

This is an extract from the following report

Updated crosswalks of the revised EUNIS Habitat Classification with the European Vegetation Classification and the European Red List Habitats for EUNIS coastal habitats and wetlands

Formal query routines and indicator species

Specific Contract No. 3417/B2019/EEA.57640 Framework Service Contract No. EEA/NSS/17/002/Lot 1

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2 Update of crosswalks of the revised EUNIS Habitat Classification for coastal habitats and wetlands with EuroVegChecklist 2016

2.1 Background

The update of crosswalks of EUNIS with *EuroVegChecklist* 2016 will replace earlier crosswalks based on previous versions of both classification systems. The updated version is presented in Appendix C. Almost all habitat types of the new categories N and Q could be crosswalked. For the coastal habitat types (N), the only exception is habitat type N1k (Machair grasslands). Concerning the wetlands (Q), the exceptions are the habitat types Q13 (Ombrotrophic percolation mire) and Q32 (Aapa mire). For the motivation of removal of these habitat types see Paragraph 2.3.

The changes in the EUNIS habitat classification over the years were for a long time relatively modest, but more substantial revisions took place as a result of the work carried out through a number of European Vegetation Survey projects for the EEA (Schaminée et al. 2012, 2013, 2014, 2016a, 2016b, 2018), the DGENV analysis of the European Red List of Habitats (Janssen et al. 2016), further meetings and consultation by the EEA and ETC-BD of the vegetation experts involved, e.g. at meetings of the European vegetation Survey in Wrocław (23-25 May 2018) and Madrid (3-6 September 2019), and public consultation in the EU Member States.

The overview of European syntaxa has undergone substantial expert revision after the publication of *The Diversity of European Vegetation* in 2002, which was a first attempt to achieve a respectable level of stability in the classification of European vegetation (Rodwell et al. 2002), based on a list of European vegetation classes by Mucina, published in 1997 in a bundle of case studies by the EVS (Mucina in Rodwell et al. 1997). This major enterprise, an initiative of the EVS, was carried out by a team under the leadership of Ladislav Mucina, resulting in a new overview, the so-called *EuroVegChecklist*, which was published in 2016. Compared to the 2002 overview, *EuroVegChecklist* is geographically more comprehensive, scientifically more robust, and better grounded within current phytosociological understanding and data.

2.2 EuroVegChecklist 2016

The published version of *EuroVegChecklist* (see Figure 2.1) provides floristic hierarchical classification systems of vascular plant, bryophyte, lichen, and algal communities. The vascular plant communities include 109 classes, 300 orders, and 1108 alliances. It offers “The first comprehensive and critical account of European syntaxa and synthesizes more than a hundred years of classification effort by European phytosociologists. It aims to document and stabilize the concepts and nomenclature of the syntaxa for practical use, such as calibration of habitat classification used by the European Union, standardization of terminology for environmental assessment, management and conservation of natural areas, landscape planning and education. The presented classification systems provide a baseline for future development and revision of European syntaxonomy”, as stated in the summary of the paper (Mucina et al. 2016). The new overview not only gives the lists of syntaxa, but it also briefly characterizes – in ecological and

geographic terms – the accepted syntaxonomic concepts, links available synonyms to the accepted syntaxonomic concepts, and provides lists of diagnostic species for all classes.

The plant communities of the “conspectus of the high ranked syntaxa of the European vegetation dominated by vascular plants” are divided into three main groups (Zonal and intrazonal vegetation, Azonal vegetation and Anthropogenic vegetation), which are further ordered along the main geographic zones. The group of the Zonal and intrazonal vegetation, for instance, comprises seven subgroups of vegetation types for respectively the arctic zone, boreal zone, nemoral forest zone, steppe zone, continental desert zone, Mediterranean zone, and the Canary Islands, Madeira and Azores.

EuroVegChecklist is also published on the web (<https://www.synbiosys.alterra.nl/evc>), where the publication can be downloaded and comments can be posted. Within the EVS, the European Vegetation Classification Committee was established and procedures formulated and approved by the EVS Business Meeting in Bilbao on 14 September 2017, to guide and harmonize proposals for future changes to the European vegetation classification.

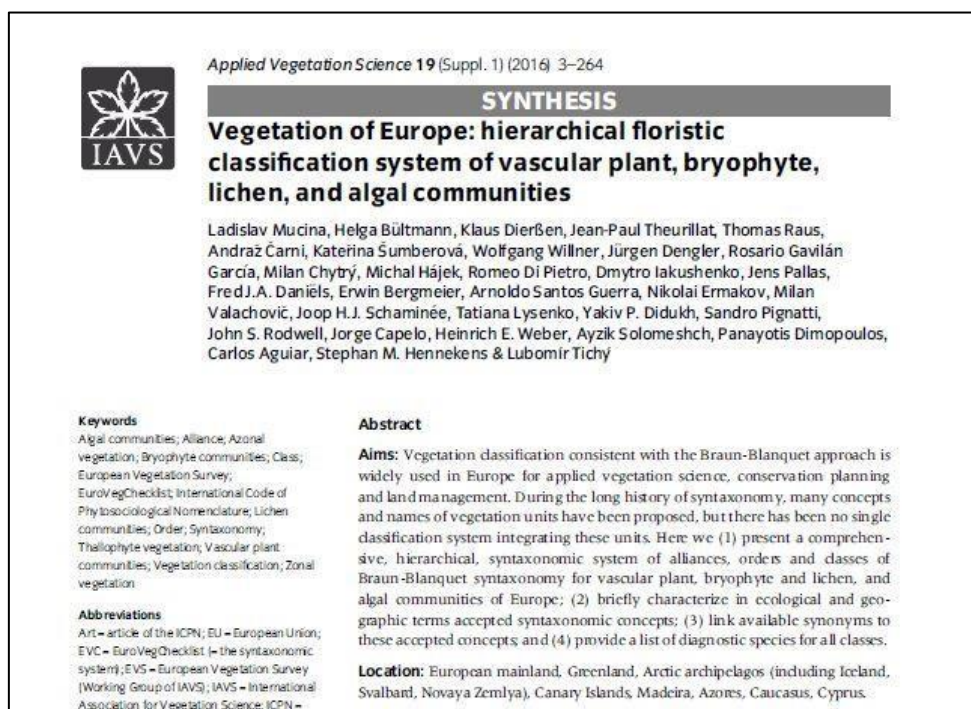


Figure 2.1. *EuroVegChecklist* was published in 2016 as a special issue of *Applied Vegetation Science*, a journal of the International Association for Vegetation Science (IAVS).

2.3 Some remarks on the EUNIS Habitat Classification for coastal habitats and wetlands

For updating the crosswalks of the revised EUNIS Habitat Classification for coastal habitats and wetlands with EuroVegChecklist 2016 the latest version of the EUNIS list of habitat types at level 3 for coastal habitats (Group B) and wetlands (Group E) was provided by EEA as a “working list”. During the process of crosswalking this list proved to be very stable. It was only slightly modified, leading to the final classification as presented in Appendix A. Appendix B comprises the descriptions of the revised habitat types.

The moderations comprise:

- We consider Machair as a habitat complex, to be listed in Group X. It would be possible to focus on Machair grassland (as was proposed in the draft crosswalk list that was sent for consultation), but in that case, there are no differences with N15 (Atlantic and Baltic coastal dune grassland, grey dune). Likewise, we propose to move Aapa mire (listed as Q32 in the working list) to Group X, as it is also a habitat complex; this was suggested by Doug Evans (personal communication). As a consequence, Polygon mire (Q33) should be renumbered into Q32.
- To our opinion, the “Ombrotrophic percolation mire” (Q13), which was proposed as a new habitat type (not distinguished in the old EUNIS Habitat Classification), is not sufficiently supported by data. This habitat type was mentioned to occur in Georgia, but its status as a separate habitat type is questionable. The habitat type is still mentioned in the working list (Appendix A) as well as in Appendix B and C, but not in Appendix E as indicator species cannot be provided.
- To Group Q4 we propose to add a new habitat type (Q46; Carpathian travertine fen with halophytes). It includes the old EUNIS type D6.14 (Swards of Carpathian travertine concretions), which is a bit narrower. The old type was a part of the Level 3 habitat type ‘Inland saltmarshes’ (D6.1), but the occurrence of halophytes is rather low.
- As Palsa and Polygon mires cannot be distinguished on floristic criteria, we define them jointly in the expert system, using the code Q3132. We propose to keep them as separate habitat types, as they will continue to exist as separate in the revised EUNIS classification.
- We propose to change the name Mires into Wetlands (Level 1, Group Q) and to transfer four habitat types from Group C to Group Q (Q51 t/m Q54). This was a suggestion from the EVS group, accepted by Doug Evans. For level 2, we propose the name “Helophyte beds” (Q4). These types also occur isolated, not connected to rivers and lakes. The remaining wetland types from Group C will need a revision in the near future. As an example: within Group Q, it will be important to distinguish between “ephemeral wetlands” (class *Isoeto-Nanojuncetea*) and “soft-water wetlands” (class *Littorelletea*).

3 Indicator species and distribution maps of the revised coastal and wetland habitats of the EUNIS classification

3.1 Background

In our previous report (Schaminée et al. 2018), we produced lists of indicator species and distribution maps for the revised EUNIS habitat types of grasslands (habitat group R), shrublands (group S) and forests (group T) based on a large set of European vegetation plots. Here we use the same methods as in Schaminée et al. (2018) and focus on another two habitat groups that were revised in the meantime: coastal habitats (group N) and wetlands (group Q).

3.2 Data sources

The primary data source for producing lists of indicator species and maps for the EUNIS habitats were European vegetation-plot records (henceforth ‘vegetation plots’ or ‘plots’). Such plots typically contain a full list of vascular plant species, often also a list of bryophytes and lichens, estimates of coverabundance of each species, location and various additional information on vegetation structure and environmental features in the plot (Schaminée et al. 2009; Dengler et al. 2011). These plots were extracted from the EVA database (Chytrý et al. 2016), accessed on 21 July 2019, and several other databases not included in EVA (see a list of all databases in Appendix F). The geographical scope was defined as the whole of Europe (including the European part of Russia), Azores, Madeira, Canary Islands, Anatolia, Cyprus, Georgia, Armenia and Azerbaijan. The dataset contained plots representing both the target coastal and wetland habitats, but also all the other European terrestrial, freshwater and vegetated marine habitats. We excluded the plots that reported only species composition without cover-abundance information for individual species. Further, we excluded plots smaller than 1 m², larger than 1000 m², and plots without geographic coordinates or with reported uncertainty of the coordinates larger than 10 km. The resulting refined dataset contained a total of 1,183,986 georeferenced plots. The dataset was prepared using the Turboveg 3 program (Hennekens 2015) and analysed using the Juice 7 program (Tichý 2002).

The taxon names in this dataset originated from various national and thematic international databases, most of them managed in Turboveg 2 (Hennekens & Schaminée 2001), which use different taxon lists with partly inconsistent taxon concepts and names. Taxonomy and nomenclature were unified using Turboveg 3 in two steps. Firstly, the names from the original databases were interpreted by regional botanists, considering the taxonomic concepts and nomenclature used in the focal region of each database. This step was important because it solved regional differences in the use and meaning of some taxon names. In this step, taxon lists of most of the European vegetationplot databases were matched in the SynBioSys Taxon Database, an unpublished working database of taxon names and concepts used in the EVA project (Chytrý et al. 2016). Secondly, the names of vascular plants from the SynBioSys Taxon Database and the names from the original databases that did not match any name in the SynBioSys Taxon Database were translated to the nomenclature of the Euro+Med PlantBase (Euro+Med 2006–2018; ww2.bgbm.org/EuroPlusMed), using a complete list of accepted names and synonyms of European and Mediterranean vascular plant taxa provided by the Botanischer Garten und Botanisches Museum Berlin-Dahlem in March 2018. A small proportion of the vascular plant taxon names present in the vegetation plots used in this study did not match any valid name or synonym of the Euro+Med PlantBase. Many of these names were names of hybrids or taxonomically problematic

taxa used in the source databases, and we retained them in the dataset. All of these names had very few occurrences in the dataset as a result of local use of these names, indicating their negligible effect on the classification. The names of bryophytes and lichens followed the SynBioSys Taxon Database.

The covers of individual species were, in most vegetation plots, recorded using cover-abundance scales (70% of plots were recorded using the BraunBlanquet scale; Westhoff & van der Maarel 1973). We transformed all these scales to the mid-percentage values corresponding to individual coverabundance classes following the default conversion of the Turboveg 2 program (Hennekens & Schaminée 2001). For the seven-grade Braun-Blanquet scale the transformation was $r + 1 \ 2 \ 3 \ 4 \ 5 \rightarrow 1\% \ 2\% \ 3\% \ 13\% \ 38\% \ 63\% \ 88\%$, for the nine-grade Braun-Blanquet scale $r + 1 \ 2m \ 2a \ 2b \ 3 \ 4 \ 5 \rightarrow 1\% \ 2\% \ 3\% \ 4\% \ 8\% \ 18\% \ 38\% \ 63\% \ 88\%$, and for the Domin scale $+ \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9 \ 10 \rightarrow 1\% \ 2\% \ 3\% \ 4\% \ 13\% \ 23\% \ 29\% \ 42\% \ 63\% \ 88\% \ 99\%$.

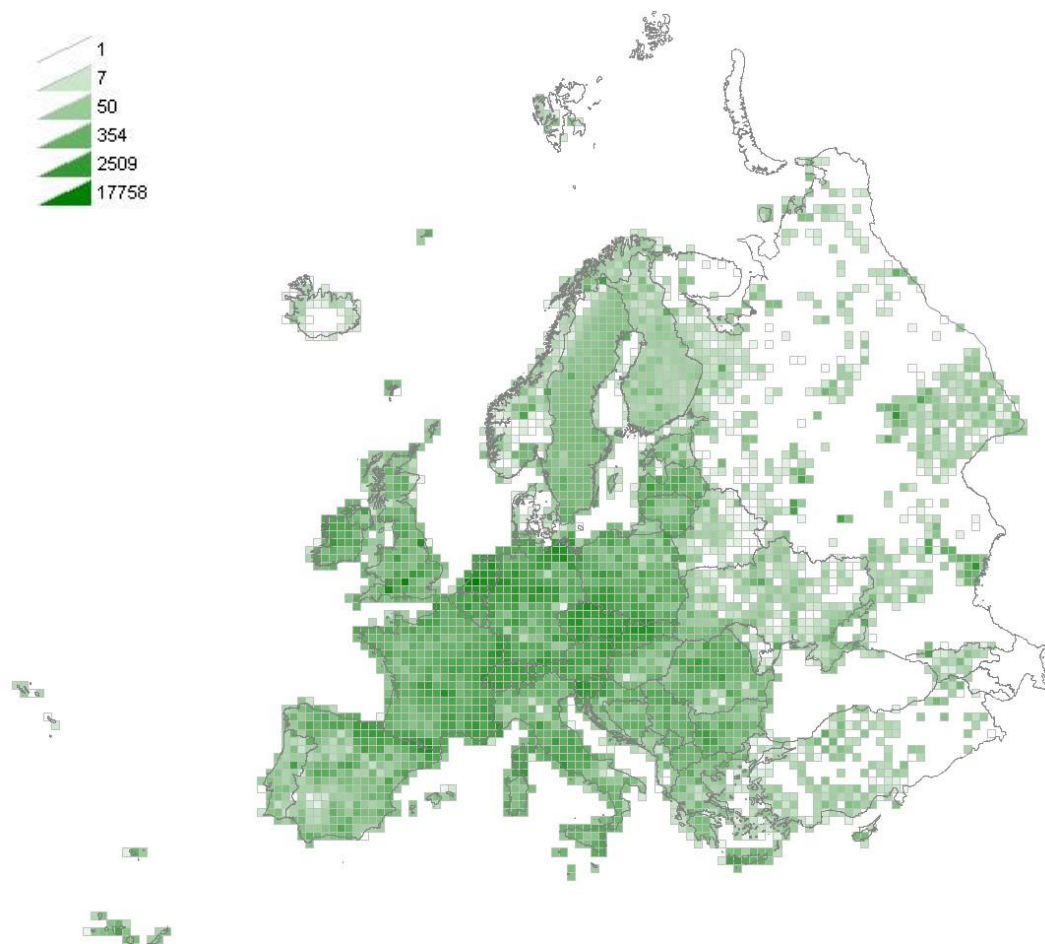


Figure 3.1. Density of 1,183,986 georeferenced plots in EVA and other plots provided for this project in 50 x 50 km grid cells (accessed on 11 November 2019).

3.3 Expert system for identifying EUNIS habitats in vegetation-plot databases

The purpose of the expert system is to identify EUNIS coastal and wetland based on species composition and cover-abundances of particular species or species groups, which are, in some cases, combined with the plot location criteria (if the habitat is difficult to distinguish based on purely floristic criteria).

The expert system is based on formal definitions of habitats written as logical formulas in an editable script stored as a TXT file (Appendix D). The computer program that runs the expert system evaluates all the plots of a vegetation database, and checks for each of them whether it meets the conditions of one or more of the formal definitions of habitats included in this script. If a plot matches a definition of one habitat, it is assigned to this habitat. In an ideal case, the habitats should be mutually exclusive, and each plot should be assigned to one and only one habitat. However, in reality, some plant communities have a transitional composition indicating two or more habitats. The plots from such places can match the definitions of two or more habitats defined in the expert system. Other plant communities can be untypical (e.g. due to idiosyncratic or depauperated species composition), so they cannot be assigned to any habitat and remain unclassified by the expert system. Nevertheless, the expert system was prepared in such a way that it allowed a large majority of plots to be assigned unequivocally to a single habitat.

The expert system script is divided into three sections. Section 1 merges selected taxon names. In most cases, we merged subspecies, varieties or forms at the species level. We did so in order to improve the consistency of taxonomic concepts across the dataset because some authors recorded only species and others also intraspecific taxa. Further, we merged taxonomically difficult groups of species containing many misidentifications into species aggregates (Appendix D). Section 2 defines species groups used further in the formal definitions of habitats by listing the species belonging to each of them (one species can belong to more than one group). Section 3 comprises logical definitions of habitats written as formulas consisting of relational operators, which define individual assignment criteria, and logical operators AND, OR and NOT, which combine these criteria. Technical description of the syntax of the expert system is provided by Tichý et al. (2019: Appendix S1).

The expert system approach to habitat identification has several advantages: (i) It enables identification of vegetation plots even if they have not been labelled by the name of a habitat or a syntaxon; (ii) it applies habitat classification consistently across the whole of Europe and adjacent areas, unlike assignments by human experts, which may differ from place to place depending on varying regional traditions; (iii) it provides explicit qualitative and quantitative criteria used for the assignment of plots to particular habitats, which help the users understand the meaning and delimitation each habitat; (iv) it can be used to identify any vegetation plot obtained in the future using the same criteria; (v) it can be modified or improved by adding new types or adjusting definitions of already included types.

The expert system contains two types of criteria to assign vegetation-plot records to habitats:

- Species-based assignment criteria: plant species composition or coverabundances of plant species in vegetation plots, often applied to functional (e.g. dwarf shrubs, trees), biogeographical (e.g. western Mediterranean species) or ecological (e.g. calcareous fen) species groups (internal classification criteria according to De Cáceres et al. 2015).
- Location-based assignment criteria: information about plot location, such as geographical coordinates, which can be used for assigning plots to biogeographical regions (e.g. boreal vs. temperate) or habitat complexes (e.g. coastal vs. inland), or altitudinal zones (external classification criteria according to De Cáceres et al. 2015).

3.3.1 Species-based assignment criteria

Species-based assignment criteria are either qualitative or quantitative and can be applied either to single species or species groups. The qualitative criterion is the presence or absence of a species or a species group in a plot. The quantitative criteria are based on the percentage cover of specific species or species groups occurring in a plot; they assess whether their cover is greater than (or equal to) a specified percentage threshold or greater than (or equal to) the cover of another species or species group occurring in the same plot. These assignment criteria are applied using the relational operators GR (= greater than) or GE (= greater than or equal to). The examples in the following text use GR, but GE can be used instead of GR if appropriate.

When applied to a single species, the script defines the qualitative criterion as “Species name GR 00”, meaning that the cover of this species is greater than zero. To define a quantitative criterion, a non-zero percentage value should be given: for example, “*Fagus sylvatica* GR 50” denotes that the cover of *Fagus sylvatica* in the plot should be greater than 50%. Optionally, the cover of a species can be compared with the total cover of all the other species occurring in the plot, for example, “*Erica tetralix* GE #\$\$” means that the cover of *Erica tetralix* should be greater than the cover of any other species in the plot, or “*Erica tetralix* GR \$50” means that the cover of *Erica tetralix* should be greater than 50% of the total percentage cover of all species in the plot.

When applied to species groups, the qualitative criterion assesses whether the number of species of the target group in the plot exceeds a pre-selected threshold, or whether the number of species of one group is greater than the number of species of another group (or several other groups). The quantitative criterion for species groups assesses whether the total cover-abundance of the species of the group is greater or less than the threshold, or whether it is greater or less than the total cover-abundance of species of another group (or other groups, taking them either separately or as a unification of several groups). The total cover of a species group is computed by combining percentage covers of individual species of the group that occur in a plot, using an algorithm that assumes random overlap of covers of individual species, as proposed by Chytrý et al. (2005) and formally described by Fischer (2015). In contrast to the simple sum of percentage covers of individual species, the total cover of all species in the plot calculated using this algorithm cannot exceed 100%.

The species groups included in the expert system comprise species that characterize a particular habitat and enable its identification. The initial lists of species included in the groups were compiled from relevant phytosociological literature, national habitat handbooks, personal field experience, data from previous EUNIS reports (Schaminée et al. 2013, 2014, 2016a, b, 2018), fact sheets of the European Red List of Habitats

(<https://forum.eionet.europa.eu/european-red-list-habitats/library/terrestrialhabitats>; see Janssen et al. 2016) and other sources. These initial lists were critically revised and extensively modified based on multiple classification trials with successive versions of the expert system (see below the section Iterative optimization).

The expert system contains two basic types of species groups called ‘functional species groups’ and ‘discriminating species groups’. All the groups of both types are defined in Section 2 of the expert system script by listing species belonging to them. A functional group is indicated by the symbols ###, whereas ##D designates a group that can be used as either functional or discriminating.

Functional species groups

The concept of the functional species groups follows Landucci et al. (2015). These groups comprise species with similar functional traits (e.g. life form, morphology or phenology), but also groups with

similar distribution ranges, affinity to the same habitat, or species characterized by a combination of these properties. In the expert-system script (Appendix D), these groups are used in Section 3 to define both the qualitative and quantitative assignment rules. The qualitative assignment rules, using the information on presence/absence of species, are as follows:

- A plot should contain at least n species of the group (“#nn Group-name” in the script, where nn is a two-digit number of required species; for example, “#03 Dwarf-shrubs” means that at least three species of the functional group Dwarf-shrubs should be present in the plot).
- A plot should contain more species from one group than from another group (“### Group-name1 GR ### Group-name2” in the script; for example, “### Fen-species GR ### Bog-species” means that the plot should contain more species of fens than those of bogs).

The quantitative assignment rules for functional species groups, using the information on total covers of species groups, are as follows:

- The total cover of a species group in the plot should be greater than a threshold (“#TC Group-name GR nn” in the script, where #TC means the total cover of the species of the group and GR nn means greater than a percentage threshold; for example, “#TC Dwarf-shrubs GR 50” means that the total cover of dwarf shrubs in the plot should be greater than 50%).
- The total cover of a species group should be greater than that of another group (“#TC Group-name1 GR #TC Group-name2” in the script; for example, “#TC Fen-species GR #TC Bog-species” means that the plot should contain a greater total cover of fen species than that of bog species).
- The total cover of a species group should be greater than that of another group, excluding the species of the former group from the latter group (“#TC Group-name1 GR #TC Group-name2 EXCEPT #TC Group-name1” in the script; for example, “#TC Dark-taiga-trees GR #TC Trees EXCEPT #TC Darktaiga-trees” means that the total cover of the dark taiga trees in the plot should be greater than that of other trees). This formula can also be used for comparing the cover of a single species with the total cover of a group, e.g. “#TC Picea abies GR #TC Trees EXCEPT #TC Picea abies” means that *Picea abies* should have a greater cover than the total cover of the other trees. Formally, a functional species group containing the single species *Picea abies* has to be created in this case.
- The total cover of a species group in a plot should be greater than $n\%$ of the total cover of all the species in a plot (“#TC Group-name GR \$50” in the script, where \$50 means 50% of the total cover of all species; for example, “#TC Dwarf-shrubs GR \$50” means that the total cover of dwarf shrubs should be greater than 50% of the total cover of all species in the plot).
- Finally, a general group containing all the species occurring in a plot can be created, and its total cover computed using the #T\$ notation in the script. Such a group can be used to identify whether the total cover in the plots is greater than a given threshold (e.g. “#T\$ GR 30” means that the total vegetation cover in the plot should be greater than 30%). Alternatively, this group can be used to introduce a rule that the total cover of a species group should be greater than the total cover of all species in the plot except the total cover of species belonging to the particular group (“#TC Group-name GR #T\$” in the script; in this case, #T\$ means the total cover of all the other species in the plot, excluding the species of the particular group involved in the comparison, and unlike in a previous case, EXCEPT does not need to be specified as it is introduced automatically).

In all cases, two or more functional species groups can be merged in the logical formulas of habitat definitions, e.g. “#TC Trees|#TC Shrubs|#TC Dwarfshrubs” represents the total cover of all woody plants in the plot.

An example of a habitat definition based on functional species groups (T18 Fagus forest on acid soils):

<#TC Macaronesian-coastal-dune-scrub GR 15>

This means that the total cover of the functional species group of Macaronesian coastal dune scrub species should be larger than 15%.

Discriminating species groups

The concept of discriminating species groups follows the proposals of Dengler et al. (2006) and Willner (2011), and the principles of the expert system developed by L. Tichý for European vegetation classes (Mucina et al. 2016: Appendix S12). If this type of species groups is used, one discriminating species group is compiled for each habitat. Such a group includes a subset of diagnostic species of this habitat that can be, as a group, used for the reliable identification of this habitat. A species can be assigned to more than one of these groups. A plot is assigned to the habitat whose discriminating species group is most represented in this plot. The degree of representation is measured either as the sum of square-rooted percentage covers of individual species of the group (##Q), which is an intermediate solution between a measure based on the total percentage cover with an upper boundary of 100% according to Fischer (2015) and a measure based on species numbers (Tichý et al. 2019).

The expert system includes several independent sets of discriminating species groups, which are identified by a two-digit number after the + sign at the beginning of the group name. Any comparison of species covers is made only among the groups with the same number. In the current version of the expert system, groups marked as +01 are compared only among Atlantic and Baltic coastal habitats, +02 among Mediterranean and Black Sea coastal habitats, +03 among inland sparsely vegetated habitats, +04 among all other non-forest habitats, +05 among a few specific habitats of temperate broadleaved deciduous forests, +06 to +09 among different groups of mire habitats, and +10 among broad habitat groups. For example, the expression ##Q +01 N11-Atlantic-Baltic-and-Arctic-sand-beach in the expert system script means that the sum of square-rooted percentage covers of the species belonging to the discriminating species group of Atlantic, Baltic and Arctic sand beaches in the plot should be greater than the sum of square-rooted percentage covers of the species of the discriminating species group of any other habitat which has a discriminating group with a name starting with +01.

The relative importance of functional and discriminating species groups for habitat classification varies among habitat groups. In the habitats defined by the presence of certain dominant species, especially forest and shrubland habitats, the use of functional groups in combination with quantitative assignment criteria is often sufficient and most effective to define the particular habitat (e.g. heath is a habitat determined by the dominance of ericoid or genistoid dwarf-shrub species). Therefore, the thresholds of the total covers of functional groups or single-species covers are used to define forest and shrubland habitats. However, for the habitats characterized by a weak or irregular dominance of specific species, such as most grassland and coastal habitats, this method of habitat definition rarely provides satisfactory classification. For such habitats, we based the classification primarily on the discriminating species groups.

An example of a definition based on discriminating species groups (Q22 Poor fen):

```
(((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Acidophilous-fen-species> AND (<##Q +07 Poor-fen> AND <#TC +09 Acidophilous-fen-species GR 25>))) NOT (<#TC Trees GR 15> OR <#TC Shrubs GR 15>)
```

This means that sum of square-rooted percentage covers of the discriminating species group of all mire habitats should be greater than that of any other broad habitat group, and at the same time the sum of square-rooted percentage covers of the discriminating species groups of fens,

acidophilous fens and poor fens should be greater than those of their contrasting group with the same number at the beginning of their name, and the cover of acidophilous fen species should be greater than 25% (note that here the same group is used again as a functional species group and the cover of neither trees nor shrubs should be greater than 15%.

3.3.2 Location-based assignment criteria

Some habitats in the EUNIS classification are defined partly by their occurrence in vegetation zones, altitudinal belts or habitat complexes. For example, specific groups of coniferous forests are divided into boreal and temperate types, or some habitat types are defined by their occurrence on coastal dunes, although similar habitats also occur on inland dunes. It may be impossible to distinguish such habitats only by plant species composition or cover, especially if they are species-poor, because at least in some places their species composition can be identical in the boreal and temperate zones, or in coastal and inland dunes. Therefore, we included several location-based assignment criteria into the formal definitions of habitats in the expert system, complementing the species-based assignment criteria. Nevertheless, we could define most of the habitats purely on the basis of species composition, and we added the location-based criteria only when the species-based classification was not able to separate some types or would have required very complex definitions.

The location-based criteria are either qualitative or quantitative: in the expert-system script, they are indicated as \$\$C (C stands for “character”) or \$\$N (N stands for “numeric”). The qualitative criteria are defined using the relational operator EQ (equal to), e.g. “\$\$C Country EQ Belgium” (the plot occurs in Belgium), while the quantitative criteria use the operator GR (greater than) or GE (greater than or equal to), e.g. “\$\$N Altitude (m) GR 1000” (altitude of the plot is higher than 1000 m a.s.l.). The range of quantitative criteria can be defined by a combination of two statements, e.g. “<\$\$N Altitude (m) GE 500> NOT <\$\$N Altitude (m) GR 1000>” defines an altitude from 500 to 1000 m a.s.l.

The location-based criteria have to be provided for each vegetation plot in a specific database field (“header data” in the terminology implemented in Turboveg and Juice). The following variables were used in the EUNIS expert system to define the location-based assignment criteria:

- Country – a qualitative variable containing country names.
- ECOREG_WWF – a qualitative variable containing the codes of the WWF ecoregions (Olson et al. 2001, see <https://www.worldwildlife.org/biomecategories/terrestrial-ecoregions>). Of a larger number of European ecoregions, only the following were used in the expert system:
- PA0402 Atlantic mixed forests
- PA0406 Cantabrian mixed forests
- PA0433 Pyrenees conifer and mixed forests
- PA0436 Sarmatic mixed forests
- PA0445 Western European broadleaf forests • PA0503 Caledon conifer forests
- PA0520 Scandinavian coastal conifer forests
- PA0608 Scandinavian and Russian taiga
- PA0610 Urals montane forests and taiga
- PA1110 Scandinavian Montane Birch forest and grasslands
- COAST_EEA – a qualitative variable containing information as to whether the location is on the sea coast, including a buffer distance of up to 5000 m from the coast. A digital coast map provided by the European Environment Agency (<https://www.eea.europa.eu/data-and-maps/data/eea-coastline-foranalysis-1/gis-data/europe-coastline-shapefile>) was used

to identify coastal plots based on their geographic coordinates. The coast was divided into five categories:

- ARC Arctic
- ATL Atlantic
- BAL Baltic
- BLA Black Sea
- MED Mediterranean
- DUNES_BOHN – a qualitative variable containing information whether the location is on coastal dunes. A digital version of the Map of Natural Vegetation of Europe (Bohn et al. 2003) was used, and the plots with geographic coordinates corresponding to the mapping units from P1 to P16 (coastal dune vegetation) were given the code Y (= yes) for this variable.
- DEG_LAT – a quantitative variable containing the degrees of latitude of the plot in the coordinate system WGS 84, format DD.DDDD.
- DEG_LON – a quantitative variable containing the degrees of longitude of the plot in the coordinate system WGS 84, format DD.DDDD. Western longitudes are indicated by numbers with a minus sign.
- Altitude (m) – a quantitative variable containing the altitude of the plot in metres above sea level.

An example of a definition containing location-based assignment criteria (F12 Moss and lichen tundra):

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(((<#TC +01 N13-Atlantic-and-Baltic-shifting-coastal-dune GR #T$> AND <##Q +01 N13-Atlantic-and-Baltic-shifting-coastal-dune>) NOT <#TC Trees|#TC Shrubs GR 15>) AND ((<$C Coast_EEA EQ ATL_COAST> OR <$C Coast_EEA EQ BAL_COAST>) NOT ((<$N DEG_LON GR -50> NOT <$N DEG_LON GR -11>) AND (<$N DEG_LAT GR 0> NOT <$N DEG_LAT GR 40>)))
```

This means that the total cover of the functional group of Atlantic and Baltic shifting coastal dune should be larger than all other species in the plot and the discriminating group of the same name has a higher cover any other discriminating species group and at the same time the plot should be located on the Atlantic or Baltic coast but not in the area between the longitudes 50°W and 11°W and latitudes 0° and 40°N, i.e. not in Macaronesia.

3.3.3 The hierarchical structure of the expert system

The expert system was developed hierarchically. Each habitat definition was assigned a priority degree. When the expert system is running, the definitions with the highest priority are applied to the dataset first, resulting in habitat assignment of the plots that meet the requirements of these definitions, while other plots remain unclassified. Then, the definitions with lower priority are applied only to the unclassified plots.

The current study deals only with the EUNIS habitat groups that were revised so far, i.e. N, Q, R, S and T. However, the hierarchy of the expert system has been designed to include the vegetation habitats from the other groups (A, C, H, I) once they are revised in the future. Preliminary definitions of these habitats were developed and included in the expert system, which is important for separation of the target habitat groups from the non-target groups. However, these preliminary definitions were not tested and therefore, not included in the results.

In some cases, we created two definitions with different priority levels to define a single habitat. The definition applied at a higher level is usually based on the occurrence or a high total cover of species from a functional group that comprises species narrowly specialized to this habitat. This definition classifies the plots that are very typical examples of the particular habitat, but it leaves

many less typical plots of this habitat unclassified. Subsequently, a definition at a lower priority level, based on discriminating species groups, is applied to the unclassified plots. This definition classifies plots that are less typical examples of the habitat but still exhibit a higher affinity to this habitat than to any other habitat. Such a two-step approach is needed for habitats in which an occurrence of narrowly specialized species is a sufficient criterion for habitat assignment even if these species have a relatively low cover. If only definitions based on discriminating species groups were used, some of the plots of these habitats could be misclassified.

For example, the habitat R11 Pannonian and Pontic sandy steppe is defined by two formulas. First, this formula on a higher priority level is applied:

- $\langle \#TC \text{ R11-Pannonian-and-Pontic-sandy-steppe-specialists GR 15} \rangle \text{ NOT } \langle \#TC \text{ Trees} | \#TC \text{ Shrubs GR 15} \rangle$

This means that the total cover of the functional species group R11-Pannonianand-Pontic-sandy-steppe-specialists, including a selection of narrow specialists of this habitat, should have a cover greater than 15% and the total cover of trees and shrubs should be greater than 15%. Then, the following formula with a lower priority level defining the same habitat is applied to the plots that were not yet classified by any formula with the higher priority level:

- $(\langle \#Q \text{ +04 R11-Pannonian-and-Pontic-sandy-steppe} \rangle \text{ AND } \langle \#03 \text{ +04 R11-Pannonian-and-Pontic-sandy-steppe} \rangle) \text{ NOT } \langle \#TC \text{ Trees} | \#TC \text{ Shrubs GR 15} \rangle$

This means that the sum of square-rooted percentage covers of a discriminating species group of the Pannonian and Pontic sandy steppe (including both the narrow specialists and frequently occurring less-specialized species) should be higher than the sum of square-rooted percentage covers of the discriminating species groups of any other habitat, and the plot should contain at least three species of this group, and the total cover of trees and shrubs should not exceed 15%.

The expert system contains habitat definitions assigned to seven priority levels (Fig. 1). The definitions at the highest priority level (7) are applied first in the classification, while the definitions at the lowest priority level (1) are applied last:

- Level 7: Coastal habitats dominated by woody plants (i.e. coastal heaths, dune scrub and dune forests; habitats N18 to N1G) and Macaronesian heath (habitat S43) are defined based on a high cover of dominant species or a high total cover of functional groups of dominant species (dwarf shrubs, shrubs and trees) in combination with an occurrence on the coast, on coastal dunes, or in Macaronesia, respectively.
- Level 6: Other (i.e. herbaceous) coastal habitats (N11–N17 and N1H–N1K) and marine habitats of the tidal zone dominated by vascular plants (A25a– A25d) are defined based on the discriminating species groups of habitats within these two groups, in combination with occurrence on the coast or coastal dunes.
- Level 5: The habitat group H (inland sparsely vegetated habitats) is defined based on a cover not greater than 30% in combination with the occurrence of at least one species specialized to the habitats of this group. Individual habitats within this group are preliminarily defined based on their preliminary discriminating species groups.
- Level 4: Some coastal herbaceous (group N), some grassland (group R), some anthropogenic (group I), all shrubland except the Macaronesian heath (group S) and all forest (group T) habitats are classified using definitions based on a high cover of characteristic dominant species or functional groups of characteristic dominant species, or the presence of a specified minimum number of species narrowly specialized to individual habitats.
- Level 3: Habitat groups of shrublands (group S) and forests (group T) are defined based on the dominance of shrubs, dwarf-shrubs or trees. Vegetation plots that have not been previously classified to specific habitats within these groups are classified directly to these broad groups.

- Level 2: All the non-shrubland and non-forest habitat that were not defined before are defined based on the discriminating species groups.
- Level 1: Habitat groups of mire (Qa), marsh (Qb), grassland (R), freshwater (C), sparsely vegetated (H) or anthropogenic (I) habitats, without assignment to any specific habitat, are defined based on discriminating species groups. Vegetation plots that have not been previously classified to specific habitats within these groups are classified directly to these habitat groups.

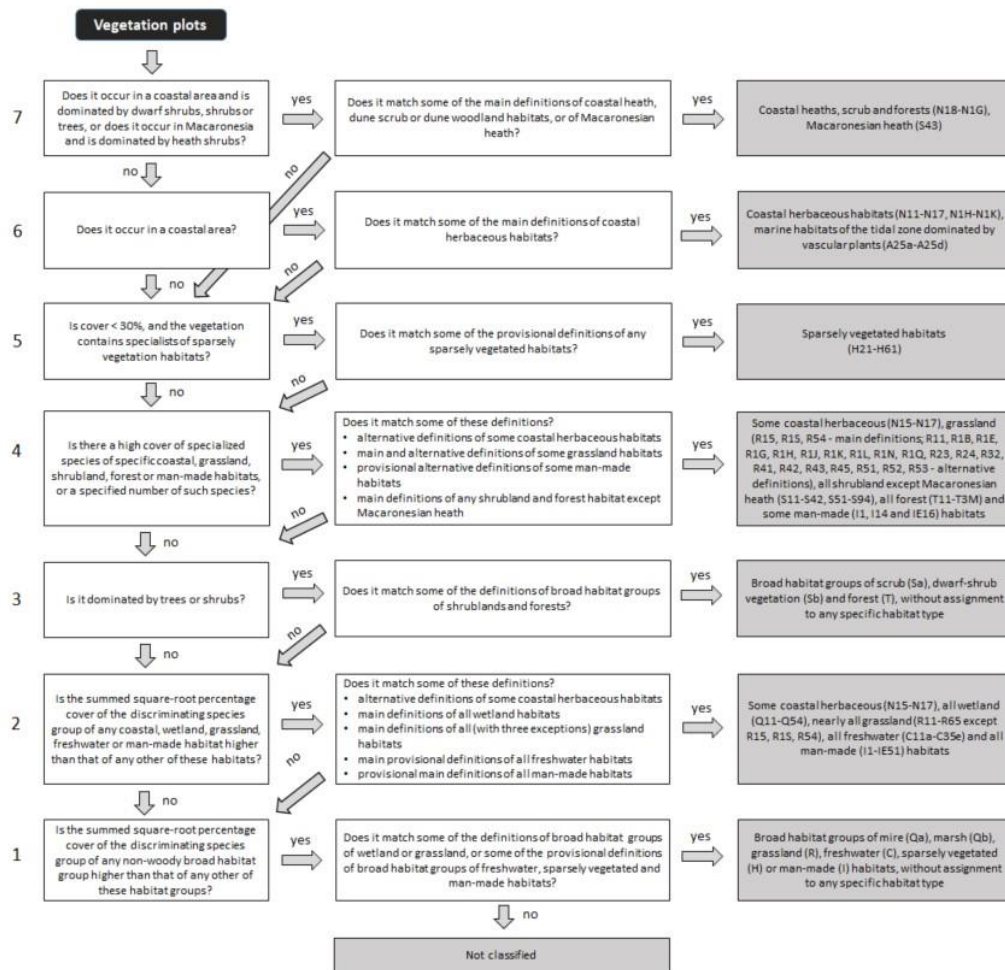


Figure 3.2. A scheme of the EUNIS classification expert system with seven hierarchical levels indicated by the number on the left side.

3.4 Iterative optimization and evaluation of the expert system

A preliminary version of the expert system was prepared, containing logical formulas defining individual habitats. This version was applied to the dataset of all 1,183,986 vegetation plots. The plots assigned to individual habitats by the expert system were checked by several experts from different countries, who were specialists in different habitats. These plots were also mapped, and the experts paid special attention to geographically outlying plots. If the experts identified misclassified plots, the expert system was modified to avoid such misclassifications. The

modifications were done either in the species groups or in the formal definitions. In the case of species groups, the species that contributed to misidentifications were identified in the source dataset and removed from the groups, while other species that might contribute to the correct habitat identification were added to individual groups. In the case of formal definitions, the structure of the formulas or thresholds used in the formulas were changed. These decisions were always made by experts based on a detailed inspection of the expert system classification of the vegetationplot dataset. This process was modified many times until misclassification identifiable by the experts were eliminated.

3.5 Results of the expert system

We developed formal definitions for 25 coastal (group N) and 18 wetland (Q) habitats (Table 2.1) and included them in the expert system (Appendix D). Based on the floristic criteria, we were not able to formally define the habitats N23 Shingle and gravel beach with scrub and N24 Shingle and gravel beach forest, because they cannot be separated from other forest types found in the coastal areas. Consequently, these habitat types do not appear in Appendix C and E. Further, we were not able to separate the habitats Q31 Palsa mire and Q32 Polygon mire, nevertheless we were able to create a common definition for these two types, which we coded as Q3132 in the expert system and its outputs.

In addition, the expert system contains 144 habitats of grasslands (R), shrublands (S) and forests (T) defined in our previous work (Schaminée et al. 2018) and 52 preliminary definitions of the habitats of other habitat groups (A – marine, C – freshwater, H – sparsely vegetated and I – unvegetated manmade), which however have not been tested and require a considerable revision in the future. Of all 1,183,986 vegetation plots in the dataset, 154,103 were classified to one of the two target habitat groups N or Q and its habitats.

3.6 Indicator species of the revised EUNIS coastal and wetland habitats

Indicator species of each habitat were obtained through statistical analysis of the groups of vegetation plots classified by the expert system to this habitat. Three types of indicator species were established following Chytrý & Tichý (2003): diagnostic species, constant species and dominant species. Each of these types of indicator species has a different meaning, and together they provide a comprehensive characterization of the habitat through its species. Diagnostic species are species with occurrences concentrated in a particular habitat, being absent or rare in other habitats. As such, they are good positive indicators of the habitat. However, diagnostic species may be absent from the habitat at many sites. Constant species are species that occur frequently but not exclusively in a particular habitat: some of them may be generalist species that are also frequent in other habitats. Dominant species are those that often reach high cover in a particular habitat, thus determining the habitat physiognomy.

For the purposes of computing indicator species, we removed all the plots that were not classified by the expert system or were classified to more than one habitat. This dataset was geographically stratified (Knollová et al. 2005). This step was necessary to account for the effect of geographically unbalanced sampling effort across Europe, i.e. a high concentration of vegetation

plots in relatively small areas contrasting with low density or absence of vegetation plots in other, often rather large area, although the habitat may be quite common there. Geographical stratification was performed on the dataset of vegetation plots classified by the expert system, using a grid of 3 × 5 minutes of latitude × longitude (corresponding to approximately 5.5 × 6.0 km at 50° N). If a cell of this grid contained more than one plot belonging to the same habitat, one plot was selected randomly, while the others were deleted. If such resampling resulted in less than 20 plots per habitat across the whole dataset, some randomly selected plots were returned to the dataset so that the total number of plots of this habitat in the dataset was 20. The resampled dataset contained 458,640 plots, i.e. 39% of the dataset of all classified plots, but it was more balanced and more representative. Plots classified to other habitat groups than coastal and wetlands were retained in the dataset to provide background for calculating the degree of concentration of species occurrences within the target vegetation type for establishing diagnostic species.

Diagnostic species were determined based on the degree of concentration of their occurrences in the groups of plots representing each EUNIS habitat. This degree of concentration, also called fidelity, was calculated using the phi coefficient of association (Sokal & Rohlf 1995; Chytrý et al. 2002) standardized as if each habitat was represented by the same number of plots (Tichý & Chytrý 2006). The species with a value of phi greater than 0.15 for a particular habitat were considered as diagnostic for this habitat. This threshold was selected arbitrarily as a compromise between a stringent selection of few species with high diagnostic value (if phi was higher) and a lax selection of many species with weak diagnostic value (if phi was lower). However, the concentration of species occurrences in the habitat, even if expressed by a high value of the phi coefficient, may not be statistically significant for some habitats represented by a low number of plots in the dataset. Therefore, the statistical significance of the species-habitat association was tested using Fisher's exact test (Sokal & Rohlf 1995), and if not significant at $P < 0.05$, the species was excluded from the list of diagnostic species (Tichý & Chytrý 2006).

Constant species were defined as those with a constancy (= percentage occurrence frequency) of at least 10% in the target habitat. This threshold is much lower than usually used for constant species of vegetation types in phytosociology. However, a lower value is needed for habitats, because many of them consist of several vegetation types occurring across broad geographic ranges with varying species composition, and as a result, few species have higher constancy across the whole habitat.

Dominant species were defined as those that occurred with a cover greater than 25% in at least 5% of vegetation plots classified to the target habitat. This means that a species is considered as dominant even if it does not belong to the highest vegetation layer, and a single plot can have more than one dominant species. Conversely, a habitat can have no dominant, especially if it has sparse vegetation with low cover of all species occurring at most sites.

Records of taxa identified only to the genus level and records of epiphytic lichen species were removed from the lists of indicator species. Records of other non-vascular plants (bryophytes and non-epiphytic lichens) were retained in the lists of indicator species because many of these species are important ecological indicators. However, as they were not recorded in all plots, their frequency values were likely underestimated. Their fidelity can be both underestimated (if they were sampled only in some proportion of plots of the habitat) or overestimated (if bryophytes and lichens were more often sampled in some habitat than in others). A solution would be to compute frequency values only for plots where bryophytes and lichens were recorded (or would have been recorded if present). However, this was not possible because vegetation plots without records of bryophytes and lichens in most cases do not contain information whether these species were really absent or just not recorded (such as an indication of the total cover of bryophytes and lichens).

The lists of indicator species were checked by experts from the author team. If we found species that are untypical of the habitat according to the expert knowledge, primary data were checked, in some cases resulting in the detection of errors in the source data which were corrected, and the indicator species lists recalculated.

The resulting lists of indicator species for the EUNIS coastal and wetland habitats, including diagnostic, constant and dominant species, are in Appendix E.

New code	Habitat name	No. of plots
N	Coastal habitats	
N1	Coastal dunes and sandy shores	
N11	Atlantic, Baltic and Arctic sand beach	507
N12	Mediterranean and Black Sea sand beach	647
N13	Atlantic and Baltic shifting coastal dune	4050
N14	Mediterranean, Macaronesian and Black Sea shifting coastal dune	6582
N15	Atlantic and Baltic coastal dune grassland (grey dune)	3033
N16	Mediterranean and Macaronesian coastal dune grassland (grey dune)	5629
N17	Black Sea coastal dune grassland (grey dune)	1006
N18	Atlantic and Baltic coastal Empetrum heath	180
N19	Atlantic coastal Calluna and Ulex heath	143
N1A	Atlantic and Baltic coastal dune scrub	1429
N1B	Mediterranean and Black Sea coastal dune scrub	310
N1C	Macaronesian coastal dune scrub	71
N1D	Atlantic and Baltic broad-leaved coastal dune forest	693
N1E	Black Sea broad-leaved coastal dune forest	16
N1F	Baltic coniferous coastal dune forest	482
N1G	Mediterranean coniferous coastal dune forest	163
N1H	Atlantic and Baltic moist and wet dune slack	3997
N1J	Mediterranean and Black Sea moist and wet dune slack	351
N2	Coastal shingle	
N21	Atlantic, Baltic and Arctic coastal shingle beach	520
N22	Mediterranean and Black Sea coastal shingle beach	257
N23	*Shingle and gravel beach with scrub	
N24	*Shingle and gravel beach forest	
N3	Rock cliffs, ledges and shores, including the supralittoral	
N31	Atlantic and Baltic rocky sea cliff and shore	1038
N32	Mediterranean and Black Sea rocky sea cliff and shore	1346
N33	Macaronesian rocky sea cliff and shore	61

N34	Atlantic and Baltic soft sea cliff	56
N35	Mediterranean and Black Sea soft sea cliff	89
Q	Wetlands	31577
Q1	Raised and blanket bogs	
Q11	Raised bog	5158
Q12	Blanket bog	1118
Q2	Valley mires, poor fens and transition mires	
Q21	Oceanic valley mire	2033
Q22	Poor fen	6516
Q23	Relict mire of Mediterranean mountains	165
Q24	Intermediate fen and soft-water spring mire	7871
Q25	Non-calcareous quaking mire	6903
Q3	Palsa and polygon mires	
Q31	Palsa mire	
Q32	Polygon mire	
Q3132	Palsa and polygon mires	321
Q4	Base-rich fens and calcareous spring mires	
Q41	Alkaline, calcareous, carbonate-rich small-sedge spring fen	5283
Q42	Extremely rich moss-sedge fen	3434
Q43	Tall-sedge base-rich fen	1880
Q44	Calcareous quaking mire	2080
Q45	Arctic-alpine rich fen	969
Q46	Carpathian travertine fen with halophytes	33
Q5	Helophyte beds	
Q51	Tall-helophyte bed	24843
Q52	Small-helophyte bed	12627
Q53	Tall-sedge bed	7911
Q54	Inland saline or brackish helophyte bed	725

Table 3.1. Overview of the EUNIS habitat types, with their new codes and the number of plots assigned to each of them by the expert system; habitats marked by an asterisk could not be defined in the expert system.

Appendix A: List of the revised EUNIS Habitat Classification for coastal habitats and wetlands, including indication of the availability of distribution maps and EUNIS-syntaxon crosswalk

New code	EUNIS 2012 code	RL code	Habitat name	Map & Indicators crosswalk	Syntaxon	EUNIS-species
N	B		Coastal habitats			
N1	B1		Coastal dunes and sandy shores			
N11	B1.1; B1.2	B1.1a	Atlantic, Baltic and Arctic sand beach	x		x
N12	B1.1; B1.2	B1.1b	Mediterranean and Black Sea sand beach	x		x
N13	B1.31; B1.311; B1.321	B1.3a	Atlantic and Baltic shifting coastal dune	x		x
N14	B1.3	B1.3b	Mediterranean, Macaronesian and Black Sea shifting coastal dune	x		x
N15	B1.4	B1.4a	Atlantic and Baltic coastal dune grassland (grey dune)	x		x
N16	B1.4	B1.4b	Mediterranean and Macaronesian coastal dune grassland (grey dune)	x		x
N17	B1.4	B1.4c	Black Sea coastal dune grassland (grey dune)	x		x
N18		B1.5a	Atlantic and Baltic coastal Empetrum heath	x		x
N19	B1.5; B1.51					
N19	B1.5	B1.5b	Atlantic coastal Calluna and Ulex heath	x		x
N1A	B1.6	B1.6a	Atlantic and Baltic coastal dune scrub	x		x
N1B	B1.6	B1.6b	Mediterranean and Black Sea coastal dune scrub	x		x
N1C	B1.6	B1.6c	Macaronesian coastal dune scrub	x		x
N1D	B1.7; B1.72	B1.7a	Atlantic and Baltic broad-leaved coastal dune forest	x		x
N1E	B1.7	B1.7b	Black Sea broad-leaved coastal dune forest	x		x
N1F	B1.7; B1.71	B1.7c	Baltic coniferous coastal dune forest	x		x
N1G	B1.7; B1.74	B1.7d	Mediterranean coniferous coastal dune forest	x		x
N1H	B1.8	B1.8a	Atlantic and Baltic moist and wet dune slack	x		x
N1J	B1.8	B1.8b	Mediterranean and Black Sea moist and wet dune slack	x		x
N2	B2		Coastal shingle			
N21	B2.1; B2.2; B2.3; B2.4	B2.1a	Atlantic, Baltic and Arctic coastal shingle beach	x		x
N22	B2.1; B2.2; B2.3; B2.4	B2.1b	Mediterranean and Black Sea coastal shingle beach	x		x
N23	B2.5	-	Shingle and gravel beach with scrub	-		-
N24	B2.6	-	Shingle and gravel beach forest	-		-
N3	B3		Rock cliffs, ledges and shores, including the supralittoral			
N31	B3.2; B3.3	B3.1a	Atlantic and Baltic rocky sea cliff and shore	x		x

N32	B3.2; B3.3	B3.1b	Mediterranean and Black Sea rocky sea cliff and shore	x	x
N33	B3.2; B3.3	B3.1c	Macaronesian rocky sea cliff and shore	x	x
N34	B3.4	B3.4a	Atlantic and Baltic soft sea cliff	x	x
N35	B3.4	B3.4b	Mediterranean and Black Sea soft sea cliff	x	x
Q	D		Wetlands		
Q1	D1		Raised and blanket bogs		
Q11	D1.1	D1.1	Raised bog	x	x
Q12	D1.2		Blanket bog	x	x
Q13		D1.2	Ombrotrophic percolation mire	-	-
Q2	D2		Valley mires, poor fens and transition mires		
Q21	D2.1	D2.1	Oceanic valley mire	x	x
Q22	D2.2	D2.2a	Poor fen	x	x
Q23	D2.2	D2.2b	Relict mire of Mediterranean mountains	x	x
Q24	D2.2	D2.2c	Intermediate fen and soft-water spring mire	x	x
Q25	D2.3	D2.3a	Non-calcareous quaking mire	x	x
Q3	D3		Palsa and polygon mires		
Q31	D3.1	D3.1	Palsa mire		
Q32	D3.3		Polygon mire		
Q3132	D3.1; D3.3	D3.1	Palsa and polygon mires	x	x
Q4	D4		Base-rich fens and calcareous spring mires		
Q41	D4.1	D4.1a	Alkaline, calcareous, carbonate-rich smallsedge spring fen	x	x
Q42	D4.1	D4.1a	Extremely rich moss-sedge fen	x	x
Q43	D4.1	D4.1b	Tall-sedge base-rich fen	x	x
Q44	D4.1	D4.1c	Calcareous quaking mire	x	x
Q45	D4.2	D4.2	Arctic-alpine rich fen	x	x
Q46	D6.14	-	Carpathian travertine fen with halophytes	x	x
Q5			Helophyte beds		
Q51	C3.2; C5.1	C5.1a	Tall-helophyte bed	x	x
Q52	C3.1; C3.4	C5.1b	Small-helophyte bed	x	x
Q53	D5.2	C5.2	Tall-sedge bed	x	x
Q54	D6.2	C5.4	Inland saline or brackish helophyte bed	x	x

Appendix B: Descriptions of the revised EUNIS habitat classification for Coastal habitats (N) and Wetlands (Q)

N – COASTAL HABITATS

N1 – Coastal dunes and sandy shores

N11 – Atlantic, Baltic and Arctic sand beach

Atlantic, Baltic and Arctic sandy beach is a linear habitat, occurring on sandy shores of the Atlantic and Arctic Oceans and the North and Baltic Seas. It is mainly an unvegetated habitat with low species diversity. Annual halophytes are the typical plant species, appearing temporarily on strandline sediments. On less dynamic beaches, as around the Baltic, perennials including some brackish and freshwater marsh plants are characteristic.

Volcanic sediments can provide a distinctive character around Icelandic shores. Distinctive invertebrates characterise beaches and their driftlines, providing food for some wading birds.

N12 – Mediterranean and Black Sea sand beach

A largely unvegetated linear feature of sheltered coastlines around the Mediterranean and Black Seas, with fragmentary and sporadic vegetation cover developing on the accumulated sand, gravel and decaying plant material. Typically, the vegetation cover comprises scattered annual halophytes, although pioneer dune perennials can appear where sand ridges get pushed by storms beyond the normal tidal limit.

N13 – Atlantic and Baltic shifting coastal dune

Primary, shifting (so-called 'white') dunes of dynamic coastal sands along the Atlantic, North Sea and Baltic coasts. Early pioneers upshore from the strandline catch sand blown from the beach and initiate foredune, then embryo dune, development stages. They may come and go with subsequent storms, or continue to build higher, mobile dunes that move inland, sometimes to enormous size and in distinct ridges with intervening valleys. *Ammophila arenaria* is the widespread dominant in the middle to later stages. This grass is especially well-equipped to cope with rapid upbuild and continually shifting sands. *Leymus arenarius* and *Ammocalamagrostis baltica* play a similar role in colder regions. The vegetation cover on the sharply-draining, nutrient-poor sand is typically open with few, but distinctive, associates, some indicative of the regional temperature contrasts, and some striking fungi. Specialised beetles are also characteristic.

N14 – Mediterranean, Macaronesian and Black Sea shifting coastal dune

Primary, shifting ('white') dunes of dynamic coastal sands around the Black and Mediterranean Seas, and into the Atlantic around SW Iberia and Macaronesia. Early pioneers upshore from the strandline catch sand blown from the beach and initiate embryo dune development. These may come and go with subsequent storms, or continue to build higher mobile white dunes that move inland. Except in Macaronesia, the dominant plant in the middle to later stages is *Ammophila arenaria* (subsp. *arundinacea* in the Mediterranean), and the associated flora on the permeable, impoverished sands is limited and sparse.

N15 – Atlantic and Baltic coastal dune grassland (grey dune)

Grasslands that develop on the stabilised sands of older (grey) dunes along the Atlantic (southern to middle Portugal), North Sea and Baltic coasts. The sandy substrate, thinly enriched with accumulating humus, is well-drained and can dry out during summer. Typically with a more or less complete cover of (relatively low) grasses, herbs, bryophytes and lichens, sometimes with low shrubs, they comprise one of the most species-rich habitats on the temperate European coast. The flora can vary with the regional climate, with the character of the substrate, from acid to highly calcareous, and with the local dune topography. Individual dune systems can vary from narrow strips to enormous stretches, though most are not a dynamic stage in succession, but maintained in a more or less stable fixed state. They were often grazed or mown in the past, which prevented the development of scrub and woodland. The habitat is threatened in most countries by abandonment of traditional farming, by eutrophication through nitrogen deposition, overuse and urbanisation, often related to tourism.

N16 – Mediterranean and Macaronesian coastal dune grassland (grey dune)

Stable (grey) dunes of fixed sands along the Mediterranean and Macaronesian coasts, and of the thermo-Atlantic coasts of Portugal, southwestern Spain and North Africa inland from wind erosion and salt deposition. They have a more or less complete cover of graminoids and herbs, often with a contingent of colourful spring

annuals capitalising on early rains. The flora varies according to regional climate and dune topography. They may represent a temporary phase, giving way to evergreen sclerophyll scrub and woodland, or may form more permanent grassland at sites not suitable for shrubland. Through much of the Mediterranean, the habitat has been destroyed, contaminated by the invasion of non-native species or is much influenced by tourism, urbanization, infrastructure development, arable cultivation, nitrogen deposition and afforestation.

N17 – Black Sea coastal dune grassland (grey dune)

Dune grassland on stabilised or semi-stabilised coastal sands around the Black Sea, mostly on the western and north-western stretches and now only very locally. The dunes are best developed on broader flatter shores, and the ridges can vary in height from just a few metres to over 50 m, with moister depressions between. The flora is variable with a shift from the Mediterranean to Pontic regions moving northwards, with many regional endemic plant species among its grasses and herbs. Perennials predominate, but there can be striking contingents of annuals on more mobile stretches of sand on the ridges. Mosses and lichens can be extensive on north-facing, less sunny slopes.

N18 – Atlantic and Baltic coastal *Empetrum* heath

Heath on stable, decalcified dune sands along the cooler north Atlantic and Baltic coasts of Europe, dominated by *Empetrum nigrum*, with or without *Calluna vulgaris*, or occurring in dune slacks where *Erica tetralix* may also be abundant or even replace *Empetrum* with the same suite of associates. Persistent where wind-exposure or light grazing prevent succession to scrub or woodland.

N19 – Atlantic coastal *Calluna* and *Ulex* heath

Heath on stable, decalcified, sharply-draining dune sands along the warmer, more humid Atlantic coast of Europe, dominated by *Calluna vulgaris*, *Erica* spp., *Ulex* spp. or other low spiny legumes, often with a strong contingent of grasses and sedges. Persistent where wind-exposure or light grazing prevent succession to scrub or woodland.

N1A – Atlantic and Baltic coastal dune scrub

Scrub dominated by a wide diversity of low to tall shrubs on stabilised dry dune sands and in dune slacks along the Atlantic and Baltic coasts. The composition varies according to regional climate and soil conditions. Fen vegetation with low *Salix repens* or grasslands with *Rosa spinosissima* are not included.

N1B – Mediterranean and Black Sea coastal dune scrub

Scrub dominated by a wide diversity of low to tall shrubs on stabilised dry dune sands along the Mediterranean and Black sea coasts, often grading to dune grassland or woodland, the associated herb flora showing elements from these neighbouring vegetation types or mosaics.

N1C – Macaronesian coastal dune scrub

Often sparse scrub on coastal dune sands in the arid mediterranean climate in parts of the Canarian archipelago.

N1D – Atlantic and Baltic broad-leaved coastal dune forest

A forest type with a wide range of variation, comprising a diversity of relatively open to closed forests on Atlantic and Baltic coastal dunes. It develops where more stable coastal sands are invaded by broadleaved trees typical of the local soil and climatic conditions. It includes forests in dry and wet conditions, on calcareous and acidic sands and along the climatic gradient from southern Norway and the Baltics towards central Portugal. Many of these forests are indistinguishable in their floristic composition from inland examples of the same general type.

N1E – Black Sea broad-leaved coastal dune forest

Natural or semi-natural tree and tree-shrub communities on coastal dunes along the Black Sea coast. The forests on larger dunes have xerothermic features, the trees being small and strongly branched while on smaller dunes species more typical of alluvial forest are found. Lianas are frequent. Although non-disturbed stands are dominated by native species, invasive aliens such as *Amorpha fruticosa*, *Robinia pseudoacacia* and *Elaeagnus angustifolia* can be frequent.

N1F – Baltic coniferous coastal dune forest

Forests on coastal dunes on the Baltic coast dominated by *Pinus sylvestris*. Many of these forests are indistinguishable in their floristic composition from inland examples of the same general type.

N1G – Mediterranean coniferous coastal dune forest

Forests on coastal dunes in the Mediterranean Basin are dominated by different species of pine. Many stands are of planted origin. A variety of other woody species occur including shrubs such as junipers. Where shrubs exceed the cover of pine, the habitat should be considered N19 Mediterranean and Black Sea coastal dune scrub.

N1H – Atlantic and Baltic moist and wet dune slack

Dune slacks develop in Atlantic and Baltic dune systems as moist-wet depressions between dune ridges, where blow-outs have lowered the sand level to that of groundwater or, unusually in the Wadden Sea, where barrier islands are occasionally flooded by tidal inundation. The water table fluctuates seasonally, less so around the Baltic, and the mean wetness of slacks can vary so that the range of vegetation is considerable from dwarf rush and bryophyte pioneer vegetation, through wet grasslands, to various kinds of mire and swamp, with persistent areas of open water with aquatic plants.

N1J – Mediterranean and Black Sea moist and wet dune slack

Small permanent or temporary freshwater bodies that develop in the depressions between sand ridges in the dune systems along the Mediterranean and Black Sea coasts. The constituent vegetation depends on the depth and persistence of the water which is very variable, and also on the level of enrichment, which is usually eutrophic to mesotrophic, though locally dystrophic. There can be aquatic communities in the open waters and swamps around the margins and, where the slacks dry out in summer, conditions can become saline with ephemerals colonising.

N2 – Coastal shingle

N21 – Atlantic, Baltic and Arctic coastal shingle beach

These deposits of shingle are most typical of highly dynamic beaches along the Atlantic, Arctic and Baltic coasts, with concentrations along the English Channel. Often mobile and largely bare, they provide an inhospitable environment colonised only in more stable situations, with some deposition of finer material and drift detritus, by a distinctive suite of salt-tolerant and nitrophilous perennial plants. They also provide a habitat suitable for some nesting waders and seabirds and a variety of distinctive invertebrates. Locally, in southern England and the Baltic, larger apposition beaches are more extensively colonised by vegetation.

N22 – Mediterranean and Black Sea coastal shingle beach

Shingle and cobble beaches formed on dynamic coasts around the Mediterranean and Black Seas where waves, mostly in winter, weather cliffs and redeposit the eroded material. Mixed with shells and decaying algae and sea grass washed ashore, it provides a nitrogen-rich surface for patchy and sporadic colonisation by annuals and some perennials, also sometimes weedy assemblages. Though widespread, its stands are narrow and localised and highly vulnerable to tourist recreation and coastal development.

N23 – Shingle and gravel beach with scrub

Coastal gravel banks with scrub. Included are dense thermo-Mediterranean scrub on gravel banks and heaths on shingle in the temperate zone.

N24 – Shingle and gravel beach forest

Coastal gravel banks, colonised by trees or riparian thickets, in particular, Mediterranean gravel banks colonized by *Quercus ilex* low forests, by *Tamarix africana* or *Vitex agnuscastus*.

N3 – Rock cliffs, ledges and shores, including the supralittoral

N31 – Atlantic and Baltic rocky sea cliff and shore

Cliffs, together with vegetated crevices, ledges and cliff-tops along the coasts of the Baltic Sea, the North Sea and the Atlantic Ocean south to middle Portugal. Exposed bedrock dominates the habitat, and it's very variable composition and structure determine the character of available surfaces. The height and slope of the cliffs influence the input of salt spray which, on exposed coasts, can be very high close to the sea. This combination of local climatic and topographic conditions determines the often strong zonation of crevice vegetation, grasslands and heaths found on the cliffs, with regional climate also affecting the flora. Nesting seabirds also add a distinctive nutrientdemanding element to the flora on their guano.

N32 – Mediterranean and Black Sea rocky sea cliff and shore

Cliffs, together with vegetated crevices, ledges and cliff-tops along the coasts of the Mediterranean Sea and Atlantic Ocean round to middle Portugal, and more locally, the Black Sea. Exposed bedrock dominates the habitat, and its variable composition and structure determine the character of available surfaces, the height and slope of the cliffs influencing the input of salt spray which, on exposed coasts, can be very high close to the sea. This combination of local climatic and topographic conditions determines the often strong zonation of crevice vegetation and grasslands found on the cliffs, with regional climate also affecting the flora, with many Mediterranean endemics.

N33 – Macaronesian rocky sea cliff and shore

The rocky cliffs of the Macaronesian islands comprise a narrow strip of basalt lava influenced by salt-spray whose zonation of crevice and ledge vegetation vary on the different island groups of the Canaries, Madeira and the Azores, with endemics providing a highly distinctive aspect to the flora. The habitat also provides important sites for nesting seabirds whose guano offers a nutrient-rich surface for colonisation.

N34 – Atlantic and Baltic soft sea cliff

Coastal loamy cliffs, with a bedrock of clays, shales or loamy sands, erode much quicker than cliffs with a hard bedrock, and therefore usually have a less steep slope and are often unstable. Along the Atlantic and Baltic coasts, they harbour relatively common and widespread species, even though a range of different micro-habitats may be found with ephemeral plant communities on the bare sediments, rank grasslands and scrub on more stable ground and flush vegetation around seepages.

N35 – Mediterranean and Black Sea soft sea cliff

Coastal soft cliffs around the Mediterranean and Black Seas that consist of readily-eroded clays, shales and sands. Usually, they have gently sloping and often unstable surfaces with a mixture of open soil, pioneer vegetation, scrub and flushes influenced by percolating waters. This habitat is poorly known, and there is little information on its ecological and floristic features.

Q – Wetlands

Q1 – Raised and blanked bogs

Q11 – Raised bog

The mire surface and underlying peat of highly oligotrophic, strongly acidic peatlands with a raised centre from which water drains towards the edges. The peat is composed mainly of sphagnum remains. Raised bogs form on nearly flat ground and are ombrotrophic, i.e. derive moisture and nutrients only from rainfall. Raised bog complexes include larger and smaller bog pools, lawns, elevated hummocks and their associated vegetation. Raised bogs form only in cool climates with high rainfall, and they are most widespread in the boreal zone and in the mountains and hills of the temperate zone; they also occur locally in the lowlands of the temperate zone. They are characteristic of lowlands and hills of northwestern and northern Europe, the adjacent Hercynian ranges, the Jura, the Alps and the Carpathians. Bogs harbour, in addition to sphagna (*Sphagnum fuscum*, *S. magellanicum* aggr., *S. majus*), which are often abundant, a small number of dwarf shrubs such as *Andromeda polifolia*, *Rhododendron tomentosum*, *Vaccinium oxycoccos*, and sedges such as *Carex magellanica*, *Carex pauciflora*, *Eriophorum vaginatum* and *Trichophorum cespitosum*, non-sphagnaceous bryophytes and lichens.

Q12 – Blanket bog

The mire surface and underlying peat of ombrotrophic peatlands, formed on flat or gently sloping ground with poor surface drainage, in oceanic climates with high rainfall. The mire surface may on flatter ground be very similar to that of a raised bog, with a complex of small pools and terrestrial hummocks. Blanket bogs are a habitat of northwestern Europe, characteristic of the western and northern British Isles, the Faeroe Islands and the western seaboard of Scandinavia with small outliers in France, Portugal and Spain. They often cover extensive areas with local topographic features supporting distinct communities. Sphagna (*Sphagnum compactum*, *Sphagnum papillosum*, *Sphagnum rubellum*, *Sphagnum tenellum*) play an important role in all of them, accompanied by *Calluna vulgaris*, *Eriophorum angustifolium*, *Eriophorum vaginatum*, *Molinia caerulea*, *Narthecium ossifragum*, *Schoenus nigricans* and *Trichophorum cespitosum*. Blanket bog complexes include dystrophic pools and acidic flushes as well as the mire surface.

Q13 - Ombrotrophic percolation mire

Dome-shaped Sphagnum mire only fed by precipitation, which in contrast to bogs in other parts of the world have slightly humified and highly permeable peat over its total depth. So far only described from the Kolchis area of Georgia. Dominated by *Sphagnum papillosum*, *S. imbricatum* and *S. palustre*, vascular plants include *Molinia caerulea*, *Rhynchospora alba*, *R. caucasica*, *Rhododendron ponticum*, *R. luteum*, *Vaccinium arctostaphylos* and *Drosera rotundifolia*.

Q2 – Valley mires, poor fens and transition mires

Q21 – Oceanic valley mire

Topogenous wetlands in which the peat-forming vegetation depends on water draining from the surrounding landscape. Most valley mires are habitat complexes including poor fens, transition mires and pools. Acid valley mires often have vegetation resembling that of bogs, especially in those parts relatively distant from flowing water. Basic and neutral valley mires support mainly poor-fen vegetation, but in large mire systems, this is accompanied by acid wet grassland, large sedges and reeds. Sphagnum hummocks form locally, and transition mires or littoral and spring communities colonize small depressions. Excluded are rich-fen valley mires.

Q22 – Poor fen

This type of mire, fed by a throughput of acid, nutrient-poor groundwater occurs in a variety of topographic situations (around upland springs, in the lags of raised bogs, in forest hollows and among infertile fen-grassland complexes) throughout the siliceous landscapes of temperate Europe, particularly in the north. There is a continuous surface carpet of oligotrophic sphagna and small sedges and an associated flora of mire generalists characteristic of less minerotrophic situations. Surface patterning is usually very limited but, towards the boreal regions, there can be a gentle hummock-hollow pattern with scattered trees in drier areas.

Q23 – Relict mire of Mediterranean mountains

Oligo- to mesotrophic mire occurring on the waterlogged margins of glacial lakes and around streams in the montane and subalpine belts of the Spanish Sierra Nevada, Corsica, and the western Balkan Peninsula (and also the High Atlas of Morocco). It develops on blankets of thin peat over siliceous bedrocks, kept constantly wet and cool (covered by snow in the high Balkan mountains for much of the year) and providing a splash of green in prevailingly dry landscapes. The vegetation is dominated by small sedges or graminoids often with distinctive endemic and relict species.

Q24 – Intermediate fen and soft-water spring mire

These weakly acidic minerotrophic mires occur on peat fed from upper catchments by diffuse seepage of non-calcareous groundwater discharged via springs. They occur widely throughout temperate Europe, though at higher altitudes in the warmer south. The vegetation is typically dominated by a carpet of brown mosses and minerotrophic sphagna, small sedges and associated herbs, though generally without rich-fen indicators, and sometimes with drier hummocks on which sub-shrubs and occasional trees can be found.

Q25 – Non-calcareous quaking mire

This habitat develops by terrestrialisation of open water through the outgrowth of sodden floating rafts of vegetation and accumulating peat from the margins of acidic lakes and ponds, the whole forming a flat quaking surface. It is widely distributed through Europe, though usually highly localised, with the largest areas reported from the Nordic countries. On the matted carpets of sedges and other vascular plants typical of minerotrophic situations, sphagna, other mosses and often abundant liverworts develop, thicker stretches sometimes forming irregular ombrotrophic hummocks. The main threat for such mires is drainage, leading quickly and often irreversibly to the development of other habitats, like poor fens. Quaking areas in percolation mires (which have a much higher species richness) need a very long time to regenerate after rewetting if the regulatory mechanism of the peat body has been destroyed by drainage.

Q3 – Palsa and polygon mires

Q31 – Palsa mire

Palsa mire develops where thick peat is subject to sporadic permafrost in Iceland, northern Fennoscandia and Arctic Russia where there is low precipitation and an annual mean temperature below -1°C. The permafrost dynamics produce a typical patterning with palsa mounds 2–4 m (sometimes 7 m) high, elevated in central thicker areas by permafrost lenses. The carpet of Sphagnum peat limits the penetration of thaw, maintaining a perennially frozen core of peat, silt and ice lenses beneath. Pounikko hummock ridges can be found in marginal areas subject to seasonal freezing, and there are plateau-wide palsas and string mires in the Arctic. Intact palsa mounds show a patterning of weakly minerotrophic vegetation with different assemblages of mosses, herbs and sub-shrubs on their tops and sides. Old palsa mounds can become dry, and erosion may lead to melting and collapse. A complete melting leaves behind thermokarst ponds.

Q32 – Polygon mire

Complex mires of the Arctic and subarctic patterned by surface microrelief of large, 10–30 m in diameter, low-centre or high-centre polygons formed by the juxtaposition of dry, 0.3–0.5 m high ridges. The non-sphagnaceous mosses (*Dicranum elongatum*, *Polytrichum strictum*) and lichens (*Cladonia* and *Flavocetraria* genera) outweigh the sphagna and together with dwarf shrubs occur on the ridges. Wet hollows are occupied by grasses, sedges (*Carex rariflora*, *Eriophorum scheuchzeri*) and mosses incl. sphagna. Polygon mires occur rarely in northeastern Europe (Novaya Zemlya, Svalbard and Russian Nenets Autonomous Okrug), in the tundra where the mean annual temperature is below -1°C.

Q4 - Base-rich fens and calcareous spring mires

Q41 – Alkaline, calcareous, carbonate-rich small-sedge spring fen

Short-sedge fens, spring fens and fen grasslands kept continually wet by base-rich, nutrient-poor waters, occurring through the lowlands and mountains of temperate Europe and more locally in the boreal zone. They are most common, rich and diverse in the limestone massifs of central European mountains, especially the Alps and Carpathians. The soil is rich in organic matter and has high pH, often with precipitation of carbonate or tufa. Small basiphilous sedges dominate the vegetation with rich associated flora and a patchy carpet of fen bryophytes while sphagna are absent.

Q42 – Extremely rich moss-sedge fen

Base-rich fens without calcium carbonate precipitation, neutral, often with calciumtolerant sphagna (e.g. *Sphagnum contortum*, *S. subfulvum*, *S. teres* and *S. warnstorffii*) dominated by sedges.

Q43 – Tall-sedge base-rich fen

Tall-sedge fens are dominated by medium to tall graminoids and tall herbs, along with a patchier tier of low plants, and a ground carpet of rich-fen bryophytes. They are limited to flat landforms where base-rich, nutrient-poor groundwater from springs and seepage lines keep the surface very wet, even in summer. They occur throughout Europe, particularly in the Atlantic and central European lowlands, becoming transitional in species composition northwards to quaking calcareous fens, though sometimes covering large areas in Fennoscandia.

Q44 – Calcareous quaking mire

Calcareous quaking mire develops in as a topogenic mire in basins fed by very calcareous, nutrient-poor groundwater, with generally thin peat, less than 2 m thick. It occurs widely throughout Europe but is most widespread in Finland and Sweden. The surface is kept permanently very wet and covered by an extensive moss carpet with only sparse vascular plants, sometimes disposed over irregular patterns of flarks and hollows. Calcium precipitation can occur on the surface, and the carpet is often interrupted by stretches of open water.

Q45 – Arctic-alpine rich fen

Fens developed on open substrates constantly flushed by icy, base-rich water alongside small rivers, springs or glaciers in the alpine belt of European mountains and in the Arctic. Constant disturbance by moving water and freeze-thaw, aeration with turbulent flow and low productivity prevent peat accumulation. Consequently, this fen typically occurs as small unstable patches colonising bare ground. The vegetation consists of small basiphilous sedges, rushes and herbs, brown mosses and liverworts, and can include endemic species that are perhaps glacial relics such as *Carex atrofusca*, *Carex microglochin* and *Juncus triglumis*.

Q46 – Carpathian travertine fen with halophytes

Short-sedge fens developed on active travertine springs fed by extremely mineral-rich groundwater coming from deep aquifers upwards along Tertiary faults. They have conserved ancient species composition that combines plant and animal (e.g. snails and ostracods) specialists dwelling in short-sedge calcareous fens of temperate Europe

(*Eleocharis quinqueflora*, *Parnassia palustris*, *Pinguicula vulgaris*, *Primula farinosa*, *Schoenus ferrugineus* and *Pupilla alpicola*) with halophytic species (*Centaurium littorale* subsp. *uliginosum*, *Glaux maritima*, *Plantago maritima* subsp. *salsa*, *Scorzonera parviflora* and *Triglochin maritima*) and *Trichophorum pumilum*, a rare glacial relict of low-productive tundra, fen and salt marsh habitats. Many of these species have isolated relict populations in this habitat. Their species composition is similar to halophytic fens of the southern Siberian high-mountain regions which are climatically analogous to the European full glacial period. The habitat is endemic to the Inner Western Carpathian basins. Most of the localities were destroyed in the past.

Q5 – Helophyte beds

Q51 – Tall-helophyte bed

This habitat of tall helophytes characteristically occupies a zone from shallow to moderately deep mesotrophic to eutrophic fresh or slightly brackish water along the banks of rivers and lakes, in artificial water bodies and at nutrient-rich terrestrial sites on waterlogged ground. It is a very widespread, but naturally fragmented habitat, throughout the European lowlands. The occurrence of different dominant species depends on water depth, duration of flooding, substratum, trophic level, disturbance by waves or current, herbivory and human influence, some of the plants being cut for fodder or thatching. Because of the competitive ability and clonal growth of tall helophytes, the stands are usually species-poor and often dominated by one or a few co-dominants. The habitat is vulnerable to drainage and pollution, land reclamation for agricultural and urban development, and the decline of marshland exploitation for renewable crops.

Q52 – Small-helophyte bed

Small and amphibious helophyte-dominated freshwater vegetation is a widespread, very common but fragmented habitat throughout the European lowlands, occurring in the shallow littoral zones of lakes, ponds and rivers subject to periodic and repeated variation in water levels. It is characterised by amphibious plants and provides an important habitat for benthic invertebrates, fish, amphibians and several species of birds, by offering shelter and food. Like other wetland types, this habitat has suffered much from the intensification of agricultural land use, including drainage, modification of flooding and reclamation, and expansion of urban areas.

Q53 – Tall-sedge bed

This habitat develops throughout the European lowlands, though less commonly to the warmer south, on the margins of standing and slow-moving fresh waters just above the mean water level, but subject to periodic flooding, and on year-round water-saturated soils. Tall-sedge communities are usually species-poor, often dominated by one productive plant, often of densely tussock habit, and accompanied by few characteristic species, often disposed in mosaics on and between the tussocks. The particular dominant depends on climate, substrate, hydrology and trophic level of the habitat and, now usually in the past, on management by grazing or cutting. The main threats are the expansion of agricultural, industrial and urban areas and changes in the level of groundwater and its pollution. Often the habitat is totally transformed without the possibility of natural recovery, and strong intervention is usually needed for recovery.

Q54 – Inland saline or brackish helophyte bed

This habitat includes helophyte beds developing in and around inland saline or brackish lakes, ponds and other standing or slowly flowing waters such as saline Mediterranean rivers that are subject to summer drying. The habitat may include, depending on the particular hydrological regime, emergent communities dominated by a variety of tall or tussocky species tolerant of brackish or saline conditions. It is distributed in both the continental part of Europe and the arid Mediterranean region, where it can dry out completely in the summer and become hyper-saline. Threats include land reclamation for agricultural and urban expansion, anthropogenic changes in hydrology, and the input of freshwater to serve waterfowl hunting or ecotourism in dry areas. Safeguarding the distinctive hydrology and controlling the spread of helophytes by grazing are the main conservation actions.

Appendix C: Crosswalk between the revised EUNIS classification for Coastal habitats (N) and Wetlands (Q) and EuroVegChecklist 2016

N11 - Atlantic, Baltic and Arctic sand beach

- <> CAK-01A - *Atriplicion littoralis* Nordhagen 1940
- <> CAK-01B - *Salsolo-Minuartion peploidis* Tx. in Br.-Bl. et Tx. 1952
- <> CAK-01C - *Agropyro-Rumicion* Nordhagen 1940 nom. ambig. rejic. propos.
- <> CAK-02A - *Cakilion edentulae* Thannheiser 1981
- <> CAK-02B - *Atriplicion nudicaulis* Golub et al. 2003
- <> CAK-03A - *Euphorbion peplidis* Tx. ex Oberd. 1952

N12 - Mediterranean and Black Sea sand beach

- <> CAK-03A - *Euphorbion peplidis* Tx. ex Oberd. 1952
- <> CAK-03B - *Cakilion euxinae* Géhu et al. 1994

N13 - Atlantic and Baltic shifting coastal dune

- <> AMM-01A - *Ammophilion* Br.-Bl. 1921
- > AMM-01C - *Elymion arenarii* Christiansen 1927
- > AMM-02A - *Agropyro-Honckenyon peploidis* Tx. in Br.-Bl. et Tx. 1952 nom. mut. propos.

N14 - Mediterranean, Macaronesian and Black Sea shifting coastal dune

- <> AMM-01A - *Ammophilion* Br.-Bl. 1921
- <> AMM-01B - *Elymion gigantei* Morariu 1957

N15 - Atlantic and Baltic coastal dune grassland (grey dune)

- <> COR-01A - *Corynephorion canescentis* Klika 1931
- > CRU-01A - *Koelerion arenariae* Tx. 1937 corr. Gutermann et Mucina 1993
- > CRU-01B - *Euphorbio portlandicae-Helichrysion stoechadis* Sissingh 1974
- <> CRU-02B - *Helichrysion picardii* (Rivas-Mart., M. Costa et Izco in Rivas-Mart. et al. 1990) Rivas-Mart. et al. 1999
- > TUB-02A - *Linarion pedunculatae* Díez Garretas et al. in Izco et al. 1988
- <> TUB-02B - *Alkanno-Maresion nanae* Rivas Goday in Rivas Goday et Rivas-Mart. 1963 corr. Díez Garretas et al. 2001
- <> TUB-03A - *Anthyllido hamosae-Malcolmion lacerae* Rivas Goday 1958

N16 - Mediterranean and Macaronesian coastal dune grassland (grey dune)

- > CHE-01K - *Laguro ovati-Vulpion fasciculatae* Géhu et Biondi 1994
- > CRU-01C - *Diantho catalaunici-Scrophularion humifusae* Baudière et Simonneau 1974
- > CRU-01D - *Syntrichio-Lomelosion argenteae* Biondi, Sburlino et Theurillat in Sburlino et al. 2014
- > CRU-02A - *Crucianellion maritimae* Rivas Goday et Rivas-Mart. 1958
- <> CRU-02B - *Helichrysion picardii* (Rivas-Mart., M. Costa et Izco in Rivas-Mart. et al. 1990) Rivas-Mart. et al. 1999
- > MOQ-01C - *Euphobio paraliae-Lotion glauci* Jardim et al. 2003
- > TUB-02A - *Linarion pedunculatae* Díez Garretas et al. in Izco et al. 1988
- <> TUB-02B - *Alkanno-Maresion nancae* Rivas Goday in Rivas Goday et Rivas-Mart. 1963 corr. Díez Garretas et al. 2001
- > TUB-02C - *Psammo-Vulpion Pignatti* 1953
- > TUB-02D - *Vulpio-Lotion Horvatić* 1963
- > TUB-02E - *Maresion nancae* Géhu et al. 1987
- > TUB-02F - *Medicagini-Triplachnion nitentis* Mayer 1995
- > TUB-02G - *Ononidion tournefortii* Géhu et al. 1996

N17 - Black Sea coastal dune grassland (grey dune)

- > CRU-03A - *Sileno thymifoliae-Jurineion kilaeae* Géhu et Uslu ex Mucina all. nov. hoc loco
- > CRU-03B - *Scabiosion ucranicae* Sanda et al. 1980
- > CRU-03C - *Cynodonto-Teucrium polii* Korzhenevskii et Kliukin 1990

N18 - Atlantic and Baltic coastal *Empetrum* heath

- <> ULI-02A - *Empetrium nigri* Schubert ex Westhoff et Den Held 1969

N19 - Atlantic coastal *Calluna* and *Ulex* heath

- > ULI-01A - *Ericion cinereae* Böcher 1940
- <> ULI-01B - *Ulicion Malcuit* 1929
- <> ULI-01D - *Ericion umbellatae* Br.-Bl. in Br.-Bl. et al. 1952
- <> ULI-02A - *Empetrium nigri* Schubert ex Westhoff et Den Held 1969
- <> ULI-02B - *Calluno-Genistion pilosae* P. Duvigneaud 1945

N1A - Atlantic and Baltic coastal dune scrub

- > ARE-01A - *Salicion arenariae* Tx. ex Passarge in Scamoni 1963
- > ARE-01B - *Ligustro-Hippophaeion* Géhu et Géhu-Franck 1983
- <> ARE-01C - *Holoschoeno australis-Salicion arenariae* Neto et al. 2004
- <> LAV-02A - *Coremation albi* Rothmaler 1943

- <> RHA-01A - Berberidion vulgaris Br.-Bl. ex Tx. 1952 nom. conserv. propos.
- <> RHA-01D - Urtico-Crataegion Passarge et G. Hofmann 1968
- <> RHA-03A - Pruno spinosae-Rubion ulmifolii O. de Bolòs 1954

N1B - Mediterranean and Black Sea coastal dune scrub

- <> ARE-01C - Holoschoeno australis-Salicion arenariae Neto et al. 2004
- > ARE-01D - Pyracantho coccineae-Hippophaeion fluviatilis de Foucault et Julve 2001
- > CRU-02C - Helichryso barrelieri-Centaureion spinosae Mucina et Dimopoulos all. nov. hoc loco
- <> LAV-01D - Quercion fruticosae Rothmaler 1954
- <> LAV-02A - Coremation albi Rothmaler 1943
- > QUI-04B - Juniperion turbinatae Rivas-Mart. 1975 corr. 1987
- <> QUI-04H - Oleo-Ceratonion siliquae Br.-Bl. ex Guinochet et Drouineau 1944
- > QUI-04I - Asparago orientalis-Juniperion macrocarpae (Díez Garretas et Asensi 2014) Mucina stat. nov. hoc loco
- <> QUI-04L - Ceratonio-Pistacion lentisci Zohary et Orshan 1959

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- <> RHA-01A *Berberidion vulgaris* Br.-Bl. ex Tx. 1952 nom. conserv. propos.
- <> RHA-03A - *Pruno spinosae*-*Rubion ulmifolii* O. de Bolòs 1954

N1C - Macaronesian coastal dune scrub

- > MOQ-01A - *Traganion moquini* Sunding 1972
- > MOQ-01B - *Polycarpeo niveae*-*Euphorbion paraliae* Rivas-Mart. et Wildpret in Rivas -Mart. et al. 2002

N1D - Atlantic and Baltic broad-leaved coastal dune forest

- <> ALN-01A - *Alnion glutinosae* Malcuit 1929
- <> FAG-03A - *Carpinion betuli* Issler 1931
- <> POP-02A - *Alnion incanae* Pawłowski et al. 1928
- <> QUE-01B - *Quercion roboris* Malcuit 1929
- <> QUE-02B - *Lonicero periclymeni*-*Betulion pubescentis* Géhu 2006

N1E - Black Sea broad-leaved coastal dune forest

- <> FAG-03A - *Carpinion betuli* Issler 1931
- <> POP-02A - *Alnion incanae* Pawłowski et al. 1928
- <> POP-02D - *Alno-Quercion roboris* Horvat 1950

N1F - Baltic coniferous coastal dune forest

- <> PIC-03A - *Dicrano-Pinion sylvestris* (Libbert 1933) W. Matuszkiewicz 1962 nom. conserv. propos.

N1G - Mediterranean coniferous coastal dune forest

- <> QUI-03A - *Pistacio lentisci*-*Pinion halepensis* Biondi, Blasi, Galdenzi, Pesaresi et Vagge in Biondi et al. 2014
- <> QUI-03D - *Pinion pineae* Feinbrun 1959

N1H - Atlantic and Baltic moist and wet dune slack

- <> CHA-01A - *Charion intermediae* Sauer 1937
- <> CHA-01C - *Charion canescentis* Krausch 1964
- <> POT-01A - *Potamogetonion* Libbert 1931
- <> POT-01B - *Nymphaeion albae* Oberd. 1957
- <> LIT-01F - *Hyperico elodis*-*Sparganion* Br.-Bl. et Tx. ex Oberd. 1957
- <> ISO-02A - *Nanocyperion* Koch 1926
- <> MOL-10B - *Loto tenuis*-*Trifolion fragiferi* Westhoff et Den Held ex de Foucault 2009

- <> SAG-01A - Saginion maritimae Westhoff et al. 1962
- <> PHR-02A - Scirpion maritimi Dahl et Hadač 1941
- <> PHR-01A - Phragmition communis Koch 1926
- <> PHR-04A - Magnocaricion elatae Koch 1926
- <> SCH-01A - Caricion davallianae Klika 1934
- > SCH-01B - Caricion viridulo-trinervis Julve ex Hájek et Mucina in Theurillat et al. 2015
- <> SCH-03B - Caricion fuscae Koch 1926 nom. conserv. propos.
- <> SCH-03C - Anagallido tenellae-Juncion bulbosi Br.-Bl. 1967

N1J - Mediterranean and Black Sea moist and wet dune slack

- <> ISO-01A - Isoëtion Br.-Bl. 1935
- <> JUN-01C - Plantaginion crassifoliae Br.-Bl. in Br.-Bl. et al. 1952
- <> JUN-01D - Limonion etrusci Viciani et al. 2012
- <> JUN-01E - Agropyro-Plantaginion maritimi Horvatić 1934
- <> MOL-07A - Molinio-Holoschoenion Br.-Bl. ex Tchou 1948
- <> PHR-01A - Phragmition communis Koch 1926
- <> PHR-02A - Scirpion maritimi Dahl et Hadač 1941
- <> SAG-01A - Saginion maritimae Westhoff et al. 1962
- <> SAG-01B - Spergularion macrorhizae Gamisans 1990
- <> SAG-01C - Junco ranarii-Plantaginion commutatae Horvatić 1934
- <> SAG-01D - Romuleo-Saginion (Wolff 1968) Mucina nom. nov. hoc loco
- <> SAG-01E - Sileno sedoidis-Catapodion loliacei de Foucault et Bioret 2010

N21 - Atlantic, Baltic and Arctic coastal shingle beach

- > AMM-02B - Mertensio maritimae-Honckenyon diffusae Tx. et Géhu in Géhu 1998
- <> CAK-01A - Atriplicion littoralis Nordhagen 1940
- <> CAK-01C - Agropyro-Rumicion Nordhagen 1940 nom. ambig. rejic. propos.
- <> CAK-02A - Cakilion edentulae Thannheiser 1981
- <> CAK-02B - Atriplicion nudicaulis Golub et al. 2003

N22 - Mediterranean and Black Sea coastal shingle beach

- <> CAK-03A - Euphorbion peplidis Tx. ex Oberd. 1952
- > CRI-02G - Elytrigio bessarabicae-Lactucion tataricae Korzhenevskii ex Didukh et Mucina all. nov. hoc loco

- <> CAK-03B - *Cakilion euxinae* Géhu et al. 1994

N31 - Atlantic and Baltic rocky sea cliff and shore

- > CRI-01A - *Crithmion maritimi* Tx. et Oberd. 1958
- <> CRI-01B - *Crithmo-Staticion* Molinier 1934
- <> CRI-01C - *Crithmo-Daucion halophili* Rivas-Mart. et al. 1990
- > ASP-10A - *Asplenion marini* Segal 1969
- <> CRI-03A - *Cochleario officinalis-Armerion maritimae* Géhu et Géhu-Franck 1984
- > CRI-02A - *Dactylido hispanicae-Helichrysion stoechadis* Géhu et Biondi in Géhu 1994

N32 - Mediterranean and Black Sea rocky sea cliff and shore

- <> CRI-01B - *Crithmo-Staticion* Molinier 1934
- <> CRI-01C - *Crithmo-Daucion halophili* Rivas-Mart. et al. 1990
- > CRI-02F - *Crucianellion rupestris* S. Brullo et Furnari 1990

N33 - Macaronesian rocky sea cliff and shore

- > CRI-01D - *Limonion anfracti-cancellati* (Horvatić 1934) *Mucina* nom. nov.
hoc loco
- > CRI-01E *Crithmo-Frankenion hirsutae* Mayer 1995
- > CRI-01F - *Kochio prostratae-Limonion meyeri* Korzhenevskii 1987
- > CRI-04A - *Frankenio-Astydamion latifoliae* Santos 1976
- > CRI-04B - *Euphorbio azoricae-Festucion petraeae* Lüpnitz 1976
- > CRI-04C - *Helichrysion obconico-devium* Rivas-Mart. et al. 2002

N34 - Atlantic and Baltic soft sea cliff

- <> CRI-03A - *Cochleario officinalis-Armerion maritimae* Géhu et Géhu-Franck 1984
- > JUN-02A - *Agropyron pungentis* Géhu 1968

N35 - Mediterranean and Black Sea soft sea cliff

- > JUN-02B - *Agrostio-Elytrigion athericae* S. Brullo et Siracusa 2000

Q11 - Raised bog

- <> OXY-02A - *Oxycocco microcarpi-Empetrion hermaphroditi* Nordhagen ex Du Rietz 1954 nom. conserv. propos.
- <> OXY-02B - *Sphagnion medii* Kästner et Flössner 1933
- <> SCH-04A - *Scheuchzerion palustris* Nordhagen ex Tx. 1937

Q12 - Blanket bog

- <> OXY-01A - *Ericion tetralicis* Schwickerath 1933
- <> OXY-01B - *Oxycocco-Ericion tetralicis* Nordhagen ex Tx. 1937
- > * *Erico mackaiana*-*Sphagnion papillosum* (Fernández Prieto et al. 1987)
Rivas -Mart. et al.1999

Q13 - Ombrotrophic percolation mire

- <> OXY-01B - *Oxycocco-Ericion tetralicis* Nordhagen ex Tx. 1937

Q21 - Oceanic valley mire

- <> OXY-01B - *Oxycocco-Ericion tetralicis* Nordhagen ex Tx. 1937
- <> OXY-01A - *Ericion tetralicis* Schwickerath 1933
- <> OXY-02B - *Sphagnion medii* Kästner et Flössner 1933

Q22 - Poor fen

- <> SCH-03D - *Sphagno-Caricion canescentis* Passarge (1964) 1978 nom. conserv.
propos.

Q23 - Relict mire of Mediterranean mountains

- > SCH-03E - *Festucion frigidae* Rivas-Mart. et al. 2002
- > SCH-03F - *Caricion intricatae* Quézel 1953
- > SCH-03G - *Narthecion scardici* Horvat ex Lakušić 1968

Q24 - Intermediate fen and soft-water spring mire

- > SCH-03A - *Drepanocladion exannulati* Krajina 1933
- <> SCH-03B - *Caricion fuscae* Koch 1926 nom. conserv. propos.
- <> SCH-03C - *Anagallido tenellae-Juncion bulbosi* Br.-Bl. 1967

Q25 - Non-calcareous quaking mire

- <> LIT-01G - *Sphagno-Utricularion* T. Müller et Görs 1960
- <> SCH-03D - *Sphagno-Caricion canescentis* Passarge (1964) 1978 nom. conserv. propos.
- <> SCH-04A - *Scheuchzerion palustris* Nordhagen ex Tx. 1937

Q31 - Palsa mire

- > * *Rubus chamaemori*-*Dicranion elongati* Lavrinenko et Lavrinenko 2015

Q32 - Polygon mire

-

> * *Rubus chamaemori*-*Dicranion elongati* Lavrinenko et Lavrinenko 2015

Q41 - Alkaline, calcareous, carbonate-rich small-sedge spring fen

<> SCH-01A - *Caricion davallianae* Klika 1934

<> SCH-01B - *Caricion viridulo-trinervis* Julve ex Hájek et Mucina in
Theurillat et al. 2015

Q42 - Extremely rich moss-sedge fen

<> SCH-02A - *Saxifrago-Tomentypnion* Lapshina 2010

<> SCH-02D - *Sphagno warnstorffii-Tomentypnion nitentis* Dahl 1957

Q43 - Tall-sedge base-rich fen

<> SCH-01A - *Caricion davallianae* Klika 1934

<> SCH-02A - *Saxifrago-Tomentypnion* Lapshina 2010

Q44 - Calcareous quaking mire

<> SCH-02C - *Stygio-Caricion limosae* Nordhagen 1943

<> LIT-01H - *Scorpidio-Utricularion minoris* Pietsch 1965

Q45 - Arctic-alpine rich fen

> SCH-01C - *Caricion atrofusco-saxatilis* Nordhagen 1943

> SCH-02B - *Caricion stantis* Matveyeva 1994

Q46 - Carpathian travertine fen with halophytes

<> SCH-01A - *Caricion davallianae* Klika 1934

Q51 - Tall-helophyte bed

<> PHR-01A - *Phragmites communis* Koch 1926

<> PHR-05B - *Phalaridion arundinaceae* Kopecký 1961

<> PHR-05D - *Deschampsion argenteae* Capelo et al. 2000

Q52 - Small-helophyte bed

<> PHR-01A - *Phragmites communis* Koch 1926

<> PHR-05B - *Phalaridion arundinaceae* Kopecký 1961

<> PHR-05D - *Deschampsion argenteae* Capelo et al. 2000

Q53 - Tall-sedge bed

- <> PHR-04A *Magnocaricion elatae* Koch 1926
- > PHR-04B - *Magnocaricion gracilis* Géhu 1961
- > PHR-04C - *Carici-Rumicion hydrolapathi* Passarge 1964
- > PHR-05C - *Caricion broterianae* (Rivas-Mart. et al. 1986) J.A. Molina 1996

Q54 - Inland saline or brackish helophyte bed

- > PHR-01B - *Typhion laxmannii* Nedelcu 1968
- <> PHR-02A - *Scirpion maritimi* Dahl et Hadač 1941
- > PHR-02B - *Meliloto dentati-Bolboschoenion maritimi* Hroudová et al. 2009

Explanation of the qualifiers

- < the type left of the qualifier is defined as a part of the type right of the qualifier
- > the type left of the qualifier is defined as a broader than and completely including the type right of the qualifier
- <> both types have a large part that overlaps, but also parts that do not overlap
- * Alliance not yet included in the European Vegetation Classification

Appendix D: Formal definitions of the revised Coastal habitats (N) and Wetlands (Q)

Species groups used in the formal definitions of habitat types

Abies alba

Abies alba

Acidophilous-oak-forest-trees

Castanea sativa

Quercus petraea

Quercus pyrenaica

Quercus robur

Adriatic-Genista

Genista hassertiana

Genista holopetala

Genista radiata

Alnus-Fraxinus-excelsior

Alnus glutinosa

Fraxinus excelsior

Alnus-Fraxinus-angustifolia-excelsior

Alnus glutinosa

Fraxinus angustifolia

Fraxinus excelsior

Alnus cordata

Alnus cordata

Alnus glutinosa

Alnus glutinosa

Alpine-acidophilous-herbs

Agrostis nevadensis

Agrostis rupestris

Alopecurus gerardi

Androsace carnea

Androsace obtusifolia

Armeria alpina

Astrantia minor

Bupleurum stellatum Campanula alpina

Campanula herminii

Campanula scheuchzeri

Carex curvula Carex fimbriata

Centaurea uniflora

Crocus carpetanus

Crocus sieberi

Crocus veluchensis

Dianthus glacialis
Dianthus microlepis Dianthus scardicus
Doronicum styriacum
Endressia pyrenaica
Erodium carvifolium
Euphrasia hirtella
Euphrasia minima
Festuca airoides
Festuca eskia
Festuca halleri
Festuca henriquesii Festuca iberica
Festuca igoschiniae
Festuca pseudodura Festuca riloensis
Festuca rothmaleri
Festuca scabriculmis
Festuca supina
Galium cespitosum
Gentiana acaulis
Gentiana alpina
Gentiana boryi
Gentiana brachyphylla
Gentiana punctata
Gentiana pyrenaica
Geum montanum
Helictochloa versicolor
Hieracium alpinum
Homogyne alpina
Juncus jacquinii
Juncus trifidus
Lagotis uralensis
Laserpitium halleri
Leucanthemopsis alpina
Luzula lutea
Luzula pediformis
Minuartia recurva
Minuartia sedoides
Narcissus bulbocodium
Narcissus pseudonarcissus
Oreochloa disticha
Oreochloa seslerioides Paradisea liliastrum
Pedicularis comosa
Pedicularis kernerii
Pedicularis portenschlagii
Pedicularis tuberosa
Phyteuma betonicifolium
Phyteuma confusum
Phyteuma globulariifolium
Phyteuma hemisphaericum
Phyteuma michelii
Plantago alpina
Plantago nivalis

Poa media
Polygala edmundii
Potentilla aurea
Potentilla frigida
Potentilla grandiflora
Potentilla nevadensis
Potentilla valderia
Primula glutinosa
Primula integrifolia
Primula minima
Ranunculus abnormis
Ranunculus amplexicaulis
Ranunculus pyrenaicus
Salix herbacea
Scleranthus uncinatus
Sesleria comosa
Silene flos-jovis
Silene radicata
Silene vallesia
Silene waldsteinii
Soldanella alpina
Soldanella hungarica
Trifolium alpinum
Trifolium parnassii
Valeriana celtica
Veronica allionii
Veronica bellidioides

Alpine-subalpine-ericoid-dwarf-shrubs

Bruckenthalia spiculifolia
Erica carnea
Rhododendron caucasicum
Rhododendron ferrugineum Rhododendron hirsutum
Rhododendron myrtifolium
Rhododendron chamaecistus

Aralo-Caspian-semi-desert-species

Agropyron fragile
Alhagi maurorum
Alyssum turkestanicum
Anabasis aphylla
Artemisia lerchiana
Astragalus physodes
Atraphaxis spinosa
Bassia prostrata Calligonum aphyllum
Camphorosma monspeliaca
Ceratocarpus arenarius
Eremopyrum orientale
Ferula caspica
Medicago medicaginoides
Peganum harmala

Petrosimonia oppositifolia
Salsola dendroides Salsola kali aggr.
Zygophyllum fabago

Arctic-alpine-bryophytes-lichens

Alectoria nigricans
Alectoria ochroleuca
Cetraria cucullata
Cetraria delisei
Cetraria nivalis
Cladonia amaurocraea
Cladonia bellidiflora
Cladonia carneola
Cladonia ecmocyna
Cladonia stellaris
Gymnomitrium coralloides
Kiaeria starkei
Nephroma arcticum Racomitrium

lanuginosum

Sphaerophorus globosus aggr.
Stereocaulon paschale
Tetralophozia setiformis
Thamnolia vermicularis
Vulpicida tubulosus

Arctic-alpine-dwarf-shrubs

Arctostaphylos alpinus
Betula nana
Empetrum nigrum aggr.
Loiseleuria procumbens

Arctic-alpine-dwarf-willows Salix alpina

Salix breviserrata
Salix herbacea
Salix herbacea x polaris
Salix kazbekensis Salix nummularia
Salix polaris
Salix reptans
Salix reticulata
Salix retusa
Salix retusa aggr.
Salix serpillifolia

Arctic-alpine-shrubby-junipers

Juniperus communis subsp. hemisphaerica
Juniperus communis subsp. nana
Juniperus sabina

Arctic-ericoid-dwarf-shrubs

Cassiope hypnoides
Cassiope tetragona

Diapensia lapponica
Phylodoce caerulea
Rhododendron lapponicum

Arcto-alpine-rich-fen-specialists

Alopecurus magellanicus
Carex aquatilis
Carex atrofusca
Carex bicolor
Carex capillaris
Carex capitata
Carex maritima
Carex microglochin
Carex norvegica Carex paralela
Carex saxatilis
Catoscopium nigratum
Dupontia fisheri
Juncus arcticus
Juncus biglumis
Juncus castaneus
Juncus triglumis
Kobresia simpliciuscula
Ranunculus hyperboreus
Salix polaris
Salix reticulata
Saxifraga aizoides
Saxifraga foliolosa
Saxifraga rivularis
Thalictrum alpinum
Tofieldia pusilla

Atlantic-and-Baltic-soft-sea-cliff-clay-indicators

Anthyllis vulneraria
Brassica oleracea
Eupatorium cannabinum
Jacobaea vulgaris
Petasites spurius Reseda lutea
Samolus valerandi Tussilago farfara

Atlantic-and-Baltic-soft-sea-cliff-salt-indicators

Armeria maritima
Plantago coronopus
Plantago maritima
Silene uniflora

Atlantic-forest-species

Ceratocarpus claviculata
Hedera helix
Hypericum pulchrum
Ilex aquifolium
Lonicera periclymenum

Teucrium scorodonia

Atlantic-heath-shrubs

Cistus lasianthus
Cistus ocymoides
Cistus palhinhae
Cistus psilosepalus Cistus umbellatus
Daboecia cantabrica
Erica australis
Erica ciliaris
Erica cinerea
Erica erigena
Erica lusitanica
Erica mackaiana Erica scoparia
Erica umbellata Erica vagans
Genista anglica
Genista micrantha
Genista triacanthos
Genista tridentata
Ulex boivinii
Ulex gallii
Ulex minor

Betula pendula

Betula pendula

Betula pendula var. fontqueri

Betula pendula var. fontqueri

Betula pendula-pubeszens

Betula alba
Betula alba aggr.
Betula pendula
Betula pendula x pubescens
Betula pendula + B. pubescens
Betula pubescens
Betula pubescens var. glabrata
Betula pubescens var. pumila

Betula pubescens

Betula pubescens

Birch-bog-forest-species Aulacomnium palustre

Calamagrostis canescens
Carex canescens
Carex nigra
Comarum palustre
Eriophorum angustifolium
Eriophorum vaginatum
Molinia caerulea aggr.
Myrica gale

Polytrichum commune
Vaccinium oxycoccos
Vaccinium uliginosum

Blanket-bog-specialists

Anagallis tenella
Campylopus atrovirens
Carex duriei
Erica cinerea
Erica mackaiana
Pleurozia purpurea
Racomitrium lanuginosum
Schoenus nigricans
Sphagnum pylaesii

Bog-Pinus Pinus

mugo

Pinus mugo aggr.
Pinus mugo subsp. rotundata
Pinus sylvestris

Bog-vascular-plants-specialists

Andromeda polifolia
Carex pauciflora
Chamaedaphne calyculata
Drosera rotundifolia
Eriophorum angustifolium
Eriophorum vaginatum
Narthecium ossifragum
Rhynchospora alba
Rhynchospora fusca
Rhododendron tomentosum Rubus
chamaemorus
Trichophorum cespitosum Vaccinium
microcarpum
Vaccinium oxycoccos
Vaccinium uliginosum

Boreo-temperate-mountain-Betula Betula litwinowii

Betula pubescens var. glabrata
Betula pubescens var. pumila

Buxus sempervirens

Buxus sempervirens

C-Mediterranean-mountain-thorny-cushion-shrubs Astracantha nebrodensis

Astracantha parnassi subsp. calabricus
Astracantha sicula
Astragalus sirinicus
Cytisus spinescens
Genista cupanii

Genista desoleana
Genista lobelii
Genista michelii
Genista salzmännii

Calcium-rich-spring-mires

Blysmus compressus
Carex capillaris Carex capitata
Carex davalliana
Carex hostiana
Carex lepidocarpa
Carex panicea
Carex pulicaris
Carex trinervis
Carex viridula
Centaurium littorale
Dactylorhiza incarnata
Dactylorhiza majalis
Dactylorhiza traunsteineri
Eleocharis quinqueflora
Epipactis palustris
Eriophorum angustifolium
Eriophorum latifolium
Festuca frigida
Gymnadenia conopsea
Juncus alpinoarticulatus
Juncus subnodulosus
Liparis loeselii
Parnassia palustris
Polygala amarella
Primula farinosa
Salix repens
Salix rosmarinifolia
Schoenus ferrugineus Schoenus nigricans
Succisa pratensis
Tofieldia calyculata Triglochin maritima
Triglochin palustris
Valeriana dioica

Calcium-tolerant-Sphagna-and-boreal-rich-fen-bryophytes

Cinclidium stygium
Paludella squarrosa
Sphagnum contortum
Sphagnum obtusum
Sphagnum platyphyllum
Sphagnum subfulvum
Sphagnum subsecundum Sphagnum teres
Sphagnum warnstorffii

Canary-Island-xerophytic-scrub-species

Allagopappus canariensis

Anagyris latifolia
Androcymbium hierrense
Argyranthemum callichrysum
Argyranthemum coronopifolium
Argyranthemum escarrei
Argyranthemum gracile
Argyranthemum sundingii
Asparagus arborescens
Asparagus nesiotes
Asparagus pastorianus
Asparagus plocamoides
Asparagus scoparius
Asparagus umbellatus
Atriplex glauca
Brachypodium arbuscula
Bupleurum handiense
Bystropogon odoratissimus
Bystropogon plumosus
Campylanthus salsoloides
Caralluma burchardii
Carlina salicifolia
Ceropegia dichotoma
Ceropegia fusca
Convolvulus floridus
Convolvulus lopezsocasi
Convolvulus scoparius
Cytisus filipes
Dorycnium eriophthalmum
Dracaena draco
Echium aculeatum
Echium brevirame
Echium giganteum Echium strictum
Erysimum bicolor
Euphorbia aphylla
Euphorbia atropurpurea
 Euphorbia balsamifera
 Euphorbia berthelotii
 Euphorbia canariensis
 Euphorbia handiensis
 Euphorbia lamarckii
 Euphorbia regis-jubae
 Globularia salicina
 Helianthemum canariense
 Herniaria canariensis
 Hypericum canariense
 Jasminum odoratissimum
 Justicia hyssopifolia
 Kickxia sagittata
 Kickxia scoparia
 Kleinia neriifolia
 Lavandula pinnata

Marcetella moquiniana
Maytenus canariensis
Neochamaelea pulverulenta
Pancratium canariense
Parolinia intermedia
Parolinia ornata
Paronychia canariensis
Periploca laevigata
Plantago arborescens
Plocama pendula
Reichardia famarae
Reseda scoparia
Retama raetam
Rhamnus crenulata
Rubia fruticosa
Ruta pinnata
Rutheopsis herbanica
Schizogyne sericea
Scilla haemorrhoidalis
Seseli webbii
Sideritis brevicaulis
Sideritis dendrochahorra
Sideritis pumila
Sideroxylon mirmulans
Sonchus capillaris
Sonchus microcarpus
Sonchus leptocephalus
Teline osyroides
Teucrium heterophyllum
Vicia cirrhosa

Carpinus betulus

Carpinus betulus

Cedrus atlantica

Cedrus atlantica

Cedrus libani

Cedrus libani

Chamaephytes Achillea atrata

Achillea erba-rotta
Achillea lucana
Achillea maritima
Achillea rupestris
Achyranthes aspera
Achyranthes sicula
Aegonychon calabrum
Aethionema saxatile
Agrostis stolonifera
Ajuga iva

Ajuga reptans
Alchemilla longana
Alyssoides utriculata
Alyssum cuneifolium
Alyssum diffusum
Alyssum ligusticum
Alyssum montanum
Alyssum wulfenianum
Andromeda polifolia
Androsace alpina
Androsace brevis
Androsace chamaejasme
Androsace hausmannii
Androsace helvetica Androsace lactea
Androsace mathildae
Androsace pubescens
Androsace vandellii Androsace villosa
Androsace vitaniana
Androsace wulfeniana
Andryala ragusina
Anogramma leptophylla
Antennaria dioica
Anthemis aetnensis
Anthemis cotula
Anthemis cupaniana
Anthemis hydruntina
Anthemis ismelia
Anthyllis hermanniae Anthyllis montana
Antirrhinum australe
Antirrhinum latifolium
Antirrhinum majus
Antirrhinum siculum
Arctostaphylos alpinus
Arctostaphylos uva-ursi
Arenaria aggregata
 Arenaria balearica
 Arenaria bertolonii
 Arenaria biflora
 Arenaria ciliata
 Arenaria grandiflora
 Arenaria huteri
 Arenaria moehringioides
 Arenaria procera
Argentina anserina Argyrolobium zanonii
Armeria leucocephala
Armeria multiceps
Armeria pungens
Armeria sardoa
Armeria soleirolii
Armeria sulcitana
Artemisia absinthium

Artemisia alba
Artemisia atrata
Artemisia caerulescens
Artemisia campestris
Artemisia chamaemelifolia
Artemisia cretacea
Artemisia genipi
Artemisia glacialis
Artemisia nitida
Artemisia pedemontana
Artemisia umbelliformis
Artemisia vallesiaca
Arthrocnemum macrostachyum
Asarum europaeum
Asparagus aphyllus
Asparagus pastorianus
Asperula calabra
Asperula crassifolia
Asperula garganica
Asperula gussonii
Asperula nitida
Asperula pumila
Asperula purpurea
Asperula rupestris
Asperula staliana
Asperula suberosa
Astracantha nebrodensis
Astracantha parnassi subsp. calabricus
Astracantha sicula
Astragalus austriacus
Astragalus glycyphyllos
Astragalus sempervirens Astragalus sirinicus
Aubrieta columnae
Aubrieta deltoidea
Aurinia leucadea Aurinia saxatilis
 Aurinia sinuata
 Ballota frutescens
 Ballota hispanica
 Ballota pseudodictamnus
 Barbarea rupicola
 Bassia saxicola
 Bellium crassifolium
 Biscutella incana
 Bituminaria morisiana
 Brassica botteri
 Brassica drepanensis
 Brassica incana
 Brassica insularis
 Brassica macrocarpa
 Brassica oleracea
 Brassica rupestris

Brassica villosa
Buphthalmum inuloides
Bupleurum dianthifolium
Calendula suffruticosa
Calluna vulgaris
Campanula garganica
Campanula isophylla
Camphorosma monspeliaca
Caralluma europaea
Carpobrotus acinaciformis
Carpobrotus edulis
Castroviejoa frigida
Castroviejoa montelinasana
Centaurea aplolepa
Centaurea cineraria
Centaurea diomedeae
Centaurea filiformis
Centaurea gymnocarpa
Centaurea horrida
Centaurea leucadea
Centaurea tauromenitana
Centranthus angustifolius
Centranthus ruber
Centranthus trinervis
Cephalaria squamiflora
Cerastium carinthiacum
Cerastium latifolium Cerastium thomasi
Cerastium tomentosum Cerastium uniflorum
Chiliadenus bocconeii
Chiliadenus lopadusanus Cichorium spinosum
Cistus oelandicus
Clinopodium alpinum
Clinopodium corsicum Clinopodium serpyllifolium
 Clinopodium suaveolens
 Clinopodium thymifolium
 Comarum palustre
 Convolvulus cneorum
 Convolvulus lineatus
 Convolvulus oleifolius
 Coronilla coronata
 Coronilla minima
 Coronilla vaginalis
 Cressa cretica
 Crithmum maritimum
 Crucianella maritima
 Cymbalaria aequitriloba
 Cymbalaria muelleri
 Cymbalaria muralis
 Cymbalaria pilosa
 Cynoglossum magellense
Cystopteris fragilis

Cytisus decumbens
Cytisus emeriflorus
Cytisus hirsutus
Cytisus pseudoprocumbens
Cytisus purpureus
Cytisus spinescens
Daphne alpina
Daphne cneorum
Daphne oleoides
Daphne petraea
Daphne striata
Delairea odorata
Dianthus arrostii
Dianthus rupicola
Dictamnus albus
Diploaxis crassifolia
Diploaxis harra
Dorycnium hirsutum
Dracocephalum austriacum
Dracocephalum ruyschiana
Dryas octopetala
Drypis jacquiniana
Drypis spinosa
Dysphania ambrosioides
Edraianthus graminifolius Empetrum nigrum aggr.
Erica carnea
Erica cinerea
Erica manipuliflora
Erica sicular
Eritrichium nanum
Erodium alpinum
Erodium corsicum
Erodium glaucophyllum
 Erodium nervulosum
 Erysimum cheiri
 Euphorbia amygdaloides
 Euphorbia barbelieri
 Euphorbia biumbellata
 Euphorbia ceratocarpa
 Euphorbia corsica
 Euphorbia flavicoma
 Euphorbia fragifera
 Euphorbia gasparrinii
 Euphorbia myrsinites
 Euphorbia orientalis
 Euphorbia paralias
 Euphorbia pithyusa
 Euphorbia rigida
 Euphorbia segetalis
 Euphorbia spinosa
 Euphorbia triflora

Fagonia cretica
Fragaria moschata
Fragaria vesca
Fragaria viridis
Frankenia hirsuta
Frankenia hispida
Frankenia intermedia
Frankenia laevis Fumana arabica
Fumana ericoides
Fumana laevipes
Fumana procumbens Fumana
scoparia
Fumana thymifolia
Galium schmidii
Genista aristata
Genista cupanii
Genista germanica
Genista holopetala
Genista januensis
Genista pilosa
Genista radiata
Genista sagittalis Genista sericea
Genista sylvestris
Genista tinctoria
Genista triangularis
Geum reptans
Glandora rosmarinifolia Glechoma hederacea
Glechoma hirsuta
Glechoma sardoa
Globularia cordifolia
Globularia meridionalis
Globularia neapolitana
 Globularia repens
 Gypsophila arrostii
 Gypsophila papillosa
 Gypsophila repens
 Halimione portulacoides
 Halocnemum strobilaceum
 Haplophyllum patavinum Helianthemum alpestre
 Helianthemum apenninum Helianthemum canum
 Helianthemum cinereum
 Helianthemum croceum
 Helianthemum hirtum
 Helianthemum jonium
 Helianthemum syriacum
 Helianthemum lunulatum
 Helianthemum nummularium
 Helianthemum oelandicum
Helianthemum pilosum
Helianthemum violaceum Helichrysum italicum
Helichrysum nebrodense

Helichrysum pendulum
Helichrysum rupestre
Helichrysum saxatile Helichrysum siculum
Helichrysum stoechas
Heliotropium amplexicaule
Heliotropium bocconeii
Heliotropium curassavicum
Heliotropium suaveolens
Helleborus foetidus
Helosciadium crassipes
Herniaria fontanesii
Hieracium bifidum
Hieracium lucidum
Hieracium murorum
Hormathophylla ligustica
Huperzia selago
Hypericum aegypticum
Hypericum coris
Hyssopus officinalis Iberis saxatilis
Iberis semperflorens
Iberis sempervirens
Inula verbascifolia
Jacobaea abrotanifolia
Jacobaea candida
Jacobaea gibbosa
Jacobaea lycopifolia
Jacobaea maritima
Jasione orbiculata
Jovibarba globifera
 Kickxia commutata
 Launaea fragilis
 Lavandula multifida
 Limbarda crithmoides
 Limoniastrum monopetalum
 Limonium acutifolium Limonium albidum
 Limonium articulatum
 Limonium bocconeii
 Limonium cosyrense
 Limonium divaricatum
 Limonium hermaeum
 Limonium inarimense
 Limonium japygicum Limonium laetum
 Limonium lausianum
 Limonium merxmülleri Limonium
 morisianum
Limonium panormitanum
Limonium parvifolium
Limonium remotispiculum
Limonium tenoreanum
Limonium tenuiculum
Linaria capraria Linaria supina

Linaria tonzigii
Linnaea borealis
Linum campanulatum
Linum capitatum
Linum suffruticosum aggr.
Linum tenuifolium
Loiseleuria procumbens Lomelosia crenata
Lomelosia graminifolia
Lotus collinus
Lotus creticus
Lotus cytisoides
Lotus longesiliquosus Lomelosia cretica
Lycopodiella inundata
Lycopodium alpinum
Lycopodium annotinum
Lycopodium clavatum
Lycopodium complanatum Lycopodium issleri
Lycopodium tristachyum
Matthiola fruticulosa Matthiola incana
Medicago marina
Mentha requienii
Mercurialis corsica
Mesembryanthemum cordifolium
Micromeria consentina
 Micromeria filiformis
 Micromeria graeca
 Micromeria juliana
 Micromeria marginata
 Micromeria microphylla
 Micromeria nervosa
 Minuartia austriaca
 Minuartia biflora
 Minuartia capillacea
 Minuartia cherlerioides
 Minuartia graminifolia
 Minuartia grignensis
 Minuartia laricifolia
 Minuartia recurva
 Minuartia rostrata
 Minuartia rupestris
 Minuartia sedoides Minuartia verna
Minuartia villarii
Moehringia bavarica
Moehringia dielsiana
Moehringia glaucovirens
Moehringia lebrunii
Moehringia papulosa
Moehringia sedoides
Moehringia tommasinii Moltkia suffruticosa
Myriolimon ferulaceum
Nepeta agrestis

Nepeta nepetella
Noccaea brachypetala
Noccaea rotundifolia
Noccaea stilosa
Noccaea sylvia
Odontarrhena alpestris
Odontarrhena argentea
Odontarrhena bertolonii
Odontarrhena corsica
Odontarrhena nebrodensis
Odontarrhena robertiana
Odontites bocconeii
Onobrychis saxatilis
Onoclea struthiopteris
Ononis masquillieri Ononis minutissima
Ononis spinosa
Ononis striata
Onosma echioides
Opuntia compressa
Origanum onites
Orthilia secunda
Oxalis corniculata
Oxytropis amethystea
 Oxytropis jacquinii
 Oxytropis lapponica
 Oxytropis pilosa
 Peganum harmala
 Phagnalon rupestre
 Phagnalon saxatile
 Phagnalon sordidum
 Phyla canescens
 Phyla nodiflora
 Phyllolepidium cyclocarpum
 Pimpinella tragium
 Plagius flosculosus
 Plantago albicans
 Plantago sempervirens
 Plantago subulata
 Plumbago europaea
 Polycarpon polycarpoides
 Polygala chamaebuxus
Polygonum maritimum
Polygonum romanum
Potentilla apennina
Potentilla caulescens
Potentilla clusiana
Potentilla crassinervia
Potentilla grammopetala
Potentilla nitida
Potentilla saxifraga
Potentilla valderia

Prasium majus
Primula palinuri
Psoralea morisiana
Ptilostemon gnaphaloides
Ranunculus repens
Rhinanthus minor
Rhinanthus personatus
Rhodalsine geniculata
Rhodiola rosea
Rhodothamnus chamaecistus
Ruscus aculeatus
Ruscus hypoglossum
Ruta angustifolia
Ruta chalepensis
Ruta corsica
Ruta graveolens
Ruta montana
Salix alpina
Salix breviserrata Salix daphnoides
Salix herbacea
Salix myrsinites Salix repens
Salix reticulata
Salix retusa Salpichroa organifolia
 Salpichroa rhomboidea
 Salvia canariensis Salvia leucantha
 Salvia officinalis
 Santolina pinnata
 Saponaria pumilio
 Sarcocornia fruticosa
 Sarcocornia perennis
 Satureja cuneifolia
 Satureja montana
 Satureja subspicata
 Satureja thymbra
 Saxifraga aphylla
 Saxifraga arachnoidea
 Saxifraga aspera
 Saxifraga berica
 Saxifraga biflora
Saxifraga bryoides
Saxifraga caesia
Saxifraga callosa
Saxifraga cochlearis
Saxifraga crustata
Saxifraga depressa
Saxifraga diapiensoides
Saxifraga exarata
Saxifraga florulenta
Saxifraga glabella
Saxifraga italica
Saxifraga marginata

Saxifraga oppositifolia
Saxifraga pedemontana
Saxifraga porophylla
Saxifraga presolanensis
Saxifraga retusa
Saxifraga squarrosa
Saxifraga tenella
Saxifraga tombeanensis
Saxifraga valdensis
Saxifraga vandellii
Scabiosa limonifolia
Scrophularia canina
Scrophularia ramosissima
Scutellaria alpina
Sedum acre
Sedum album
Sedum alpestre
Sedum amplexicaule
Sedum brevifolium
Sedum dasyphyllum
Sedum magellense
Sedum monregalense
Sedum montanum Sedum
ochroleucum
Sedum rupestre
Sedum sediforme
Sedum sexangulare
Sedum spurium
Selaginella denticulata
Selaginella helvetica
Selaginella selaginoides
Sempervivum arachnoideum Sempervivum calcareum
Sempervivum dolomiticum
Sempervivum grandiflorum
Sempervivum montanum
Sempervivum riccii
Sempervivum tectorum
Sempervivum wulfenii
Senecio ambiguus
Senecio squalidus
Sideritis hirsuta
Sideritis hyssopifolia
Sideritis syriaca
Silene acaulis
Silene elisabethae
Silene fruticosa
Silene requienii
Silene velutinoides
Sinapis pubescens
Spergularia media
Spergularia rubra

Spiraea cana
Spiraea chamaedryfolia
Spiraea decumbens Stachys corsica
Stachys glutinosa
Stellaria holostea
Telephium imperati
Teucrium chamaedrys
Teucrium flavum
Teucrium marum
Teucrium massiliense
Teucrium montanum
Teucrium polium aggr.
Thymbra capitata
Thymelaea dioica
Thymus alpestris
Thymus herba-barona
Thymus longicaulis
Thymus odoratissimus
Thymus praecox
Thymus pulegioides
Thymus richardii
Thymus serpyllum
Thymus spinulosus
 Thymus striatus
 Thymus thracicus
 Thymus vulgaris
 Trachelium caeruleum
 Trifolium fragiferum
 Trifolium pratense
 Trifolium repens
 Vaccinium microcarpum
 Vaccinium myrtillus
 Vaccinium oxycoccos
 Vaccinium uliginosum
 Valeriana angustifolia
 Veronica allionii
 Veronica beccabunga
 Veronica bellidioides
 Veronica filiformis
 Veronica fruticans
Veronica fruticulosa Veronica montana
Veronica officinalis
Veronica repens
Veronica serpyllifolia
Vinca difformis
Vinca major
Vinca minor
Viola arborescens

Colchic-percolation-mire

Rhododendron luteum

Rhododendron ponticum

Rhynchospora caucasica

Continental-inland-salt-steppe-specialists

Eremopyrum orientale

Eremopyrum triticeum

Limonium gmelinii

Limonium meyeri

Limonium tomentellum

Petrosimonia brachiata

Petrosimonia oppositifolia

Puccinellia dolicholepis

Puccinellia festuciformis

Suaeda acuminata

Crops

Allium cepa

Allium sativum

Anethum graveolens

Avena sativa

Beta vulgaris subsp. vulgaris

Brassica napus

Brassica oleracea

Brassica rapa Capsicum annuum

Carthamus tinctorius

Cicer arietinum

Citrullus lanatus

Cucumis melo

Cucumis sativus

Cucurbita pepo

Cucurbita maxima

Cynara scolymus

Fagopyrum esculentum

Fagopyrum tataricum

Glycine max

Gossypium hirsutum

Helianthus annuus

Hordeum vulgare

Lactuca sativa

Lens culinaris

Linum usitatissimum Nicotiana tabacum

Papaver somniferum

Petroselinum crispum

Phacelia tanacetifolia

Phaseolus vulgaris

Pisum sativum

Raphanus sativus

Secale cereale

Sesamum indicum

Sinapis alba

Solanum lycopersicum

Solanum tuberosum
Sorghum bicolor
Triticosecale rimpaui
Triticum aestivum
Triticum monococcum
Triticum turgidum
Vicia ervilia
Vicia faba
Zea mays

Cupressaceae-trees

Juniperus drupacea
Juniperus excelsa
Juniperus foetidissima
Juniperus thurifera
Tetraclinis articulata

Cupressus sempervirens

Cupressus sempervirens

Dark-taiga-trees Abies sibirica

Picea abies
Picea obovata
Pinus sibirica

Dry-and-wet-heath-shrubs

Calluna vulgaris
Erica ciliaris
Erica mackaiana Erica vagans
Genista anglica
Genista micrantha
Ulex minor

Dry-heath-shrubs Daboecia

cantabrica

Empetrum nigrum aggr.
Erica andevalensis
Erica australis
Erica cinerea
Erica scoparia
Erica umbellata
Genista germanica
Genista pilosa
Genista triacanthos
Genista tridens
Genista tridentata
Ulex boivinii
Ulex europaeus
Ulex gallii
Ulex micranthus
Ulex parviflorus

Vaccinium myrtillus
Vaccinium vitis-idaea

Dryas

Dryas integrifolia
Dryas octopetala

Dry-continental-pine-forest-species

Arenaria procera
Astragalus arenarius
Astragalus danicus
Astragalus glycyphyllos
Brachypodium pinnatum
Convallaria majalis
Dianthus arenarius
Dracocephalum ruysiana
Geranium sanguineum
Hieracium laevigatum
Hieracium sabaudum
Lathyrus pisiformis
Onobrychis arenaria
Origanum vulgare
Peucedanum oreoselinum Pimpinella saxifraga
Thalictrum minus
Thymus serpyllum
Trifolium alpestre Trifolium medium
Trifolium montanum

Dwarf-shrubs Acantholimon ulicinum

Alyssum atlanticum
Anabasis articulata
Anthyllis cytisoides
Anthyllis lagascana
Anthyllis onobrychioides
Anthyllis polycephala
Anthyllis ramburii
Anthyllis rupestris
Anthyllis tejedensis
Anthyllis terniflora
Antirrhinum latifolium
Antirrhinum siculum
Arctostaphylos alpinus
Arctostaphylos uva-ursi
Arenaria aggregata
Arenaria alfacarensis
Arenaria cavanillesiana
Argyrolobium zanonii
Asparagus aphyllus
Astracantha caspica
Astracantha caucasica
Astracantha condensata

Astracantha cretica
Astracantha echinus
Astracantha erinacea
Astracantha granatensis
Astracantha gummifera
Astracantha nebrodensis
Astracantha parnassi subsp. calabricus
Astracantha parnassi subsp. cyllenea
Astracantha parnassi subsp. parnassi
Astracantha prusiana
Astracantha rumelica Astracantha sicala
Astracantha thracica
Astracantha trojana
Astragalus alopecuroides subsp. grosii
Astragalus angustifolius
Astragalus balearicus
Astragalus cavanillesii Astragalus hispanicus
Astragalus sempervirens
Astragalus sirinicus
Astragalus tragacantha
Ballota frutescens
 Ballota hispanica
 Ballota pseudodictamnus
 Bruckenthalia spiculifolia
 Bupleurum frutescens
 Calluna vulgaris
 Camphorosma monspeliaca
 Carthamus balearicus
 Carthamus hispanicus subsp. araneosus
 Cassiope hypnoides
 Cassiope tetragona
 Centaurea horrida
 Centaurea hyssopifolia
 Cephalaria squamiflora
 Convolvulus cneorum
 Convolvulus oleifolius
 Corema album subsp. azoricum
 Coris hispanica
 Coronilla minima
Coronilla valentina
Cytisus spinescens
Daboecia azorica
Daboecia cantabrica
Daphne alpina
Daphne arbuscula
Daphne oleoides
Diapensia lapponica
Dorycnium fulgurans
Dorycnium hirsutum
Dryas integrifolia
Dryas octopetala

Dryas punctata
Echinopartum boissieri
Echinopartum horridum
Echinopartum lusitanicum Empetrum nigrum aggr.
Ephedra distachya
Erica andevalensis
Erica carnea
Erica ciliaris
Erica cinerea
Erica erigena
Erica mackaiana
Erica maderensis
Erica terminalis
Erica tetralix
Erica umbellata
Erica vagans
Erinacea anthyllis
Euphorbia acanthothamnos Euphorbia
isatidifolia Euphorbia maresii
Euphorbia minuta subsp. moleroi
Euphorbia paralias
 Fumana arabica
 Fumana baetica
 Fumana ericoides
 Fumana fontanesii
 Fumana hispidula
 Fumana laevipes Fumana laevis
 Fumana paradoxa
 Fumana thymifolia
 Genista acanthoclada
 Genista anglica
 Genista aspalathoides
 Genista corsica
 Genista cupanii
 Genista desoleana
 Genista dorycnifolia
 Genista fasselata
 Genista germanica
Genista hispanica
Genista lobelii
Genista lobelii subsp. longipes
Genista lydia
Genista micrantha
Genista michelii
Genista morisii
Genista pilosa
Genista ramosissima Genista salzmännii
Genista sanabrensis
Genista sardoa
Genista scorpius
Genista tenera

Genista tricuspidata
Genista tridens
Genista tridentata
Genista umbellata
Genista valdes-bermejoi
Genista versicolor
Glandora nitida
Globularia alypum
Globularia salicina
Gypsophila bermejoi
Gypsophila struthium
Halimione portulacoides Hedysarum boveanum
Helianthemum almeriense
Helianthemum alypoides
Helianthemum apenninum
Helianthemum asperum
Helianthemum caput-felis
Helianthemum hirtum
Helianthemum lippii
Helianthemum marifolium Helianthemum marifolium subsp.
 conquense
 Helianthemum neopiliferum
 Helianthemum origanifolium
 Helianthemum squamatum Helianthemum
 syriacum
 Helianthemum violaceum
 Helianthemum viscarium
 Helianthemum viscidulum
 Helichrysum italicum
 Helichrysum litoreum Helichrysum monizii
 Helichrysum stoechas
 Herniaria fontanesii Herniaria fruticosa
 Hippocrepis bourgaei
 Hippocrepis frutescens
 Hippocrepis rupestris
 Hippocrepis scabra
Hippocrepis squamata
Hormathophylla longicaulis
Hypericum aegypticum
Hypericum balearicum
Hypericum ericoides
Chamaedaphne calyculata
Chamaespartium undulatum
Cheirolophus intybaceus
Jurinea pinnata
Krascheninnikovia ceratoides
Launaea cervicornis
Launaea fragilis
Launaea pumila
Lavandula angustifolia
Lavandula dentata

Lavandula lanata
Lavandula latifolia
Lavandula multifida
Lavandula stoechas
Lembotropis nigricans
Lepidium subulatum
Limoniastrum monopetalum
Linaria capraria Linum
campanulatum
Linum suffruticosum aggr.
Lithodora fruticosa
Lithodora hispidula
Loiseleuria procumbens
Lomelosia cretica
Micromeria graeca
Micromeria hyssopifolia Micromeria nervosa
Micromeria varia
Nepeta hispanica
Odontarrhena robertiana
 Odontites bocconeii
 Onobrychis conferta
 Onobrychis stenorrhiza
 Ononis crispa
 Ononis fruticosa
 Ononis minutissima
 Ononis tridentata
 Onosma fruticosa
 Phlomis crinita
 Phlomis italica
 Phlomis lychnitis
 Phlomis purpurea
 Phyllodoce caerulea
 Polycarpaea nivea
 Polygala rupestris
 Prasium majus
 Pterocephalus spathulatus
 Ptilostemon gnaphaloides
Pulicaria burchardii
Putoria calabrica
Reaumuria vermiculata
Reseda stricta
Reseda suffruticosa
Rhododendron caucasicum
Rhododendron ferrugineum
Rhododendron hirsutum
Rhododendron lapponicum
Rhododendron myrtifolium
Rhododendron tomentosum
Rhodothamnus chamaecistus
Rosmarinus eriocalyx
Rosmarinus officinalis

Ruta angustifolia
Ruta chalepensis
Ruta montana
Salix alpina
Salix breviserrata
Salix herbacea
Salix herbacea x polaris
Salix kazbekensis
Salix myrtilloides
Salix nummularia
Salix polaris Salix repens
Salix reptans
Salix reticulata
Salix retusa
Salix retusa aggr.
Salix serpillifolia Salix sphenophylla
Salvia blancoana
Salvia candelabrum
Santolina corsica
 Santolina viscosa
 Sarcopoterium spinosum
 Satureja cuneifolia
 Satureja innota
 Satureja intricata
 Satureja obovata
 Satureja thymbra
 Scabiosa andryalifolia
 Sideritis algarviensis Sideritis arborescens
 Sideritis bubanii
 Sideritis carbonellis
 Sideritis dianica
 Sideritis glacialis
 Sideritis grandiflora
 Sideritis hirsuta
 Sideritis hyssopifolia
 Sideritis chamaedryfolia
Sideritis ibanyezii
Sideritis ilicifolia
Sideritis incana
Sideritis leucantha
Sideritis murgetana
Sideritis osteoxylla
Sideritis pungens
Sideritis pusilla
Sideritis reverchonii
Sideritis sericea
Sideritis serrata
Sideritis spinulosa
Sideritis tragoriganum
Staezelina dubia
Stachys glutinosa

Tetraena fontanesii
Teucrium algarbiense
Teucrium balthazaris
Teucrium carolipau subsp. fontqueri
Teucrium carthaginense
Teucrium gnaphalodes
Teucrium haenseleri
Teucrium charidemi
Teucrium lanigerum
Teucrium lepicephalum
Teucrium libanitis Teucrium luteum
Teucrium marum
Teucrium murcicum
Teucrium oxylepis
Teucrium pumilum
Teucrium reverchonii
Teucrium ronnigeri
Teucrium simulatum
Teucrium subspinosum
 Teucrium turredanum Thymbra
 capitata
 Thymelaea argentata Thymelaea dioica
 Thymelaea pubescens
 Thymelaea sanamunda
 Thymelaea tinctoria
 Thymelaea velutina
 Thymus antoninae
 Thymus baeticus
 Thymus caespitius
 Thymus hyemalis
 Thymus lacaitae
 Thymus longiflorus
 Thymus lotocephalus Thymus
 mastichina
 Thymus membranaceus
 Thymus orospedanus
Thymus piperella
Thymus vulgaris
Ulex argenteus
Ulex borgiae
Ulex densus
Ulex gallii
Ulex genistoides
Ulex micranthus
Ulex minor
Ulex parviflorus
Vaccinium cylindraceum
Vaccinium myrtillus
Vaccinium uliginosum
Vaccinium vitis-idaea
Vella aspera

Vella bourgeana
Vella castrilensis
Vella luentina
Vella pseudocytisus
Vella spinosa
Verbascum spinosum

E-Mediterranean-mountain-thorny-cushion-shrubs

Acantholimon ulicinum Astracantha caspica
Astracantha caucasica
Astracantha condensata
Astracantha cretica
Astracantha echinus
Astracantha parnassi subsp. cyllenea
Astracantha parnassi subsp. parnassi
Astracantha erinacea
Astracantha rumelica
Astracantha thracica
Astragalus angustifolius Astragalus sirinicus
Berberis cretica
Verbascum spinosum

E-garrigue-herbs Alyssum tenium

Alyssum umbellatum
Asparagus aphyllus
Astragalus spruneri
Atractylis cancellata
Ballota acetabulosa
Ballota pseudodictamnus
Biarum tenuifolium
Carlina gummifera
Centaurea acicularis
Centaurea spinosa
Centaureum triphyllum
Convolvulus althaeoides
Convolvulus betonicifolius
Drimia numidica
Drimia maritima
Convolvulus oleifolius
Cuscuta planiflora
Cytisus lanigerus
Fumana arabica
Fumana laevis
Genista sylvestris
Helianthemum sicanorum
Hypericum empetrifolium
Hypericum olympicum
Iris adriatica
Iris tuberosa
Lactuca tuberosa
Linum pubescens

Lotus tetraphyllus Micromeria graeca
Micromeria juliana
Micromeria myrtifolia
Micromeria nervosa
Neotinea lactea
Odontarrhena euboea
Odontarrhena obtusifolia
Ophrys bombyliflora
Ophrys scolopax
Ophrys speculum
Ophrys sphegodes
Ophrys tenthredinifera
Orchis italica
Orchis quadripunctata
Origanum onites
Paronychia bornmuelleri Paronychia macrosepala
Petrorhagia armerioides Petrorhagia cretica
Petrorhagia fasciculata Petrorhagia obcordata
 Phagnalon rupestre
 Ranunculus cupreus
 Ranunculus gracilis
 Ranunculus isthmicus
 Reseda stricta
 Satureja obovata
 Satureja thymbra
 Sideritis arborescens
 Sideritis spinulosa
 Silene corinthiaca
 Silene cretica
 Silene laconica Silene sieberi
 Stachys cretica
 Stachys spinosa
Teucrium alpestre
Teucrium brevifolium
Teucrium divaricatum
Teucrium dunense
Teucrium microphyllum
Thymelaea pubescens
Thymelaea velutina
Trifolium physodes
Vicia cretica
Viola scorpiuroides

E-garrigue-shrubs

Cistus parviflorus
Cytisus eriocarpus
Cytisus fontanesii
Ebenus cretica
Erica manipuliflora
Phlomis cretica
Phlomis fruticosa

Phlomis lanata
Salvia fruticosa
Salvia pomifera

Erico-Pinetalia-species

Amelanchier ovalis
Aquilegia vulgaris
Aremonia agrimonoides
Brachypodium rupestre
Buphthalmum salicifolium Bupleurum longifolium
Calamagrostis varia
Carduus defloratus aggr.
Carex alba
Carex ornithopoda
Cirsium laniflorum
Clinopodium alpinum
Coronilla vaginalis
 Cotinus coggygria
Cruciata taurica
Daphne cneorum Daphne oleoides
 Epipactis atrorubens
 Erica carnea
 Eryngium amethystinum
 Festuca amethystina
 Galium anisophyllum
 Galium austriacum
 Galium lucidum
 Globularia cordifolia
 Hieracium bifidum
 Hippocrepis emerus
 Inula ensifolia
 Laserpitium latifolium
Laserpitium siler
Leontodon incanus
Leucanthemum adustum
Noccaea montana
Phyteuma orbiculare
Pimpinella lithophila
Polygala amara Polygala
chamaebuxus
 Polygala nicaeensis aggr.
Psephellus declinatus
Rhamnus saxatilis
Rubus tauricus
Scabiosa lucida
Seseli libanotis
Sesleria robusta
Teucrium chamaedrys
Teucrium montanum
Teucrium polium aggr.
Thesium alpinum

Thymus longicaulis
Viola sieheana

Fagus-sylvatica-orientalis

Fagus sylvatica
Fagus orientalis

Fen-with-calcium-carbonate-precipitation-species

Cratoneuron filicinum
Eleocharis quinqueflora
Eupatorium cannabinum
Palustriella commutata aggr.
Philonotis calcarea
Schoenus ferrugineus
Tofieldia calyculata
Triglochin maritima

Forest-clearing-herbs Atropa bella-donna

Calamagrostis epigejos
Centaurium erythraea
Chelidonium majus
Digitalis purpurea
Epilobium angustifolium
Eupatorium cannabinum
Lupinus polyphyllus
Rubus idaeus
Sambucus ebulus
Senecio sylvaticus
Senecio viscosus
Torilis japonica
Verbascum thapsus

Forest-clearing-trees-and-shrubs

Betula pendula
Populus tremula
Salix caprea
Sambucus nigra
Sambucus racemosa
Sorbus aucuparia

Fraxinus excelsior

Fraxinus excelsior

Garrigue-and-micro-garrigue-species

Alyssoides utriculata
Alyssum diffusum
Aphyllanthes monspeliensis
Arenaria arcuatociliata
Arenaria vitoriana
Armeria sardoa
Artemisia alba

Asperula purpurea
Astragalus clusianus Cistus creticus
Cistus monspeliensis
Coris monspeliensis Coronilla minima
Coronilla valentina
Cytisus spinescens
Echinopartum boissieri
Erysimum fitzii
Euphorbia myrsinites Euphorbia
spinosa Fumana ericoides
Fumana procumbens
Fumana thymifolia Genista cinerea
Genista desoleana
Genista eliasennenii
Genista hispanica
Genista januensis
Genista lobelii
Genista michelii
Genista pseudopilosa
Genista pulchella
Genista salzmännii
 Genista scorpius
 Genista teretifolia Genista versicolor
 Globularia meridionalis
 Helianthemum apenninum
 Helianthemum canum
 Helianthemum hirtum
 Helianthemum italicum
 Helianthemum marifolium
 Helianthemum rossmaessleri
Helichrysum stoechas
Hypericum coris
Hyssopus officinalis
Lavandula angustifolia
Lavandula latifolia
Linum campanulatum
Linum suffruticosum aggr.
Matthiola fruticulosa
Minuartia loricifolia
Odontarrhena bertolonii
Phagnalon rupestre
Phagnalon saxatile
Phlomis crinita
Phlomis fruticosa
Salvia blancoana
Salvia officinalis
Salvia phlomoides
Santolina chamaecyparissus aggr.
Satureja intricata
Satureja montana
Sideritis flaviflora

Sideritis laxispicata
Sideritis pungens
Sideritis syriaca
Staehelina dubia
Teucrium aragonense Teucrium expassum
Teucrium leonis
Teucrium luteum Teucrium
montanum
Teucrium polium aggr.
Teucrium simlatum
Teucrium webbianum
Thymbra capitata
Thymelaea pubescens
Thymus clandestinus
Thymus longicaulis Thymus loscosii
 Thymus mastigophorus
 Thymus membranaceus
 Thymus orospedanus
 Thymus striatus
 Thymus vulgaris
 Thymus zygis

Genistoid-shrubs

Adenocarpus anisochilus Adenocarpus brutius
Adenocarpus complicatus
Adenocarpus decorticans
Adenocarpus hispanicus
Adenocarpus telonensis
Adenocarpus viscosus
Cytisus arboreus
Cytisus balansae
Cytisus cantabricus
Cytisus commutatus
Cytisus grandiflorus
Cytisus ingramii
Cytisus multiflorus
Cytisus scoparius
Cytisus striatus
Cytisus villosus
Genista cinerascens
Genista falcata
Genista florida
Genista hystrix
Genista linifolia
Genista monspessulana
Genista obtusiramea Genista polyanthos
Genista spartioides
Genista umbellata
Retama monosperma
Retama sphaerocarpa

Gypsophilous-dwarf-shrubs

Arenaria cavanillesiana
Astragalus alopecuroides subsp. grosii
Carthamus hispanicus subsp. araneosus
Centaurea hyssopifolia
Coris hispanica
Euphorbia minuta subsp. moleroi
Gypsophila bermejoi
Gypsophila struthium
Helianthemum alypoides
Helianthemum marifolium subsp. conquense
Helianthemum squamatum
Herniaria fruticosa
Jurinea pinnata
Launaea pumila
Lepidium subulatum
Ononis tridentata
Reseda stricta
Reseda suffruticosa
Reaumuria vermiculata
Rosmarinus eriocalyx
Santolina viscosa
Teucrium balthazaris
Teucrium carolipau subsp. fontqueri
Teucrium lepicephalum
Teucrium libanitis
Teucrium pumilum
Teucrium turredanum
Thymus lacaitae
Vella aspera
Vella pseudocytisus

Gypsophilous-herbs

Allosorus persicus
Artemisia pedemontana
Astragalus alopecuroides subsp. grosii
Astragalus caprinus subsp. huetii
Brassica repanda subsp. gypsicola
Campanula fastigiata
Carthamus hispanicus subsp. araneosus
Centaurium triphyllum
Chaenorhinum grandiflorum
Chaenorhinum reyesii
Chaenorhinum rubrifolium
Clypeola eriocarpa
Ctenopsis delicatula
Ctenopsis gypsophila
Diplotaxis harra
Erodium laciniatum
Ferula loscosii
Koeleria castellana

Lepidium cardamines
Limonium catanzaroi
Limonium optimae
Odontites longiflora
Sedum gypsicola
Trisetaria loeflingiana
Ziziphora hispanica

Halophytic-fen-species

Trichophorum pumilum Triglochin
maritima Plantago maritima
Glaux maritima
Schoenoplectus lacustris subsp. glaucus
Cetaurium littorale

Hemicryptophytes

Acanthus mollis
Acanthus spinosus
Achillea ageratum
Achillea barrelieri
Achillea distans
Achillea ligustica
Achillea macrophylla
Achillea millefolium aggr.
Achillea nana
Achillea nobilis
Achillea oxyloba
Achillea ptarmica
Achillea setacea
Achillea tomentosa
Achillea virescens
Achnatherum bromoides
Achnatherum calamagrostis
Aconitum lycoctonum
Adenophora lilifolia
Adenostyles alliariae Adenostyles alpina
Adenostyles australis
Adenostyles leucophylla
Adonis distorta
Adonis vernalis
Aegonychon purpureocaeruleum
Aethionema thomasianum
Agrimonia eupatoria
Agrimonia procera
Agropyron cristatum
Agrostis alpina
Agrostis canina
Agrostis capillaris
Agrostis castellana
Agrostis gigantea
Agrostis rupestris

Agrostis schleicheri
Ajuga genevensis
Ajuga orientalis
Ajuga pyramidalis
Alcea biennis
Alcea ficifolia
Alcea rosea
Alcea setosa
Alchemilla acutidens
Alchemilla alpigena
Alchemilla alpina
Alchemilla chirophylla
Alchemilla cinerea
Alchemilla colorata
 Alchemilla compta
 Alchemilla conjuncta
 Alchemilla connivens
 Alchemilla coriacea
 Alchemilla crinita
 Alchemilla decumbens
 Alchemilla demissa
 Alchemilla effusa
 Alchemilla exigua
 Alchemilla fallax
 Alchemilla filicaulis
 Alchemilla fissa
 Alchemilla fissimima
 Alchemilla flabellata
 Alchemilla flaccida
 Alchemilla flavovirens
 Alchemilla frigens
 Alchemilla glabra
Alchemilla glacialis
Alchemilla glaucescens
Alchemilla glomerulans
Alchemilla grossidens Alchemilla helvetica
Alchemilla heteropoda
Alchemilla hirtipes
Alchemilla illyrica
Alchemilla impexa
Alchemilla incisa
Alchemilla inconcinna
Alchemilla jucunda
Alchemilla lineata
Alchemilla longiuscula
Alchemilla marsica
Alchemilla monticola
Alchemilla nitida
Alchemilla obtusa
Alchemilla opaca
Alchemilla pallens

Alchemilla pentaphyllea
Alchemilla reniformis
Alchemilla saxatilis
Alchemilla schmidelyana
Alchemilla semisecta
Alchemilla sinuata
Alchemilla straminea
Alchemilla strigosula
Alchemilla subcrenata
Alchemilla subsericea Alchemilla tenuis
Alchemilla tirolensis Alchemilla transiens
Alchemilla trunciloba
Alchemilla undulata Alchemilla vaccariana
 Alchemilla versipila
 Alchemilla vetteri
 Alchemilla vulgaris aggr.
 Alchemilla xanthochlora
Alkanna tinctoria
Alkanna tuberculata
Alliaria petiolata
Allosorus acrosticus
Allosorus guanchicus
Allosorus persicus
Allosorus pteridioides
Allosorus tinaei
Alopecurus aequalis
Alopecurus arundinaceus
Alopecurus bulbosus
Alopecurus geniculatus
Alopecurus gerardi
Alopecurus pratensis
Althaea cannabina
Althaea officinalis
Amaranthus muricatus
Ampelodesmos mauritanicus
Anagallis crassifolia
Anagallis monelli
Anagallis tenella
Anarrhinum bellidifolium
Anarrhinum corsicum
Anchusa azurea
Anchusa crispa
Anchusa hybrida
Anchusa ochroleuca
Anchusa officinalis
Anchusa undulata
Androsace adfinis
Androsace carnea
Androsace obtusifolia
Anemone baldensis
Anemone sylvestris

Angelica archangelica
Angelica sylvestris
Anthemis cretica
Anthemis maritima
Anthoxanthum odoratum aggr.
Anthriscus nemorosa
Anthriscus nitidus
Anthriscus sylvestris
Anthyllis vulneraria
Aphyllanthes monspeliensis Apium graveolens
Aposeris foetida
Aquilegia alpina
Aquilegia atrata
 Aquilegia barbaricina
 Aquilegia bernardii
 Aquilegia bertolonii
 Aquilegia einseleana
 Aquilegia nigricans
 Aquilegia ottonis
 Aquilegia thalictrifolia
 Aquilegia viscosa
 Aquilegia vulgaris
 Arabidopsis arenosa
Arabidopsis halleri
Arabidopsis petraea
Arabis allionii
Arabis alpina
Arabis caerulea
Arabis ciliata
Arabis collina Arabis glabra
Arabis hirsuta
Arabis pedemontana
Arabis planisilqua
Arabis sagittata
Arabis serpillifolia
Arabis soyeri
Arabis surculosa
Arabis vochinensis
Arctium lappa
Arctium minus
Arctium nemorosum
Arctium tomentosum
Aremonia agrimonoides
Arenaria marschlinsii
Armeria alpina
Armeria arenaria
Armeria canescens
Armeria denticulata
Armeria gussonei
Armeria helodes
Armeria macropoda

Armeria marginata
Armeria maritima Armeria morisii
Armeria seticeps
Arnica montana
Arrhenatherum elatius
Artemisia campestris
Artemisia vulgaris
Aruncus dioicus
Asperula aristata
Asperula cynanchica
Asperula hexaphylla
Asperula laevigata
Asperula neglecta Asperula nitens
 Asperula rupicola
 Asperula tinctoria
 Asphodelus fistulosus
 Asphodelus tenuifolius
 Asplenium adiantum-nigrum
 Asplenium adulterinum
 Asplenium ceterach
 Asplenium fissum
 Asplenium fontanum
 Asplenium lepidum
Asplenium marinum
Asplenium obovatum
Asplenium petrarchae
Asplenium ruta-muraria
Asplenium sagittatum
Asplenium scolopendrium
Asplenium seelosii
Asplenium septentrionale
Asplenium trichomanes
Asplenium viride
Aster alpinus
Aster amellus
Aster novi-belgii aggr.
Aster vimineus
Aster x salignus
Astragalus alopecurus
Astragalus alpinus
Astragalus aquilanus
Astragalus australis
Astragalus caprinus
Astragalus centralpinus
Astragalus cicer
Astragalus danicus
Astragalus depressus
Astragalus exscapus
Astragalus frigidus
Astragalus hypoglottis
Astragalus leontinus

Astragalus maritimus
Astragalus monspessulanus
Astragalus muelleri
Astragalus odoratus
Astragalus onobrychis
Astragalus penduliflorus
Astragalus verrucosus
Astragalus vesicarius
Astrantia bavarica
Astrantia carniolica
Astrantia major
Astrantia minor
Astrantia pauciflora
Asyneuma limonifolium
 Athamanta cortiana
 Athamanta cretensis
 Athamanta ramosissima
 Athamanta sicula
 Athamanta turbith
 Athamanta vestina
 Athyrium distentifolium
 Aurinia petraea
 Avenella flexuosa
 Avenula pubescens
 Avenula versicolor
 Ballota nigra
 Barbarea arcuata
 Barbarea bracteosa
 Barbarea intermedia
 Barbarea sicula
 Barbarea stricta
 Barbarea verna
Barbarea vulgaris
Bartsia alpina
Bellardiochloa variegata
Bellidiastrum michelii
Bellis perennis
Bellis pusilla
Bellis sylvestris
Bellium bellidioides
Bellium nivale
Berteroa incana
Berteroa mutabilis
Berteroa obliqua
Beta trigyna
Beta vulgaris subsp. maritima
Beta vulgaris subsp. vulgaris
Biscutella ambigua
Biscutella coronopifolia
Biscutella intricata
Biscutella laevigata

Biscutella maritima
Biscutella pinnatifida
Biscutella raphanifolia
Biscutella rotgesii
Bituminaria bituminosa
Blechnum spicant
Blitum bonus-henricus
Boehmeria nivea
Bonannia graeca
Borago pygmaea
Bothriochloa ischaemum
Bothriochloa pertusa
Brachypodium phoenicoides Brachypodium
pinnatum Brachypodium retusum
Brachypodium rupestre Brachypodium sylvaticum
 Brassica fruticulosa
 Brassica glabrescens
 Brassica repanda
 Braya alpina
 Briza media
 Bromopsis erecta
 Bromopsis inermis
 Bromopsis pannonica
 Bromopsis ramosa aggr.
 Bubon macedonicum
 Bunias orientalis
 Bupleurum elatum
 Bupleurum falcatum
 Bupleurum petraeum
 Bupleurum ranunculoides
 Bupleurum rigidum
 Bupleurum stellatum
Cachrys cristata
Cachrys libanotis
Cachrys pungens
Cachrys sicula
Calamagrostis arundinacea
Calamagrostis canescens
Calamagrostis epigejos
Calamagrostis pseudophragmites
Calamagrostis varia
Calamagrostis villosa
Callianthemum coriandrifolium
Caltha palustris
Calystegia sepium
Calystegia silvatica
Camelina microcarpa
Camelina rumelica
Camelina sativa
Campanula albicans
Campanula alpestris

Campanula barbata
Campanula bononiensis
Campanula carnica
Campanula cenisia
Campanula cervicaria
Campanula cochleariifolia
Campanula elatines
Campanula elatinoides
Campanula excisa
Campanula foliosa
Campanula forsythii
Campanula garganica
Campanula glomerata
Campanula latifolia
Campanula lingulata
Campanula medium Campanula
 morettiana
 Campanula patula
 Campanula persicifolia
 Campanula petraea
 Campanula pyramidalis
 Campanula raineri
 Campanula rapunculoides
 Campanula rapunculus
 Campanula rhomboidalis
 Campanula rotundifolia
 Campanula sabatia
 Campanula scheuchzeri
 Campanula sibirica
 Campanula spicata
 Campanula thyrsoides
 Campanula tommasiniana
 Campanula trachelium
 Campanula trichocalycina
Campanula versicolor
Campanula zoysii
Cardamine amara
Cardamine asarifolia
Cardamine bellidifolia
Cardamine flexuosa
Cardamine matthioli
Cardamine pratensis
Cardamine raphanifolia
Cardamine resedifolia
Cardamine rivularis Cardamine trifolia
Carduus acanthoides
Carduus affinis
Carduus argemone
Carduus carduelis
Carduus cephalanthus
Carduus chrysacanthus

Carduus collinus
Carduus crispus
Carduus fasciculiflorus
Carduus litigiosus
Carduus macrocephalus
Carduus nutans
Carduus personata
Carduus pycnocephalus
Carduus tenuiflorus
Carex appropinquata
Carex atrata
Carex baldensis
Carex bohemica
Carex brachystachys Carex
brunnescens
Carex buekii
Carex canescens Carex capillaris
 Carex capitata
 Carex caryophyllea
 Carex cuprina
 Carex curvula
 Carex davalliana
 Carex demissa
 Carex depauperata
 Carex depressa
 Carex diandra
 Carex digitata
 Carex distachya
 Carex distans
 Carex divulsa
 Carex elata
 Carex elongata
 Carex extensa
 Carex ferruginea
Carex firma
Carex flava
Carex foetida
Carex fritschii
Carex fuliginosa
Carex heleonastes
Carex hostiana
Carex humilis
Carex illegitima
Carex kitaibeliana
Carex lachenalii
Carex laevigata
Carex lepidocarpa
Carex leporina
Carex macrolepis
Carex macrostachys
Carex michelii

Carex montana
Carex mucronata
Carex nigra
Carex norvegica
Carex olbiensis
Carex ornithopoda
Carex pallescens
Carex paniculata
Carex parviflora
Carex pediformis
Carex pendula
Carex pilosa
Carex pilulifera
Carex praecox
Carex pseudocyperus Carex punctata
Carex remota
Carex rupestris Carex sempervirens
 Carex spicata
 Carex strigosa
 Carex sylvatica
 Carex tumidicarpa
 Carex umbrosa
 Carex viridula
 Carex vulpina
 Carlina acanthifolia Carlina acaulis
 Carlina biebersteinii
 Carlina corymbosa
 Carlina gummifera
 Carlina involucrata
 Carlina macrocephala
 Carlina nebrodensis
 Carlina sicula
 Carlina vulgaris
Carpesium abrotanoides
Carthamus pinnatus
Carum appunum
Carum carvi
Carum heldreichii
Carum verticillatum Cenchrus ciliaris
Cenchrus longisetus
Cenchrus setaceus
Centaurea acaulis
Centaurea alba aggr.
Centaurea amara
Centaurea ambigua
Centaurea apolepa
Centaurea aspera
Centaurea calcitrapa
Centaurea cana
Centaurea centauroides
Centaurea cineraria

Centaurea collina
Centaurea cristata
Centaurea dichroantha
Centaurea diffusa
Centaurea dubia
Centaurea hyalolepis
Centaurea jacea
Centaurea kartschiana
Centaurea leucophaea
Centaurea muretii
Centaurea nemoralis
Centaurea nervosa
Centaurea nigra
Centaurea nigrescens
Centaurea paniculata
Centaurea parlatoris
 Centaurea phrygia
 Centaurea ragusina
 Centaurea rhaetica
 Centaurea rupestris aggr.
 Centaurea scabiosa
 Centaurea scannensis
 Centaurea seridis
 Centaurea sicula
 Centaurea solstitialis Centaurea sphaerocephala
 Centaurea stoebe
 Centaurea subtilis
 Centaurea tommasinii
 Centaurea uniflora
 Centaureum erythraea
 Centaureum littorale
 Cephalaria alpina
 Cephalaria leucantha
Cerastium alpinum
Cerastium arvense
Cerastium fontanum subsp. vulgare
Cerastium lineare
Cerastium pedunculatum Cerastium soleirolii
Cerastium subtriflorum
Cerastium sylvaticum
Ceratochloa cathartica
Cerinthe glabra
Cerinthe tenuiflora
Cervaria rivini
Chaerophyllum aromaticum
Chaerophyllum aureum
Chaerophyllum bulbosum
Chaerophyllum hirsutum
Chaiturus marrubiastrum
Cheirolophus crassifolius
Chelidonium majus

Chondrilla acanthophylla
Chondrilla chondrilloides
Chondrilla juncea
Chrysopogon gryllus
Chrysosplenium alternifolium
Chrysosplenium dubium
Chrysosplenium oppositifolium
Cichorium intybus
Cicuta virosa
Circaea alpina
Circaea lutetiana
Cirsium alsophilum
Cirsium bertolonii
Cirsium carniolicum
Cirsium creticum
Cirsium echinatum Cirsium eriophorum
 Cirsium erisithales
 Cirsium ferox
 Cirsium helenioides
 Cirsium heterophyllum
 Cirsium italicum
 Cirsium lobelii
 Cirsium monspessulanum
 Cirsium morisianum
 Cirsium oleraceum
 Cirsium palustre
 Cirsium pannonicum
 Cirsium scabrum
 Cirsium spinosissimum
 Cirsium tenoreanum
 Cirsium vulgare
 Citrullus colocynthis
 Cleistogenes serotina
Clematis integrifolia
Clematis recta
Clinopodium menthifolium
Clinopodium nepeta
Clinopodium vulgare
Cochlearia officinalis
Coincya monensis Coincya richeri
Conium maculatum
Convolvulus althaeoides
Convolvulus cantabrica
Convolvulus silvaticus
Coris monspeliensis
Corrigiola telephiifolia
Cortusa matthioli
Corydalis ochroleuca
Corynephorus canescens
Cosentinia vellea
Cota tinctoria

Crambe tataria
Crepis albida
Crepis alpestris
Crepis aurea
Crepis biennis
Crepis bocconi
Crepis bursifolia
Crepis chondrilloides
Crepis conyzifolia
Crepis praemorsa aggr.
Crepis jacquinii
Crepis lacera
Crepis leontodontoides
Crepis mollis
Crepis paludosa
Crepis pontana Crepis pyrenaica
 Crepis rhaetica
 Crepis spathulata
 Crepis terglouensis
 Cruciata glabra
 Cruciata laevipes
 Cryptogramma crispa
 Cryptotaenia thomasii
 Cullen americanum
 Cyanus montanus
 Cyanus triumfettii
 Cymbalaria hepaticifolia
 Cymbalaria pallida
 Cynara cardunculus
 Cynoglossum cheirifolium
 Cynoglossum clandestinum
 Cynoglossum creticum
 Cynoglossum dioscoridis
Cynoglossum germanicum
Cynoglossum montanum
Cynoglossum nebrodense
Cynoglossum officinale
Cynosurus cristatus
Cyperus esculentus
Cyperus glomeratus
Cyperus longus
Cyperus papyrus
Cyperus strigosus
Cyrtonium fortunei
Cystopteris fragilis Cystopteris montana
Cystopteris sudetica
Dactylis glomerata
Danaa cornubiensis
Danthonia alpina
Danthonia decumbens
Daucus carota

Delphinium dubium
Delphinium elatum
Delphinium emarginatum
Delphinium fissum
Deschampsia media
Descurainia tanacetifolia
Dianthus barbatus
Dianthus carthusianorum
Dianthus ciliatus
Dianthus deltoides
Dianthus ferrugineus
Dianthus furcatus
Dianthus glacialis
Dianthus monspessulanus
Dianthus pavonius
Dianthus seguieri Dianthus sternbergii
 Dianthus superbus
 Dianthus sylvestris
 Dichoropetalum carvifolia
 Dichoropetalum schottii
 Digitalis ferruginea
 Digitalis grandiflora
 Digitalis laevigata
 Digitalis lutea
 Digitalis purpurea
 Diplotaxis tenuifolia
 Dipsacus ferox
 Dipsacus fullonum
 Dipsacus laciniatus
 Dipsacus pilosus Dittrichia viscosa
 Dorycnium pentaphyllum aggr.
 Dorycnium rectum
Dorycnopsis gerardi
Draba aizoides
Draba aspera
Draba dolomitica
Draba dubia
Draba fladnizensis
Draba hoppeana
Draba loiseleurii
Draba siliquosa
Draba tomentosa
Drosera intermedia
Drosera longifolia
Drosera rotundifolia
Drymocallis rupestris
Drymochloa sylvatica
Dysphania multifida
Echinophora spinosa
Echinophora tenuifolia
Echinops exaltatus

Echinops ritro
Echinops sphaerocephalus
Echinops spinosissimus
Echium arenarium
Echium asperrimum
Echium creticum
Echium italicum
Echium vulgare
Eleocharis carniolica
Eleocharis multicaulis
Elymus caninus
Elymus panormitanus
Elytrigia corsica
Elytrigia elongata
Epilobium alpestre
Epilobium alsinifolium Epilobium anagallidifolium
 Epilobium angustifolium
 Epilobium collinum
 Epilobium dodonaei
 Epilobium fleischeri
 Epilobium hirsutum
 Epilobium hypericifolium
 Epilobium lanceolatum
 Epilobium montanum
 Epilobium nutans
 Epilobium obscurum
 Epilobium palustre
 Epilobium parviflorum
 Epilobium roseum
 Epilobium tetragonum
 Epimedium alpinum
 Erigeron alpinus
 Erigeron atticus
Erigeron epiroticus
Erigeron glabratus
Erigeron karvinskianus
Erigeron neglectus
Erigeron schleicheri
Erigeron uniflorus
Erinus alpinus
Eriophorum latifolium
Eriophorum vaginatum
Erodium acaule
Erucastrium gallicum
Erucastrium nasturtiifolium
Erucastrium palustre
Erucastrium virgatum
Eryngium alpinum
Eryngium amethystinum
Eryngium campestre
Eryngium corniculatum

Eryngium creticum
Eryngium dichotomum
Eryngium pusillum
Eryngium spinalba
Eryngium tricuspidatum
Eryngium triquetrum
Erysimum bonannianum
Erysimum crassistylum
Erysimum hieracifolium
Erysimum jugicola
Erysimum majellense
Erysimum metlesicsii
Erysimum odoratum
Erysimum pseudorhaeticum Erysimum rhaeticum
Erysimum nevadense aggr.
Erysimum sylvestre Eupatorium cannabinum
 Euphorbia carniolica
 Euphorbia cyparissias
 Euphorbia esula
 Euphorbia lathyris
 Euphorbia lucida
 Euphorbia semiperfoliata
 Ferula communis
 Ferulago campestris
 Ferulago nodiflora
 Ferulago nodosa
 Ferulago sylvatica
 Festuca acuminata Festuca airoides
 Festuca alpestris
 Festuca alpina
 Festuca amethystina Festuca apuanica
Festuca arvernensis
Festuca bosniaca
Festuca caerulescens
Festuca calva
Festuca cenisia
Festuca cinerea
Festuca circummediterranea
Festuca cyrnea
Festuca filiformis
Festuca flavescens
Festuca guestfalica auct.
Festuca halleri
Festuca heteromalla
Festuca heteropachys
Festuca heterophylla
Festuca illyrica
Festuca inops
Festuca intercedens
Festuca jeanpertii
Festuca laevigata

Festuca macranthera
Festuca marginata subsp. *andres-molinae*
Festuca marginata subsp. *gallica*
Festuca melanopsis
Festuca morisiana
Festuca nitida
Festuca norica
Festuca ovina
Festuca picturata
Festuca pignattiorum
Festuca pseudodura
Festuca quadriflora
Festuca robustifolia *Festuca rubra* aggr.
Festuca sardoa *Festuca scabriculum*
 Festuca stenantha
 Festuca stricta subsp. *sulcata*
 Festuca stricta subsp. *trachyphylla*
 Festuca sylvatica
 Festuca ticinensis
 Festuca trichophylla
 Festuca valesiaca aggr.
 Festuca varia
 Festuca violacea
 Fibigia clypeata
 Filipendula ulmaria
 Filipendula vulgaris
 Foeniculum vulgare
 Fourraea alpina
 Galatella linosyris
 Galatella sedifolia
 Galega officinalis
Galium aetnium
Galium aristatum
Galium austriacum
Galium baldense
Galium bernardii *Galium boreale*
Galium congestum
Galium corrudifolium
Galium corsicum
Galium debile
Galium erythrorrhizon
Galium glaucophyllum
Galium glaucum
Galium intermedium
Galium jussiei
Galium laevigatum
Galium litorale
Galium lucidum
Galium magellense
Galium margaritaceum

Galium megalospermum Galium
mollugo aggr.
Galium montis-arerae
Galium noricum
Galium obliquum
Galium palustre aggr.
Galium pseudohelveticum
Galium pumilum
Galium pusillum
Galium rotundifolium
Galium rubrum
Galium scabrum
Galium sylvaticum
Galium tendae
Galium tunetanum Galium uliginosum
Gaura sinuata
Gentiana acaulis
Gentiana alpina
Gentiana angulosa
Gentiana asclepiadea
Gentiana aspera
Gentiana austriaca
Gentiana bavarica
Gentiana brachyphylla
Gentiana burseri
Gentiana clusii
Gentiana cruciata
Gentiana dinarica
Gentiana froelichii
Gentiana ligustica
Gentiana lutea
Gentiana macrophylla
Gentiana magellensis
Gentiana pannonica
Gentiana pneumonanthe
Gentiana pumila
Gentiana punctata
Gentiana purpurea
Gentiana rostanii
Gentiana terglouensis
Gentiana verna
Gentianella anisodonta
Gentianella aspera
Gentianella austriaca
Gentianella columnae
Gentianella crispata
Gentianella engadinensis
Gentianella germanica
Gentianella lutescens
Gentianella pilosa
Gentianella ramosa

Geranium argenteum
Geranium asphodeloides
Geranium cinereum
Geranium palustre Geranium phaeum
Geranium pratense
Geranium pyrenaicum Geranium
reflexum Geranium sanguineum
Geranium sylvaticum aggr.
Geum gasparrinii
Geum heterocarpum
Geum micropetalum
Geum molle
Geum montanum
Geum rivale Geum urbanum
 Glaucium flavum
 Globularia bisnagarica
 Globularia incanescens
 Globularia nudicaulis
 Gnaphalium diminutum
 Gnaphalium hoppeanum
 Gnaphalium norvegicum
 Gnaphalium supinum
 Gnaphalium sylvaticum
 Goniolimon italicum
 Grafia golaka
 Gratiola officinalis
 Hacquetia epipactis
 Hedysarum confertum
 Hedysarum coronarium
 Hedysarum hedysaroides
 Helianthus decapetalus
Helianthus pauciflorus
Helictochloa bromoides
Helictochloa cincinnata
Helictochloa praeusta
Helictochloa pratensis
Helictochloa versicolor
Helictotrichon bromoides
Helictotrichon convolutum
Helictotrichon parlatorei
Helictotrichon sedenense
Helictotrichon sempervirens
Helictotrichon setaceum
Helleborus lividus
Hellenocarum multiflorum
Helminthotheca aculeata Helosciadium inundatum
Helosciadium nodiflorum Helosciadium repens
Heptaptera angustifolia
Heracleum austriacum
Heracleum sphondylium
Herniaria alpina

Herniaria incana
Hesperis laciniata
Hesperis matronalis
Heteropogon contortus Hibiscus palustris
Hibiscus roseus
Hieracium alpinum
Hieracium amplexicaule Hieracium aureum
Hieracium bupleuroides Hieracium
glaucum Hieracium humile
Hieracium incanum Hieracium lachenalii
 Hieracium lactucella
 Hieracium laevigatum
 Hieracium lawsonii
 Hieracium naegelianum
 Hieracium pallidum
 Hieracium pictum
 Hieracium piliferum
 Hieracium porrifolium
 Hieracium portanum
 Hieracium prenanthoides
 Hieracium racemosum
 Hieracium sabaudum
 Hieracium umbellatum
 Hieracium villosum
 Hieracium virgaurea
 Hierochloa australis
 Hierochloa odorata
Hippocrepis comosa
Hippocrepis glauca
Hirschfeldia incana
Holcus annuus
Holcus lanatus
Holcus mollis
Holcus notarisii
Homalotrichon pubescens
Homogyne alpina
Homogyne discolor
Homogyne sylvestris
Hordelymus europaeus
Hordeum bulbosum
Hordeum secalinum
Horminum pyrenaicum
Hornungia alpina
Hutchinsia brevicaulis
Hylotelephium anacampseros
Hylotelephium maximum
Hylotelephium telephium
Hyparrhenia hirta
Hypericum annulatum
Hypericum australe
Hypericum barbatum Hypericum elodes

Hypericum hirsutum
Hypericum humifusum
Hypericum hyssopifolium
Hypericum maculatum
Hypericum montanum
Hypericum perforatum Hypericum
perforatum Hypericum pubescens
Hypericum richeri
Hypericum spruneri Hypericum tetrapterum
 Hypericum tomentosum
 Hypericum triquetrifolium
 Hypochaeris robertia
 Iberis aurosica
 Iberis carnosa
 Iberis spathulata
 Inula bifrons
 Inula britannica
 Inula ensifolia Inula helenium
 Inula helvetica
 Inula hirta
 Inula montana
 Inula salicina
 Inula spiraeifolia
 Isatis campestris
 Isatis praecox
Isatis tinctoria
Jacobaea alpina
Jacobaea aquatica
Jacobaea erratica
Jacobaea erucifolia
Jacobaea incana
Jacobaea paludosa
Jacobaea samnitum
Jacobaea subalpina
Jacobaea uniflora
Jacobaea vulgaris
Jasione laevis
Jasione montana
Juncus acutus
Juncus conglomeratus
Juncus effusus
Juncus inflexus
Juncus jacquinii
Juncus squarrosus
Juncus tenuis
Jurinea mollis
Kernera saxatilis
Klasea nudicaulis Knautia arvensis
Knautia baldensis
Knautia calycina
Knautia dinarica

Knautia dipsacifolia
Knautia drymeia
Knautia gussonei
Knautia illyrica
Knautia longifolia
Knautia lucana
Knautia mollis
Knautia persicina
 Knautia purpurea
 Knautia ressmannii
 Knautia transalpina
 Knautia velutina
 Kobresia myosuroides
 Kobresia simpliciuscula
 Koeleria cenisia
 Koeleria eriostachya
 Koeleria hirsuta
 Koeleria macrantha
 Koeleria pyramidata Koeleria splendens
 Koeleria vallesiana
 Kundmannia sicula
 Lactuca alpina
 Lactuca longidentata
 Lactuca muralis
 Lactuca perennis
Lactuca quercina
Lactuca serriola
Lactuca tenerrima
Lactuca viminea
Lamium album
Lamium flexuosum
Lamium galeobdolon
Lamium garganicum
Lamium maculatum
Lamium orvala
Lamyropsis microcephala
Laser trilobum
Laserpitium gallicum
Laserpitium halleri
Laserpitium krapfii
Laserpitium latifolium
Laserpitium nestleri
Laserpitium nitidum
Laserpitium peucedanoides
Laserpitium prutenicum
Laserpitium siler
Lathyrus cirrhosus Ser.
Lathyrus filiformis
Lathyrus heterophyllus
Lathyrus laevigatus
Lathyrus latifolius

Lathyrus laxiflorus
Lathyrus ochraceus
Lathyrus palustris
Lathyrus pratensis
Lathyrus sylvestris
Lathyrus tuberosus
Launaea nudicaulis
Leontodon anomalus
Leontodon berinii
 Leontodon crispus
 Leontodon hirtus
 Leontodon hispidus
 Leontodon incanus
 Leontodon intermedius
 Leontodon tuberosus
 Leontopodium nivale
 Leonurus cardiaca
 Lepidium graminifolium
 Lepidium hirtum
 Lepidium latifolium
 Leucanthemopsis alpina
 Leucanthemum adustum
 Leucanthemum atratum
 Leucanthemum coronopifolium
 Leucanthemum corsicum
 Leucanthemum heterophyllum
 Leucanthemum laciniatum
Leucanthemum pachyphyllum
Leucanthemum pallens
Leucanthemum subglaucum
Leucanthemum tridactylites
Leucanthemum virgatum
Leucanthemum vulgare aggr.
Leucopoa calabrica
Leucopoa dimorpha
Leucopoa laxa
Leucopoa pulchella
Leucopoa spectabilis
Levisticum officinale Ligusticum corsicum
Ligusticum ferulaceum
Ligusticum lucidum
Ligusticum mutellina
Ligusticum mutellinoides
Ligusticum simplex
Limonium avei
Limonium bellidifolium
Limonium binervosum
Limonium calcarae
Limonium cancellatum
Limonium cordatum
Limonium cum anum

Limonium danubiale
Limonium densiflorum
Limonium densissimum
Limonium dubium
Limonium johannis
Limonium longispicatum Limonium
minutiflorum
Limonium multiforme
Limonium narbonense
Limonium pontium Limonium
 sibthorpiatum
 Limonium sinuatum
 Linaria alpina
 Linaria angustissima
 Linaria genistifolia
 Linaria heterophylla
 Linaria purpurea Linaria repens
 Linaria vulgaris
 Linum alpinum
 Linum austriacum
 Linum bienne
 Linum collinum
 Linum flavum
 Linum hirsutum
 Linum maritimum
 Linum narbonense Linum
 punctatum
Linum tommasinii
Linum viscosum
Lithospermum officinale
Lobularia maritima
Lolium perenne
Lomelosia argentea
Lomelosia crenata
Lotus alpinus
Lotus corniculatus
Lotus delortii
Lotus maritimus
Lotus pedunculatus
Lotus preslii Lotus tenuis
Lunaria annua Lunaria rediviva
Luzula campestris aggr.
Luzula forsteri
Luzula glabrata
Luzula lutea
Luzula luzulina
Luzula luzuloides
Luzula nivea
Luzula pedemontana
Luzula pediformis
Luzula pilosa

Luzula pindica
Luzula spicata
Luzula sylvatica
Lycopus europaeus
Lycopus exaltatus
Lygeum spartum
Lysimachia nemorum
Lysimachia nummularia
Lysimachia punctata
 Lysimachia vulgaris
 Lythrum intermedium
 Lythrum junceum
 Lythrum salicaria
 Lythrum virgatum
 Magydaris pastinacea
 Malva alcea
 Malva ambigua
 Malva arborea
 Malva erecta
 Malva moschata
 Malva sylvestris
 Malva thuringiaca
 Malva verticillata
 Mandragora autumnalis
 Mandragora officinarum
 Mantisalca salmantica
 Marrubium alysson
Marrubium incanum
Marrubium peregrinum
Marrubium vulgare
Matthiola sinuata
Medicago carstiensis
Medicago pironae
Medicago prostrata
Medicago sativa
Megathyrsus bionanus
Melica amethystina
Melica ciliata
Melica cupanii
Melica minuta
Melica nutans
Melica uniflora
Melilotus officinalis
Melissa officinalis
Melittis melissophyllum
Mentha aquatica
Mentha arvensis
Mentha longifolia
Mentha pulegium
Mentha spicata
Mentha suaveolens

Meum athamanticum
Mimulus moschatus
Minuartia rubra
Moehringia ciliata
Moehringia markgrafii
Moehringia muscosa
Moehringia pichleri
Molinia caerulea aggr.
Molopospermum peloponnesiacum
Moneses uniflora
Morisia monanthos Muhlenbergia frondosa
 Muhlenbergia schreberi
 Murbeckiella pinnatifida
 Murbeckiella zanonii
 Mutellina corsica
 Myosotis alpestris
 Myosotis corsicana
 Myosotis decumbens Myosotis
 scorpioides aggr.
 Myosotis soleirolii
 Myosotis sylvatica
 Myosoton aquaticum
 Myrrhis odorata
 Nardus stricta
 Nassella mucronata
 Nasturtium microphyllum
 Nasturtium officinale
 Nepeta cataria
Nepeta foliosa
Nepeta italica
Nepeta nuda
Nepeta tuberosa
Noccaea brachypetala
Noccaea brevistyla
Noccaea cikaea
Noccaea praecox Nonea pulla
Ochlopoa supina
Ocimum basilicum
Oenanthe aquatica
Oenanthe crocata
Oenanthe fistulosa
Oenanthe globulosa
Oenanthe lachenalii
Oenanthe lisae
Oenanthe peucedanifolia
Oenanthe pimpinelloides
Oenanthe silaifolia
Oenothera biennis
Oenothera glazioviana
Oenothera parviflora
Oenothera sinuosa

Oenothera stricta
Oenothera stueckii
Oenothera suaveolens
Omphalodes verna
Onobrychis alba
Onobrychis arenaria
Onobrychis humilis
Onobrychis montana
Onobrychis supina
Onobrychis viciifolia
Ononis natix Ononis pusilla
 Ononis rotundifolia
 Onopordum acanthium
 Onopordum argolicum
 Onopordum illyricum
 Onopordum tauricum
 Onosma visianii
 Oplismenus hirtellus
 Opopanax chironium
 Opopanax hispidus
 Oreochloa disticha
 Oreochloa seslerioides
 Oreoselinum nigrum
 Origanum majorana
 Origanum vulgare
 Oxalis fontana
 Oxalis stricta
 Oxybaphus nyctagineus
Oxyria digyna
Oxytropis campestris
Oxytropis halleri
Oxytropis helvetica
Oxytropis neglecta
Oxytropis pilosa
Pachypleurum mutellinoides
Paederota bonarota
Paederota lutea
Palaeocyanus crassifolius
Pallenis maritima
Panicum compressum
Papaver aurantiacum
Papaver kernerii
Paragymnopteris marantae
Parietaria judaica
Parietaria officinalis
Parnassia palustris
Paronychia argentea
Paronychia capitata
Paronychia kapela
Paronychia polygonifolia
Paspalum dilatatum

Paspalum quadrifarium
Pastinaca latifolia
Pastinaca sativa
Patzkea paniculata
Pedicularis acaulis
Pedicularis asplenifolia Pedicularis cenisia
Pedicularis comosa
Pedicularis elegans
Pedicularis elongata
Pedicularis foliosa
Pedicularis friderici-augusti
 Pedicularis gyroflexa
 Pedicularis hacquetii
 Pedicularis hoermanniana
 Pedicularis kernerii
 Pedicularis oederi
 Pedicularis palustris
 Pedicularis petiolaris
 Pedicularis recutita
 Pedicularis rosea
 Pedicularis sylvatica
 Pedicularis tuberosa
 Pedicularis verticillata
 Pentaglottis sempervirens
 Persicaria decipiens
 Persicaria salicifolia
 Petagnaea gussonei
 Petrocallis pyrenaica Petrorhagia illyrica
Petrorhagia saxifraga
Petroselinum crispum
Petroselinum sativum
Peucedanum altissimum
Peucedanum austriacum
Peucedanum cervaria
Peucedanum coriaceum
Peucedanum officinale
Peucedanum oreoselinum
Peucedanum ostruthium
Peucedanum palustre
Peucedanum venetum
Phalaris aquatica
Phalaris coerulescens
Phalaris truncata
Phalaroides arundinacea Phleum alpinum
aggr.
 Phleum phleoides Phleum pratense
Phleum serotinum
Phlomis herba-venti
Physalis alkekengi
Physalis peruviana
Physoplexis comosa

Physospermum cornubiense
Physospermum verticillatum Phyteuma
betonicifolium
Phyteuma charmelii
Phyteuma cordatum
Phyteuma globulariifolium
Phyteuma hedraianthifolium Phyteuma
hemisphaericum
Phyteuma humile
Phyteuma michelii
Phyteuma orbiculare
 Phyteuma ovatum
 Phyteuma persicifolium
 Phyteuma scheuchzeri
 Phyteuma scorzonrifolium
 Phyteuma serratum Phyteuma sieberi
 Phyteuma spicatum
Picnomon acarna
Picris hieracioides
Picris hispidissima
Picris laciniata
Picris scaberrima
Pilosella alpicola
Pilosella aurantiaca
Pilosella caespitosa
Pilosella cymosa
Pilosella glacialis
Pilosella hoppeana
Pilosella kralikii
Pilosella lactucella
Pilosella officinarum
Pilosella pavichii
Pilosella piloselloides
Pilosella pseudopilosella
Pilosella saussureoides
Pimpinella alpina
Pimpinella anisoides
Pimpinella lutea
Pimpinella major
Pimpinella peregrina
Pimpinella saxifraga
Pinguicula alpina
Pinguicula corsica
Pinguicula hirtiflora
Pinguicula leptoceras
Pinguicula longifolia
Pinguicula vulgaris
Piptatherum coerulescens
Piptatherum miliaceum
Piptatherum virescens
Plantago alpina

Plantago altissima
Plantago argentea
Plantago atrata
Plantago crassifolia
Plantago holosteum
Plantago lanceolata
Plantago major
Plantago maritima
Plantago maritima subsp. serpentina
Plantago media
Plantago serraria
Pleurospermum austriacum
 Poa alpina
 Poa badensis aggr.
 Poa balbisii
 Poa bivonae
 Poa bulbosa
 Poa carniolica
 Poa cenisia
 Poa chaixii
 Poa compressa
 Poa glauca
 Poa hybrida
 Poa laxa
 Poa minor
 Poa nemoralis
 Poa palustris
 Poa pratensis aggr.
 Poa pumila
 Poa remota
Poa trivialis
Podospermum canum
Podospermum laciniatum
Podospermum purpureum
Podospermum roseum
Polygala alpestris
Polygala alpina
Polygala amarella
Polygala angelisii
Polygala apiculata
Polygala carniolica
Polygala carueliana Polygala comosa
Polygala flavescens
Polygala major
Polygala nicaeensis aggr.
Polygala pedemontana
Polygala pisaurensis
Polygala preslii
Polygala sardoa
Polygala serpyllifolia
Polygala vulgaris

Polygonum oxyspermum Polygonum raii
Polypodium cambricum
Polypodium interjectum Polypodium serratum
Polypodium vulgare
Polypogon viridis
Potentilla alba
Potentilla anglica
Potentilla argentea
Potentilla aurea
Potentilla brauneana
Potentilla calabra
 Potentilla cinerea
 Potentilla collina
 Potentilla crantzii
 Potentilla detommasii
 Potentilla erecta
 Potentilla foliosa
 Potentilla frigida
 Potentilla grandiflora
 Potentilla heptaphylla Potentilla hirta
 Potentilla inclinata
 Potentilla indica
 Potentilla intermedia Potentilla micrantha
Potentilla multifida
Potentilla nivea
Potentilla pennsylvanica
Potentilla pusilla Potentilla recta
Potentilla reptans
Potentilla sterilis
Potentilla tabernaemontani
Potentilla thuringiaca
Prangos ferulacea
Prangos trifida
Prenanthes purpurea
Primula acaulis
Primula allionii
Primula apennina
Primula auricula
Primula carniolica
Primula daonensis
Primula elatior
Primula farinosa
Primula glaucescens
Primula glutinosa
Primula halleri
Primula hirsuta
Primula integrifolia
Primula latifolia
Primula marginata
Primula minima
Primula pedemontana

Primula spectabilis Primula tyrolensis
Primula veris
Primula villosa
Primula wulfeniana
Prunella grandiflora
Prunella hyssopifolia Prunella laciniata
Prunella vulgaris
Pseudofumaria alba Pseudofumaria lutea
Pseudoturritis turrita
Psoralea americana
Pteris cretica
Pteris vittata
Pteroselinum austriacum
Ptilostemon casabonae
Ptilostemon niveus
Ptilostemon strictus
Ptychotis sardoa
Ptychotis saxifraga
Puccinellia distans
Puccinellia fasciculata
Puccinellia festuciformis
Pulicaria dysenterica
Pulicaria odora
Pulmonaria angustifolia
Pulmonaria australis
Pulmonaria mollis
Pulmonaria obscura
Pulmonaria officinalis
Pulmonaria saccharata
Pulmonaria tridentina
Pulmonaria vallisarsae
Pulsatilla alpina
Pulsatilla halleri
Pulsatilla montana
Pulsatilla vernalis
Pyrola chlorantha
Pyrola media
Pyrola minor
Pyrola rotundifolia
Ranunculus aconitifolius
Ranunculus acris
Ranunculus aduncus
Ranunculus alpestris
Ranunculus apenninus
Ranunculus asiaticus
Ranunculus auricomus aggr.
Ranunculus bilobus
Ranunculus breynius
Ranunculus brutius
Ranunculus bulbosus
Ranunculus bullatus

Ranunculus carinthiacus
Ranunculus chaerophyllos
Ranunculus clethraphilus
Ranunculus cordiger
Ranunculus crenatus
Ranunculus flammula
Ranunculus fontanus
Ranunculus glacialis *Ranunculus gracilis*
Ranunculus gramineus
 Ranunculus illyricus
 Ranunculus isthmicus
 Ranunculus lanuginosus
 Ranunculus lingua
 Ranunculus macrophyllus
 Ranunculus marschlinsii
 Ranunculus millefoliatus
 Ranunculus monspeliacus *Ranunculus montanus*
 Ranunculus neapolitanus
 Ranunculus paludosus
 Ranunculus platanifolius
 Ranunculus pollinensis
 Ranunculus polyanthemos subsp. *nemorosus*
 Ranunculus polyanthemos
 Ranunculus pratensis *Ranunculus*
pygmaeus
 Ranunculus pyrenaicus
 Ranunculus rupestris
 Ranunculus seguieri
 Ranunculus serbicus *Ranunculus serpens*
 Ranunculus spicatus
 Ranunculus velutinus
 Ranunculus venetus
Rapistrum perenne
Ratibida pinnata
Reichardia picroides
Reseda lutea
Reseda luteola
Rhaponticoides africana
Rhaponticoides alpina
Rhaponticoides centaurium
Rhaponticum coniferum
Rhaponticum scariosum
Rhizobotrya alpina
Rhynchocorys elephas
Rhynchospora alba
Rhynchospora fusca
Rorippa amphibia
Rorippa austriaca
Rorippa islandica
Rorippa lippizensis *Rorippa pyrenaica*
Rorippa stylosa

Rorippa sylvestris Rorippa thracica
Rouya polygama
Rubia tinctorium Rubus saxatilis
Rumex acetosa
Rumex acetosella
 Rumex alpinus
 Rumex amplexicaulis
 Rumex aquaticus
 Rumex arifolius
 Rumex confertus
 Rumex conglomeratus
 Rumex crispus
 Rumex cristatus
 Rumex hydrolapathum
 Rumex intermedius Rumex
 nebroides
 Rumex nepalensis
 Rumex nivalis
 Rumex obtusifolius
 Rumex patientia
 Rumex pulcher
 Rumex sanguineus
 Rumex scutatus
Rumex thyrsiflorus
Rumex thyrsoides
Sagina glabra
Sagina nodosa
Sagina pilifera
Sagina procumbens
Sagina saginoides
Sagina subulata
Salvia aethiopis Salvia argentea
Salvia glutinosa
Salvia nemorosa
Salvia pinnata
Salvia pratensis Salvia sclarea
Salvia verbenaca
Salvia verticillata
Salvia virgata
Samolus valerandi
Sanguisorba dodecandra
Sanguisorba minor
Sanguisorba officinalis
Sanicula europaea
Saponaria bellidifolia
Saponaria lutea
Saponaria ocymoides
Saponaria officinalis
Saponaria sicula
Saussurea alpina aggr.
Saussurea discolor

Saussurea pygmaea
Saxifraga adscendens Saxifraga aizoides
Saxifraga androsacea
Saxifraga bulbifera
 Saxifraga carpetana
 Saxifraga cernua
 Saxifraga corsica
 Saxifraga cotyledon
 Saxifraga cuneifolia
 Saxifraga exarata
 Saxifraga facchini
 Saxifraga granulata
 Saxifraga hirculus
 Saxifraga hohenwartii
 Saxifraga hostii
 Saxifraga moschata
 Saxifraga muscoides
 Saxifraga mutata
 Saxifraga paniculata
 Saxifraga petraea
 Saxifraga rotundifolia
 Saxifraga sedoides
Saxifraga seguieri
Saxifraga stellaris
Saxifraga taygetea
Saxifraga umbrosa
Scabiosa pseudisetensis
Schedonorus arundinaceus
Schedonorus giganteus
Schedonorus pratensis
Scheuchzeria palustris
Schlagintweitia intybacea
Schoenoplectus lacustris
Schoenoplectus lacustris subsp. glaucus
Schoenoplectus litoralis
Schoenoplectus mucronatus
Schoenoplectus triqueter
Schoenus ferrugineus
Schoenus nigricans
Scleranthus perennis
Scolymus grandiflorus
Scolymus hispanicus
Scopolia carniolica
Scorzonera aristata
Scorzonera austriaca
Scorzonera callosa
Scorzonera glastifolia
Scorzonera hirsuta
Scorzonera hispanica
Scorzonera humilis
Scorzonera trachysperma

Scorzoneroïdes autumnalis

Scorzoneroïdes helvetica Scorzoneroïdes montana

Scrophularia aquatica

Scrophularia auriculata

Scrophularia canina

 Scrophularia lucida

 Scrophularia nodosa

 Scrophularia scopolii

 Scrophularia trifoliata

 Scrophularia umbrosa

 Scrophularia vernalis Scutellaria albida

 Scutellaria altissima

 Scutellaria columnae

 Scutellaria minor

 Scutellaria rubicunda

 Secale strictum

 Securigera varia

 Sedum hirsutum

 Sedum villosum

 Selinum carvifolia

 Selinum silaifolium

 Senecio cacaliaster Senecio doria

aggr.

 Senecio doronicum Senecio

integrifolius

 Senecio nemorensis aggr.

 Senecio ovirensis

 Senecio persoonii

 Senecio scopolii

 Senecio squalidus subsp. rupestris

 Klasea flavescens

 Serratula tinctoria

 Sesamoides purpurascens

 Seseli annuum

 Seseli djianeae

 Seseli kochii

 Seseli libanotis

 Seseli montanum

 Seseli pallasii

 Seseli peucedanoides

 Seseli polyphyllum

 Seseli ramosissimum

 Seseli tortuosum

 Seseli viarum

 Sesleria autumnalis

 Sesleria caerulea

 Sesleria insularis

 Sesleria juncifolia Sesleria nitida

 Sesleria ovata

 Sesleria sphaerocephala

 Sesleria tuzsonii

Setaria parviflora
Sibbaldia procumbens
Silaum silaus
Silene alpestris
Silene baccifera
 Silene campanula
 Silene catholica
 Silene ciliata
 Silene cordifolia
 Silene coronaria
 Silene dioica
 Silene flos-cuculi
 Silene flos-jovis
 Silene ichnusae
 Silene italica
 Silene latifolia
 Silene multicaulis
 Silene nodulosa
 Silene nutans
 Silene otites aggr.
 Silene paradoxa
 Silene parnassica
 Silene quadridentata
Silene quadrifida
Silene roemerii
Silene rupestris
Silene salzmännii Silene saxifraga
Silene succulenta
Silene suecica
Silene tyrrhenia
Silene vallesia
Silene velutina
Silene veselskyi
Silene viridiflora
Silene viscaria
Silene vulgaris
Silphium perfoliatum
Sison amomum
Sisymbrium austriacum
Sisymbrium strictissimum
Sisyrinchium angustifolium
Sisyrinchium bermudiana
Sisyrinchium montanum
Sium latifolium
Sium sisarum
Sixalix atropurpurea Smyrniolum olusatrum
Smyrniolum perfoliatum
Solanum elaeagnifolium
Soldanella alpina
Soldanella hungarica
Soldanella minima

Soldanella pusilla
Soleirolia soleirolii
Solenanthes apenninus
Solenopsis bivonae
Solidago canadensis
 Solidago gigantea
 Solidago virgaurea
 Sonchus arvensis
 Sonchus maritimus
 Sonchus palustris
 Spergularia nicaeensis
 Stachys alopecuroides
 Stachys alpina
 Stachys arenaria
 Stachys byzantina
 Stachys cretica
 Stachys germanica
 Stachys heraclea
 Stachys maritima
 Stachys officinalis
 Stachys palustris
 Stachys pubescens Stachys recta
Stachys sylvatica
Stachys thirkei
Stachys tymphaea
Staphisagria picta
Stellaria alsine
Stellaria diffusa
Stellaria graminea
Stellaria longifolia
Stellaria nemorum
Stellaria palustris
Stipa aristella
Stipa austroitalica
Stipa barbata
Stipa capillata
Stipa fontanesii
Stipa neesiana
Stipa offneri
Stipa pectinata
Stipa pennata
Stipa pulcherrima
Stipa sicula
Stipa tirsia
Stipa trichotoma
Succisa pratensis
Succisella inflexa
Swertia perennis
Symphyotrichum novae-angliae
Symphyotrichum novi-belgii aggr.
Symphytum asperum

Symphytum officinale Symphytum orientale
Tanacetum corymbosum
Tanacetum parthenium
Tanacetum vulgare
Taraxacum alpestre Taraxacum aquilonare
 Taraxacum austriacum
 Taraxacum cucullatum
 Taraxacum erythrospermum
 Taraxacum fontanum
 Taraxacum glaciale
 Taraxacum handelii
 Taraxacum hoppeanum
 Taraxacum lambinonii
 Taraxacum megalorrhizon
 Taraxacum obovatum
 Taraxacum pacheri
 Taraxacum reichenbachii
 Taraxacum sect. Erythrosperma
 Taraxacum sect. Obliqua
 Taraxacum sect. Palustria
 Taraxacum sect. Taraxacum
 Telekia speciosissima
Tephrosia balbisiana
Tephrosia integrifolia
Tephrosia longifolia
Teucrium campanulatum
Teucrium lucidum
Teucrium scordium
Teucrium scorodonia
Teucrium siculum
Thalictrum alpinum
Thalictrum calabricum
Thalictrum flavum
Thalictrum foetidum
Thalictrum galioides
Thalictrum lucidum Thalictrum minus
Thalictrum simplex
Thapsia garganica
Thesium alpinum
Thesium ramosum
Thesium corsalpinum
Thesium divaricatum
Thesium humifusum
Thesium italicum
Thesium parnassi
Thesium pyrenaicum
Thesium sommierii
Thlaspi salisii
Thyselinum palustre
Tofieldia calyculata
Tofieldia pusilla

Tolpis staticifolia Tolpis virgata

Tozzia alpina

Tragopogon crocifolius

Tragopogon dubius

Tragopogon porrifolius

Tragopogon pratensis

Tragopogon tommasinii

Tricholaena teneriffae

Trifolium alpestre

Trifolium alpinum Trifolium badium

Trifolium bionae

Trifolium hybridum

Trifolium montanum

Trifolium noricum

Trifolium ochroleucon

Trifolium pallescens

Trifolium pannonicum

Trifolium patulum

Trifolium physodes

Trifolium rubens

Trifolium thalii

Trifolium uniflorum

Trinia dalechampii Trinia glauca

Tripidium ravennae

Tripidium strictum

Tripolium pannonicum

Trisetaria alpestris

Trisetaria gracilis Trisetum alpestre

Trisetum bertolonii Trisetum conradiae

Trisetum flavescens

Trisetum gracile

Trisetum spicatum

Trochiscanthes nodiflora

Trollius europaeus

Tuberaria lignosa

Urospermum dalechampii

Urtica atrovirens

Urtica dioica

Urtica rupestris

Valeriana celtica

Valeriana dioica

Valeriana elongata

Valeriana exaltata

Valeriana excelsa

Valeriana montana

Valeriana officinalis

Valeriana salicina

Valeriana saxatilis

Valeriana stolonifera

Valeriana supina

Valeriana tripteris Valeriana tuberosa

Verbascum argenteum
Verbascum blattaria
Verbascum chaixii
Verbascum conocarpum
Verbascum creticum
Verbascum densiflorum
Verbascum lanatum
Verbascum longifolium
Verbascum lychnitis
Verbascum macrurum
Verbascum mallophorum
Verbascum nigrum
Verbascum niveum
Verbascum phlomoides
Verbascum phoeniceum
Verbascum pulverulentum
Verbascum rotundifolium
Verbascum samniticum
Verbascum siculum
Verbascum sinuatum Verbascum thapsus
Verbascum virgatum
Verbena officinalis
Veronica alpina
Veronica anagallis-aquatica
Veronica aphylla
Veronica austriaca
Veronica catenata
Veronica chamaedrys
Veronica lutea
Veronica prostrata
Veronica pumila
Veronica scutellata
Veronica urticifolia
Vicia altissima
Vicia cassubica Vicia cracca
Vicia dumetorum
Vicia durandii
Vicia glauca
Vicia grandiflora
Vicia ochroleuca
Vicia onobrychioides
Vicia pisiformis
Vicia sepium
Vicia serinica
Vicia sicula
Vicia sparsiflora
Vicia sylvatica
Vicia tenuifolia
Vincetoxicum hirundinaria Vincetoxicum nigrum
Viola aetnensis
Viola alba Viola argenteria

Viola bertolonii
Viola biflora
Viola calcarata
Viola canina
Viola cenisia
Viola collina
Viola comollia
Viola corsica
Viola dubyana
Viola elatior
Viola eugeniae
Viola graeca
Viola hirta
Viola jordanii
Viola magellensis
Viola merxmulleri
Viola mirabilis
Viola munbyana
Viola nebrodensis
Viola obliqua
Viola odorata
Viola palustris
Viola papilionacea
Viola pinnata
Viola pseudogracilis
Viola pumila
Viola pyrenaica
Viola reichenbachiana
Viola riviniana
Viola rupestris
Viola suavis
Viola thomasiana
Viola valderia
Vulpia sicula
Willemetia stipitata
Woodsia alpina
Woodsia ilvensis
Woodsia pulchella
Wulfenia carinthiaca
Xanthoselinum alsaticum
Xerolekia speciosissima

Ilex aquifolium
Ilex aquifolium

Junipero-Pinetea-species Adenocarpus hispanicus
Berberis aetnensis
Echinopartum barnadesii
Echinopartum horridum
Erica vagans
Festuca braun-blanquetii Festuca iberica

Genista falcata
Genista florida
Helictochloa marginata
Ononis aragonensis
Retama sphaerocarpa

Juniperus communis subsp. communis Juniperus communis subsp.
communis

Larix decidua
Larix decidua

Larix sibirica
Larix sibirica

Low-steppic-shrubs
Caragana frutex
Prunus fruticosa
Prunus tenella
Spiraea media

Lowland-hardwood-riparian-trees
Fraxinus pallisiae
Quercus robur
Ulmus laevis
Ulmus minor

Lowland-to-alpine-heath-dwarf-shrubs
Arctostaphylos uva-ursi
Bruckenthalia spiculifolia
Calluna vulgaris
Empetrum nigrum aggr.
Genista pilosa
Vaccinium myrtillus
Vaccinium uliginosum
Vaccinium vitis-idaea

Macaronesian-coastal-dune-scrub
Polycarpaea nivea
Pulicaria burchardii
Tetraena fontanesii
Traganum moquinii

Macaronesian-garrigue-shrubs
Artemisia argentea
Carlina salicifolia
Echium decaisnei
Erysimum arbuscula
Erysimum maderense
Genista tenera
Globularia salicina

Helichrysum monizii
Micromeria hyssopifolia
Micromeria varia

Macaronesian-junipers

Juniperus brevifolia
Juniperus cedrus

Macaronesian-laurophyllous

Apollonias barbujana
Clethra arborea
Ilex canariensis
Ilex perado
Laurus azorica
Laurus novocanariensis
Morella faya
Ocotea foetens
Persea indica
Picconia azorica
Picconia excelsa
Prunus lusitanica subsp. *azorica*
Prunus lusitanica subsp. *hixa*

Macaronesian-low-heath-shrubs *Calluna vulgaris*

Corema album subsp. *azoricum*
Daboecia azorica *Erica arborea*
Erica maderensis
Erica scoparia
Thymus caespititius
Vaccinium cylindraceum

Macaronesian-tall-heath-shrubs

Arbutus canariensis
Erica arborea
Erica scoparia
Vaccinium padifolium

Macaronesian-xero-halophile-scrub-species

Androcymbium gramineum *Astragalus mareoticus*
Chenoleoides tomentosa
Convolvulus caput-medusae
Frankenia capitata
Lobularia canariensis
Lotus arinagensis
Lotus kunkelii
Lotus lancerottensis
Minuartia webbii
Ononis hebecarpa
Ononis hesperia
Polygonum balansae
Pulicaria burchardii *Tetraena fontanesii*

Tetraena gaetula

Madeiran-xerophytic-scrub-species *Argyranthemum pinnatifidum*

subsp. *succulentum*

Artemisia argentea

Asparagus scoparius

Asparagus umbellatus

Atriplex glauca

Bupleurum salicifolium subsp. *salicifolium*

Calendula suffruticosa subsp. *maderensis*

Carlina salicifolia

Chamaemeles coriacea

Cheirolophus massonianus

Chenoleoides tomentosa

Convolvulus massonii

Crambe fruticosa

Echium nervosum

Echium portasantensis

Erysimum arbuscula *Erysimum bicolor*

Erysimum maderense

Euphorbia piscatoria

Genista tenera

Globularia salicina

Helichrysum melaleucum

Helichrysum monizii

Hypericum canariense

Jasminum azoricum

Jasminum odoratissimum

Lavandula pinnata

Lotus argyroides

Lotus macranthus

Maytenus umbellata

Plantago arborescens

Rubia fruticosa

Schizogyne sericea

Scilla madeirensis

Sideritis candicans

Sideroxylon mirmulans

Teucrium heterophyllum

Mainland-laurophyllous

Laurus nobilis

Morella faya

Prunus laurocerasus

Prunus lusitanica subsp. *lusitanica*

Mediterranean-Abies

Abies borisii-regis *Abies*

cephalonica *Abies cilicica*

Abies nebrodensis

Abies pinsapo

Mediterranean-Pinus

Pinus brutia
Pinus halepensis
Pinus pinaster
Pinus pinea

Mediterranean-Rubus

Rubus sanctus
Rubus ulmifolius

Mediterranean-genistoid-shrubs

Adenocarpus anisochilus Adenocarpus brutius
Adenocarpus complicatus
Adenocarpus decorticans
Adenocarpus hispanicus
Adenocarpus telonensis
Adenocarpus viscosus
Cytisus arboreus
Cytisus cantabricus
Cytisus commutatus
Cytisus grandiflorus
Cytisus ingramii
Cytisus multiflorus
Cytisus striatus
Cytisus villosus
Genista cinerascens
Genista falcata
Genista florida
Genista hystrix
Genista linifolia
Genista monspessulana
Genista obtusiramea Genista polyanthos
Genista spartioides
Genista umbellata
Retama monosperma
Retama sphaerocarpa

Mediterranean-halo-nitrophilous-scrub-species

Acuston lunarioides
Artemisia arborescens
Artemisia barrelieri
Artemisia herba-alba
Artemisia lucentica
Artemisia ramosa
Artemisia thuscula
Artemisia valentina
Atriplex glauca
Atriplex semibaccata
Ballota hirsuta
Bosea yervamora

Camphorosma monspeliaca
Capparis sicula
Carthamus arborescens
Ceballosia fruticosa
Chenoleoides tomentosa
Cistanche phelypaea
Commicarpus africanus
Euphorbia matritensis
Fagonia cretica
Forsskaolea angustifolia
Frankenia capitata
Frankenia thymifolia
Gymnocarpus decander
Hammada articulata
Haplophyllum linifolium
Herniaria canariensis
Hohenackeria polyodon
Ipomoea indica
Ipomoea purpurea
Launaea arborescens
Limonium frederici
Limonium opulentum
Lycium europaeum
Lycium intricatum
Lycium schweinfurthii
Malva acerifolia
Marrubium alysson
Marrubium supinum
Medicago arborea
Mercurialis tomentosa
Peganum harmala
Salsola tetrandra
Salsola divaricata
Salsola carpatha
Salsola aegaea
Salsola genistoides
Salsola longifolia
Salsola oppositifolia
Salsola papillosa
Salsola portilloi
Salsola vermiculata
Salsola verticillata
Santolina chamaecyparissus aggr.
Santolina impressa
Santolina pectinata
Santolina rosmarinifolia Sideritis danielii
Suaeda altissima
Suaeda ifniensis
Suaeda palaestina
Suaeda pelagica
Suaeda vermiculata

Trigonella rechingeri
Withania aristata
Withania frutescens
Withania somnifera

Mediterranean-mountain-relict-mire-species

Bellis bernardii
Bellium nivale
Carex bulgarica
Carex nevadensis
Cirsium heterotrichum
Dactylorhiza cordigera
Festuca frigida
Gentiana pyrenaica
Gymnadenia frivaldii
Juncus requienii
Narthecium reverchonii
Narthecium scardicum
Pinguicula balcanica
Pinguicula corsica
Pinguicula nevadensis
Plantago gentianoides
Primula deorum
Ranunculus cordiger
Ranunculus pyrenaeus
Scorzoneroidea crocea
Scorzoneroidea microcephala
Silene asterias
Soldanella pindicola Veronica nevadensis
Willemetia stipitata

Mediterranean-riparian-shrubs

Nerium oleander
Tamarix africana
Tamarix arborea
Tamarix boveana
Tamarix canariensis
Tamarix dalmatica
Tamarix hampeana
Tamarix mascatensis
Tamarix parviflora Tamarix tetrandra
Vitex agnus-castus

Mediterranean-riparian-species

Allium triquetrum Arisarum vulgare
Arum italicum Arundo donax
Asparagus acutifolius
Cercis siliquastrum
Dioscorea communis
Dittrichia viscosa
Dracunculus vulgaris

Ficus carica
Juncus acutus
Nerium oleander
Oxalis pes-caprae
Parietaria judaica
Periploca graeca
Piptatherum miliaceum
Platanus orientalis Rubia

peregrina

Rubus sanctus
Rubus ulmifolius
Scirpoides holoschoenus
Smilax aspera
Suaeda vera
Tamarix africana
Tamarix arborea
Tamarix boveana
Tamarix canariensis
Tamarix dalmatica
Tamarix hampeana
Tamarix mascatensis
Tamarix parviflora
Tamarix tetrandra
Urospermum picroides
Urtica pilulifera
Vitex agnus-castus

Mesomediterranean-maquis-shrubs

Anagyris foetida
Arbutus andrachne
Arbutus unedo
Bupleurum fruticosum
Calicotome spinosa
Calicotome villosa
Celtis australis
Erica arborea
Jasminum fruticans Juniperus phoenicea
Juniperus oxycedrus aggr.
Myrtus communis
Phillyrea angustifolia
Phillyrea latifolia
Pistacia terebinthus
Rhamnus alaternus
Rhamnus lycioides
Rosa sempervirens
Styrax officinalis
Teucrium fruticans
Viburnum tinus

Mire-specialist-bryophytes Aneura pinguis

Aulacomnium palustre Bryum
pseudotriquetrum
Calliergon giganteum
Calliergon richardsonii
Calypogeia sphagnicola
Campyliadelphus elodes
Campylium stellatum
Campylopus atrovirens
Catoscopium nigratum
Cephalozia connivens
Cephalozia loitlesbergeri
Cinclidium arcticum
Cinclidium stygium
Cinclidium subrotundum
Cladopodiella fluitans
Dicranum bonjeanii
Dicranum elongatum
Dicranum leioneuron
Dicranum undulatum
Drepanocladus polygamus
Drepanocladus pseudostramineus
Drepanocladus sendtneri
Drepanocladus trichophyllus
Fissidens adiantoides
Fissidens osmundoides
Gymnocolea inflata
Hamatocaulis lapponicus
Hamatocaulis vernicosus
Helodium blandowii Kurzia pauciflora
Leiocolea badensis
Leiocolea bantriensis
Loeskeopnum badium
Meesia hexasticha
Meesia longisetula
Meesia triquetra
Meesia uliginosa
Moerckia hibernica
Mylia anomala
Nardia scalaris
Odontoschisma sphagni
Oncophorus virens
Paludella squarrosa
Palustriella commutata aggr.
Philonotis calcarea
Philonotis fontana
Pleurozia purpurea
Polytrichum commune
Polytrichum hyperboreum Polytrichum strictum
Preissia quadrata
Pseudocalliergon lycopodioides
Pseudocalliergon trifarium

Pseudocalliergon turgescens
 Racomitrium lanuginosum
 Riccardia chamedryfolia
 Riccardia incurvata
 Riccardia multifida
 Rhizomnium pseudopunctatum Scorpidium revolvens
 aggr.
 Scorpidium scorpioides
 Sphagnum affine
 Sphagnum austinii
 Sphagnum angermanicum
 Sphagnum annulatum
 Sphagnum jensenii
 Sphagnum aongstroemii
 Sphagnum auriculatum+inundatum
 Sphagnum balticum
 Sphagnum capillifolium aggr.
 Sphagnum compactum
 Sphagnum contortum
 Sphagnum cuspidatum
 Sphagnum fimbriatum
 Sphagnum fuscum
 Sphagnum lindbergii
 Sphagnum magellanicum aggr.
 Sphagnum majus
 Sphagnum molle Sphagnum
 obtusum
 Sphagnum palustre aggr.
 Sphagnum papillosum
 Sphagnum platyphyllum
 Sphagnum pulchrum
 Sphagnum recurvum aggr.
 Sphagnum riparium
 Sphagnum rubellum
 Sphagnum russowii
 Sphagnum strictum
 Sphagnum subfulvum
 Sphagnum subnitens
 Sphagnum subsecundum
 Sphagnum tenellum
 Sphagnum teres
 Sphagnum warnstorffii
 Sphagnum lenense
 Sphagnum pylaiei
 Sphagnum pylaisii
 Straminergon stramineum
 Tomentypnum nitens
 Tritomaria quinquedentata Warnstorfia exannulata
 Warnstorfia fluitans
 Warnstorfia sarmentosa
 Warnstorfia tundrae

N15-Atlantic-and-Baltic-coastal-dune-grassland-grey-dune-specialists

Alyssum loiseleurii Anchusa calcarea
Armeria welwitschii
Euphorbia portlandica
Galium arenarium
Helichrysum italicum subsp. picardii
Iberis procumbens
Malcolmia littorea
Mibora minima
Reichardia gaditana
Thymus carnosus
Verbascum litigiosum

N16-Mediterranean-and-Macaronesian-coastal-dune-grassland-grey-dune-specialists

Anthemis maritima
Anthemis tomentosa
Anthyllis hamosa
Artemisia monosperma
Asteriscus imbricatus
Atractylis carduus
Centaurea cuneifolia
Centaurea greuteri
Centaurea sphaerocephala
Centaurea tommasinii
Corynephorus divaricatus
Cyperus macrorhizus
Dianthus pyrenaicus
Echiochilon fruticosum
Echium angustifolium
Euphorbia terracina
Filago lusitanica
Launaea fragilis
Linaria pedunculata
Lomelosia rutifolia
Lotus cytisoides
Lotus glaucus
Lotus pseudo-creticus
Malcolmia ramosissima
Maresia nana
Ononis angustifolia
Ononis tournefortii
Polycarpaea nivea Traganum moquinii

N17-Black-Sea-coastal-dune-grassland-grey-dune-specialists

Astrodaucus littoralis
Carex colchica
Centaurea odessana
Convolvulus persicus
Dianthus bessarabicus
Erysimum montanum

Festuca arenicola
Jurinea kilaea
Lepidotrichum uechtritizianum
Linum tauricum
Marrubium peregrinum
Silene euxina
Silene thymifolia
Verbascum purpureum

N22-Mediterranean-and-Black-Sea-coastal-shingle-beach-specialists

Glaucium flavum
Matthiola sinuata
Matthiola tricuspidata
Raphanus maritimus

Native-broadleaf-trees

Acer campestre
Acer cappadocicum
Acer divergens
Acer heldreichii
Acer hyrcanum Acer
monspessulanum Acer opalus
aggr.

Acer platanoides
Acer pseudoplatanus
Acer sempervirens
Acer species
Acer tataricum
Acer trautvetteri
Acer undulatum
Aesculus hippocastanum
Aesculus species
Alnus cordata
Alnus glutinosa
Alnus incana
Alnus species
Alnus x pubescens
Betula litwinowii
Betula obscura
Betula oycoviensis
Betula pendula
Betula pendula var. fontqueri
Betula pubescens
Betula pubescens var. glabrata
Betula pubescens var. pumila
Betula species
Carpinus betulus
Carpinus orientalis
Carpinus species
Castanea sativa
Castanea species

Celtis australis
Celtis planchoniana
 Celtis tournefortii
 Cercis siliquastrum
 Corylus columna
 Crataegus azarolus
 Crataegus germanica
 Diospyros lotus
 Elaeagnus angustifolia
 Elaeagnus species
 Fagus orientalis
 Fagus species
 Fagus sylvatica
 Fraxinus angustifolia
 Fraxinus excelsior
 Fraxinus ornus
 Fraxinus pallisae
 Fraxinus species Ilex
 aquifolium
 Ilex canariensis
Ilex colchica
Juglans regia
Laurus azorica
Laurus novocanariensis
Malus dasyphylla
Malus florentina Malus species
Malus sylvestris
Malus trilobata
Olea europaea
Ostrya carpinifolia
Phoenix canariensis
Phoenix theophrasti Pistacia atlantica
Platanus orientalis
Platanus species
Populus alba
Populus nigra
Populus species
Populus tremula
Populus x canescens
Prunus avium
Prunus brigantina
Prunus cerasifera
Prunus cocomilia
Prunus padus
Prunus species
Pterocarya fraxinifolia
Pyrus bourgaeana Pyrus
communis
 Pyrus nivalis
 Quercus alnifolia
 Quercus aucheri

Quercus brantii

Quercus canariensis *Quercus canariensis* +

petraea

Quercus cerris

Quercus coccifera

Quercus congesta

Quercus crenata

Quercus dalechampii

Quercus faginea

Quercus frainetto

Quercus gussonei

Quercus hartwissiana

Quercus humilis + *cerrioides*

Quercus ichnusae

Quercus ilex

Quercus infectoria

Quercus ithaburensis *Quercus*

macranthera

Quercus pauciradiata

Quercus petraea

Quercus pontica

Quercus pubescens

Quercus pyrenaica

Quercus robur

Quercus rotundifolia

Quercus species *Quercus suber*

Quercus trojana

Quercus x airensis

Quercus x allorgeana

Quercus x andegavensis

Quercus x arrimatensis

Quercus x bedaei

Quercus x calvescens

Quercus x cerrioides

Quercus x firmurensis

Quercus x fontanesii

Quercus x fontqueri

Quercus x gracilis

Quercus x kernerii

Quercus x marianica

Quercus x mixta

Quercus x montserratii

Quercus x neomairei

Quercus x numantina

Quercus x nummantina

Quercus x penasii

Quercus x rosacea

Quercus x rotensis

Quercus x salcedoi

Quercus x senneniana

Quercus x streimii

Quercus x trabutii

Quercus x welwitschii

Salix alba Salix caprea

Salix euxina Sorbus anglica

Sorbus aria aggr.

Sorbus aucuparia Sorbus borbasii

Sorbus carpatica

Sorbus dacica

Sorbus domestica

Sorbus hardeggensis

Sorbus hibernica Sorbus

intermedia

Sorbus latifolia aggr.

Sorbus pannonica

Sorbus pekarovae

Sorbus quercea

Sorbus portae-bohemicae

Sorbus roopiana

Sorbus slovenica

Sorbus sudetica

Sorbus torminalis

Sorbus umbellata

Tilia begoniifolia Tilia cordata

Tilia platyphyllos

Tilia species

Tilia tomentosa

Tilia x vulgaris

Ulmus glabra

Ulmus laevis

Ulmus minor

Ulmus procera

Ulmus species

Zelkova abelicea

Native-conifer-trees Abies alba

Abies borisii-regis

Abies cephalonica Abies cilicica

Abies nebrodensis

Abies nordmanniana

Abies pinsapo

Abies sibirica

Abies species

Cedrus atlantica

Cedrus libani

Cedrus species

Cupressus sempervirens

Cupressus species

Juniperus brevifolia

Juniperus cedrus

Juniperus drupacea

Juniperus excelsa

Juniperus foetidissima
Juniperus thurifera
Larix decidua
Larix sibirica
Larix species Picea abies
Picea omorika
Picea orientalis
Picea species
Pinus brutia
Pinus canariensis
Pinus cembra
Pinus halepensis
Pinus heldreichii
Pinus mugo subsp. rotundata
Pinus nigra
Pinus peuce
Pinus pinaster
Pinus pinea
Pinus sibirica
Pinus species
Pinus sylvestris
Pinus uncinata
Pinus x celakovskiorum
Pinus x rhaetica
Taxus baccata
Taxus species

Native-light-canopy-trees

Betula species
Betula litwinowii
Betula obscura
Betula oycoviensis
Betula pendula
Betula pendula var. fontqueri
Betula pubescens
Betula pubescens var. glabrata
Betula pubescens var. pumila
Cedrus species
Cedrus atlantica
Cedrus libani
Cupressus species
Cupressus macrocarpa
Cupressus sempervirens
Juniperus brevifolia
Juniperus cedrus
Juniperus drupacea
Juniperus excelsa
Juniperus foetidissima Juniperus thurifera
Larix species
Larix decidua Larix sibirica
Pinus species

Pinus Xrhaetica
Pinus brutia
Pinus canariensis
Pinus cembra
Pinus halepensis
Pinus heldreichii
Pinus mugo subsp. rotundata
Pinus nigra
Pinus peuce
Pinus pinaster Pinus pinea
Pinus sibirica
Pinus sylvestris
Pinus uncinata
Pinus x celakovskiorum
Pinus x rhaetica
Populus tremula
Taxus species
Taxus baccata
Tetraclinis articulata

Native-trees

Abies alba
Abies borisii-regis
Abies cephalonica Abies cilicica
Abies nebrodensis
Abies nordmanniana
Abies pinsapo
Abies sibirica Abies species
Acer campestre
Acer cappadocicum
Acer divergens
Acer heldreichii
Acer hyrcanum
Acer monspessulanum Acer opalus

aggr.

Acer platanoides
Acer pseudoplatanus
Acer sempervirens
Acer species
Acer tataricum
Acer trautvetteri
Acer undulatum
Aesculus hippocastanum
Aesculus species
Alnus cordata
Alnus glutinosa
Alnus incana
Alnus species Alnus x pubescens
Betula litwinowii
Betula obscura
Betula oycoviensis

Betula pendula
Betula pendula var. fontqueri
Betula pubescens
Betula pubescens var. glabrata
Betula pubescens var. pumila
Betula species
Carpinus betulus
Carpinus orientalis
Carpinus species Castanea sativa
Castanea species
Cedrus atlantica
Cedrus libani
Cedrus species
Celtis australis
Celtis planchoniana
Celtis tournefortii
Cercis siliquastrum
Corylus colurna
Crataegus azarolus
Crataegus germanica
Cupressus sempervirens
Cupressus species
Diospyros lotus
Elaeagnus angustifolia
Elaeagnus species
Fagus orientalis
Fagus species
Fagus sylvatica
Fraxinus angustifolia
Fraxinus excelsior
Fraxinus ornus
Fraxinus pallisae
Fraxinus species Ilex aquifolium
Ilex canariensis
Ilex colchica
Juglans regia
Juniperus brevifolia
Juniperus cedrus
Juniperus drupacea
Juniperus excelsa
Juniperus foetidissima Juniperus thurifera
Larix decidua
Larix sibirica Larix species
Laurus azorica
Laurus novocanariensis
Malus dasyphylla
Malus florentina
Malus species
Malus sylvestris
Malus trilobata
Olea europaea

Ostrya carpinifolia
Phoenix canariensis
Phoenix theophrasti
Picea abies
Picea omorika
Picea orientalis
Picea species
Pinus brutia
Pinus canariensis
Pinus cembra
Pinus halepensis
Pinus heldreichii
Pinus mugo subsp. rotundata
Pinus nigra
Pinus peuce
Pinus pinaster
Pinus pinea
Pinus sibirica
Pinus species
Pinus sylvestris
Pinus uncinata
Pinus x celakovskiorum
Pinus x rhaetica
Pistacia atlantica
Platanus orientalis
Platanus species
Platycladus orientalis
Populus alba
Populus nigra
Populus species
Populus tremula
Populus x canescens
Prunus avium
Prunus brigantina
Prunus cerasifera
Prunus cocomilia
Prunus padus
Prunus species
Pterocarya fraxinifolia
Pyrus bourgaeana
Pyrus communis
Pyrus nivalis
Pyrus syriaca
Quercus alnifolia
Quercus aucheri
Quercus brantii
Quercus canariensis Quercus canariensis +
petraea
Quercus cerris
Quercus coccifera
Quercus congesta

Quercus crenata
Quercus dalechampii
Quercus faginea
Quercus frainetto
Quercus gussonei
Quercus hartwissiana
Quercus humilis + cerrioides
Quercus ichnusae
Quercus ilex
Quercus infectoria
Quercus ithaburensis
Quercus libani
Quercus macranthera
Quercus pauciradiata
Quercus petraea
Quercus pontica
Quercus pubescens
Quercus pyrenaica
Quercus robur
Quercus rotundifolia
Quercus species
Quercus suber
Quercus trojana
Quercus x airensis
Quercus x allorgeana
Quercus x andegavensis
Quercus x arrimatensis
Quercus x bedaei
Quercus x calvescens
Quercus x cerrioides
Quercus x firmurensis
Quercus x fontanesii
Quercus x fontqueri
Quercus x gracilis
Quercus x kernerii
Quercus x marianica
Quercus x mixta
Quercus x montserratii
Quercus x neomairei
Quercus x numantina
Quercus x nummantina
Quercus x penasii
Quercus x rosacea
Quercus x rotensis
Quercus x salcedoi
Quercus x senneniana
Quercus x streimii
Quercus x trabutii
Quercus x welwitschii
Salix alba
Salix caprea

Salix euxina Sorbus anglica
Sorbus aria aggr.
Sorbus aucuparia Sorbus borbasii
Sorbus carpatica
Sorbus dacica
Sorbus domestica
Sorbus hardeggensis
Sorbus hibernica
Sorbus hybrida aggr.
Sorbus intermedia
Sorbus latifolia aggr.
Sorbus pannonica
Sorbus pekarovae
Sorbus quercea
Sorbus roopiana
Sorbus slovenica
Sorbus sudetica
Sorbus torminalis
Sorbus umbellata
Taxus baccata
Taxus species
Tilia cordata
Tilia begoniifolia
Tilia platyphyllos
Tilia species
Tilia tomentosa
Tilia x vulgaris
Ulmus glabra
Ulmus laevis
Ulmus minor
Ulmus procera
Ulmus species
Zelkova abelicea

Noble-hardwood-trees Acer opalus
aggr.

Acer platanoides
Acer pseudoplatanus
Fraxinus excelsior
Tilia cordata
Tilia begoniifolia
Tilia platyphyllos
Ulmus glabra

Noble-hardwood-trees-generalists
Acer platanoides
Fraxinus excelsior
Tilia begoniifolia Tilia cordata
Ulmus glabra

Noble-hardwood-trees-ravine-specialists Acer opalus aggr.

Acer pseudoplatanus

Tilia platyphyllos

Non-native-broadleaf-deciduous-trees

Acer negundo

Acer saccharinum

Aesculus carnea

Ailanthus altissima

Catalpa bignonioides

Celtis occidentalis

Fagus crenata

Fagus sylvatica (cult.)

Fraxinus americana

Fraxinus pennsylvanica

Gleditsia triacanthos

Juglans cinerea

Juglans mandshurica

Juglans nigra

Liriodendron tulipifera

Malus baccata

Malus prunifolia

Malus pumila

Morus alba

Morus nigra

Morus species

Paulownia tomentosa

Platanus occidentalis

Platanus x hispanica *Populus balsamifera*

Populus carolinensis

Populus laurifolia

Populus nigra cv. 'Italica'

Populus simonii

Populus suaveolens

Populus tremuloides

Populus trichocarpa

Populus x canadensis

Prunus armeniaca *Prunus cerasus*

Prunus domestica

Prunus dulcis

Pterocarya stenoptera

Quercus coccinea

Quercus palustris

Quercus robur (cult.)

Quercus rubra

Quercus rubra (cult.)

Robinia pseudoacacia

Salix alba cv. *chermesina*

Salix babylonica

Salix blanda

Styphnolobium japonicum

Ulmus pumila

Ulmus x hollandica

Non-native-broadleaf-evergreen-trees

Acacia dealbata

Acacia karoo

Acacia melanoxylon

Acacia saligna

Eucalyptus camaldulensis

Eucalyptus globulus

Eucalyptus robustus

Eucalyptus species

Schinus molle

Trachycarpus fortunei

Non-native-conifer-trees

Abies concolor

Abies grandis

Abies procera

Araucaria araucana

Cedrus deodara

Cupressus arizonica

Cupressus lusitanica

Chamaecyparis lawsoniana

Chamaecyparis pisifera

Chamaecyparis species

Cupressus macrocarpa

Larix kaempferi

Larix x eurolepis

Metasequoia species

Picea glauca

Picea pungens

Picea sitchensis

Pinus banksiana

Pinus contorta

Pinus pinaster (cult.)

Pinus radiata Pinus rigida

Pinus strobus

Pinus wallichiana

Platycladus orientalis Pseudotsuga menziesii

Sequoia sempervirens

Sequoiadendron giganteum

Taxodium distichum

Thuja occidentalis

Thuja plicata

Thuja species

Tsuga canadensis

Tsuga heterophylla Tsuga species

Xanthocyparis nootkatensis

Non-native-trees

Abies concolor

Abies grandis

Abies procera

Acacia dealbata

Acacia karoo

Acacia melanoxylon

Acacia saligna

Acer negundo

Acer saccharinum

Aesculus carnea

Ailanthus altissima

Araucaria araucana

Catalpa bignonioides

Cedrus deodara

Celtis occidentalis

Chamaecyparis lawsoniana

Chamaecyparis pisifera

Chamaecyparis species

Cupressus arizonica

Cupressus lusitanica

Cupressus macrocarpa

Eucalyptus camaldulensis

Eucalyptus globulus

Eucalyptus robustus

Eucalyptus species

Fagus crenata

Fagus sylvatica (cult.)

Fraxinus americana

Fraxinus pennsylvanica

Gleditsia triacanthos

Juglans cinerea

Juglans mandshurica

Juglans nigra

Larix kaempferi

Larix x eurolepis

Liriodendron tulipifera

Malus baccata

Malus prunifolia

Malus pumila

Metasequoia species

Morus alba

Morus nigra

Morus species

Paulownia tomentosa

Phoenix dactylifera

Picea glauca

Picea pungens

Picea sitchensis *Pinus banksiana*

Pinus contorta

Pinus pinaster (cult.)

Pinus radiata *Pinus rigida*

Pinus strobus

Pinus wallichiana
Pistacia vera
Platanus occidentalis
Platanus x hispanica Platycladus orientalis
Populus balsamifera
Populus carolinensis
Populus laurifolia
Populus nigra cv. 'Italica'
Populus simonii
Populus suaveolens
Populus tremuloides
Populus trichocarpa
Populus x canadensis
Prunus armeniaca Prunus cerasus
Prunus domestica
Prunus dulcis
Pseudotsuga menziesii
Pterocarya stenoptera
Quercus coccinea
Quercus palustris
Quercus robur (cult.)
Quercus rubra
Quercus rubra (cult.)
Robinia pseudoacacia
Salix alba cv. chermesina
Salix babylonica
Salix blanda
Schinus molle
Sequoia sempervirens
Sequoiadendron giganteum
Styphnolobium japonicum
Taxodium distichum
Thuja occidentalis
Thuja plicata
Thuja species
Trachycarpus fortunei
Tsuga canadensis
Tsuga heterophylla
Tsuga species
Ulmus pumila
Ulmus x hollandica
Xanthocyparis nootkatensis

Oak-hornbeam-forest-trees

Acer campestre
Carpinus betulus Castanea sativa
Quercus petraea
Quercus robur
Tilia tomentosa

Olea-Ceratonia-woodland-shrubs

Ceratonia siliqua
Pistacia atlantica
Pistacia lentiscus

Oryza sativa

Oryza sativa

Palsa-specialists

Dicranum elongatum
Luzula wahlenbergii
Omphalina hudsoniana
Rubus chamaemorus
Tephrosieris atropurpurea

Pan-Mediterranean-acidic-garrigue-shrubs

Calicotome villosa
Cistus creticus
Cistus laurifolius
Cistus monspeliensis
Cistus salviifolius
Globularia alypum
Helichrysum italicum
Helichrysum stoechas
Lavandula stoechas
Micromeria graeca
Rosmarinus officinalis

Pan-Mediterranean-basic-garrigue-shrubs

Argyrolobium zanonii
Asparagus horridus
Calicotome villosa
Cistus creticus
Dorycnium hirsutum
Fumana arabica
Fumana ericoides
Fumana laevipes
Fumana thymifolia
Helianthemum syriacum Helichrysum italicum
Micromeria graeca
Micromeria nervosa
Ononis minutissima
Rosmarinus officinalis
Ruta chalepensis
Salvia officinalis
Teucrium flavum
Thymbra capitata
Thymelaea hirsuta
Thymelaea tartonraira

Phrygana-shrubs

Alhagi maurorum

Euphorbia acanthothamnos
Genista acanthoclada
Genista fasselata
Lithodora hispidula
Onosma fruticosa
Sarcopoterium spinosum
Verbascum spinosum

Picea

Picea abies
Picea obovata
Picea omorika
Picea orientalis

Pinetalia-pallasianae-kochianae-species

Brachypodium pinnatum
Brachypodium rupestre
Briza media
Bromopsis cappadocica
Campanula sibirica
Carex humilis
Cirsium laniflorum
Cotinus coggygria
Cruciata taurica
Inula ensifolia
Galium mollugo aggr.
Helianthemum nummularium
Pimpinella lithophila
Psephellus declinatus
Rosa spinosissima
Rubus tauricus
Seseli libanotis Teucrium chamaedrys
Teucrium polium aggr.
Thalictrum minus
Viola sieheana

Pinus canariensis

Pinus canariensis

Pinus mugo

Pinus mugo

Pinus mugo aggr.

Pinus mugo aggr.

Pinus nigra

Pinus nigra

Pinus pinaster

Pinus pinaster

Pinus sylvestris

Pinus sylvestris

Pinus uncinata Pinus uncinata

Pinus-heldreichii-peuce

Pinus heldreichii

Pinus peuce

Pinus-sylvestris-nigra

Pinus nigra

Pinus sylvestris

Populus tremula

Populus tremula

Prunus lusitanica

Prunus lusitanica

Pteridium aquilinum

Pteridium aquilinum

Quaking-non-calcareous-fen-bryophytes

Cladopodiella fluitans

Gymnocolea inflata

Sphagnum annulatum

Sphagnum jensenii

Sphagnum auriculatum+inundatum

Sphagnum balticum

Sphagnum cuspidatum

Sphagnum lindbergii

Sphagnum majus

Sphagnum platyphyllum

Sphagnum pulchrum

Sphagnum recurvum aggr.

Sphagnum riparium

Sphagnum subsecundum Sphagnum

tenellum

Warnstorfia fluitans

Quercus coccifera

Quercus coccifera

R11-Pannonian-and-Pontic-sandy-steppe-specialists

Bassia laniflora

Colchicum arenarium

Dianthus diutinus

Dianthus serotinus Festuca beckeri

Festuca vaginata

Festuca wagneri

Tragopogon floccosus

R15-Continental-dry-rocky-steppic-grassland-and-dwarf-scrub-on-chalk-outcrops-specialists

Allium sphaeropodum
Artemisia hololeuca
Artemisia nutans
Artemisia salsoloides
Asperula tephrocarpa
Astragalus albicaulis
Brassica elongata subsp. *pinnatifida*
Diploaxis cretacea
Euphorbia petrophila
Jurinea arachnoidea
Koeleria talievii *Linum ucranicum*
Polygala cretacea
Scrophularia cretacea
Silene cretacea
Silene supina
Thymus calcareus

R1B-Continental-dry-grassland-true-steppe-specialists

Artemisia austriaca
Artemisia pontica
Astragalus dasyanthus
Astragalus exscapus
Astragalus subuliformis
Carex supina
Crambe tataria
Festuca valesiaca aggr.
Galatella villosa
Goniolimon besseranum
Goniolimon collinum
Goniolimon tataricum
Inula oculus-christi
Iris pumila
Jurinea arachnoidea
Jurinea mollis
Jurinea stoechadifolia
Koeleria brevis
Nepeta parviflora
Nepeta ucranica
Paeonia tenuifolia
Phlomis herba-venti *Pulsatilla grandis*
Salvia aethiopis
Salvia austriaca
Salvia nutans
Stipa borysthena aggr.
Stipa capillata
Stipa dasyphylla
Stipa korshinskyi
Stipa pulcherrima
Stipa ucrainica

Stipa zalesskii
Taraxacum serotinum

R1E-Mediterranean-tall-perennial-dry-grassland-specialists

Andropogon distachyos
Brachypodium boissieri *Brachypodium retusum*
Festuca capillifolia
Festuca scariosa
Helictochloa bromoides
Helictotrichon filifolium
Heteropogon contortus
Hyparrhenia hirta
Hyparrhenia sinaica
Lygeum spartum
Macrochloa tenacissima
Stipa barbata
Stipa cazorlensis
Stipa iberica
Stipa juncea
Stipa lagascae
Stipa offneri
Stipa parviflora
Trisetum velutinum

R1G-Iberian-oromediterranean-siliceous-dry-grassland-specialists

Agrostis tileni
Androsace rioxana
Armeria caespitosa
Armeria duriaei
Artemisia granatensis
Erigeron frigidus
Eryngium glaciale
Festuca clementei
Festuca pseudeskia
Herniaria boissieri
Hormathophylla purpurea
Leucanthemopsis flaveola
Luzula caespitosa
Luzula spicata subsp. *nevadensis*
Pilosella vahlii
Teesdalia conferta
Trisetum glaciale

R1H-Iberian-oromediterranean-basiphilous-dry-grassland-specialists

Astragalus tremolsianus *Draba hispanica*
Erodium cazorlanum
Erodium daucoides *Erodium glandulosum*
Festuca altopyrenaica
Festuca burnatii
Festuca hystrix
Festuca liviensis

Festuca marginata subsp. *andres-molinae*
Festuca nevadensis
Festuca ochroleuca
Onobrychis pyrenaica
Saponaria caespitosa
Saxifraga conifera
Sideritis glacialis

R1J-Cyrno-Sardean-oromediterranean-siliceous-dry-grassland-specialists

Armeria multiceps
Armeria sardoa
Cerastium soleirolii
Festuca morisiana
Pilosella soleiroliana

R1K-Balkan-and-Anatolian-oromediterranean-dry-grassland-specialists

Beta nana
Corydalis blanda
Herniaria parnassica
Poa pumila
Trifolium heldreichianum
Trifolium parnassii

R1L-Madeiran-oromediterranean-siliceous-dry-grassland-specialists

Anthoxanthum maderense
Anthyllis lemanniana
Festuca jubata
Holcus pintodasilvae
Micromeria varia subsp. *thymoides*
Orchis mascula subsp. *scopulorum*
Parafestuca albida
Rumex bucephalophorus subsp. *canariensis*

R1N-Open-Iberian-supramediterranean-dry-acid-and-neutral-grassland-specialists

Armeria caballeroi
Armeria ciliata
Armeria eriophylla
Armeria langei
Armeria merinoi
Armeria transmontana
Bufonia macropetala
Centaurea borjae
Centaurea toletana
Dianthus laricifolius *Festuca brigantina*

Festuca gredensis

Festuca longiauriculata
Festuca summilusitana
Herniaria scabrida
Leucanthemopsis flaveola
Leucanthemopsis pallida
Leucanthemopsis pulverulenta

Lotus glareosus
Ornithogalum concinnum
Ortegia hispanica
Pilosella castellana
Reseda virgata
Sagina merinoi

R1Q-Inland-sanddrift-and-dune-with-siliceous-grassland-specialists

Carex arenaria
Corynephorus canescens

R1S-Heavy-metal-grassland-in-Western-and-Central-Europe-specialists

Armeria alpina subsp. halleri
Viola calaminaria
Viola guestphalica

R23-Mountain-hay-meadow-specialists

Arabidopsis halleri
Astrantia major
Campanula serrata
Cirsium heterophyllum
Crepis pyrenaica
Crocus vernus
Geranium sylvaticum aggr.
Knautia nevadensis Meum
athamanticum Narcissus poeticus
Phleum alpinum aggr.
Phyteuma halleri
Phyteuma spicatum
Phyteuma tetramerum
Pimpinella serbica
Poa chaixii
Rhinanthus mediterraneus
Viola cornuta

R24-Iberian-summer-pasture-vallicar-specialists

Agrostis castellana
Anthoxanthum ovatum
Celtica gigantea
Festuca ampla
Festuca elegans
Holcus annuus
Molineriella minuta
Periballia involucreta

R31-Mediterranean-tall-humid-inland-grassland-specialists

Agrostis reuteri
Carex mairei Cirsium
 monspessulanum Cirsium
 pyrenaicum
Cochlearia glastifolia

Cochlearia megalosperma
Dittrichia viscosa
Dorycnium hirsutum
Dorycnium rectum
Euphorbia hirsuta
Galium viridiflorum
Hypericum caprifolium
Hypericum pubescens
Hypericum tomentosum
Imperata cylindrica
Juncus striatus
Linum tenue
Lysimachia ephemerum
Melilotus indica
Peucedanum hispanicum
Phalaris aquatica
Ranunculus granatensis Ranunculus macrophyllus
Serapias vomeracea aggr.
Sonchus maritimus
Succisella andreae-molinae
Thalictrum speciosissimum
Trifolium resupinatum

R33-Mediterranean-short-moist-grassland-of-mountains-specialists

Agrostis nevadensis
Armeria splendens
Campanula herminii
Festuca iberica
Festuca rothmaleri
Gentiana boryi
Plantago nivalis
Poa legionensis
Potentilla asturica
Potentilla nevadensis
Ranunculus abnormis
Ranunculus acetosellifolius
Scorzoneroideis carpetana
Scorzoneroideis microcephala

R34-Submediterranean-moist-meadow-specialists

Alopecurus rendlei
Bellevallia romana
Colchicum lusitanum
Crepis setosa
Moenchia mantica
Oenanthe peucedanifolia
Ornithogalum collinum
Ranunculus marginatus Ranunculus
velutinus Scilla litardierei Trifolium
cinctum
Trifolium pallidum

Trifolium resupinatum

R41-Snow-bed-vegetation-specialists

Achillea clusiana
Achillea lingulata
Alchemilla fissa
Alchemilla pentaphyllea
Alchemilla subsericea
Arabis caerulea
Carex norvegica
Dianthus microlepis
Gnaphalium hoppeanum
Ranunculus alpestris
Ranunculus crenatus
Ranunculus glacialis
Ranunculus nivalis
Ranunculus pygmaeus
Ranunculus sulphureus
Salix herbacea
Salix polaris
Saxifraga androsacea *Saxifraga cernua*
Sibbaldia procumbens
Soldanella minima

R42-Boreal-and-arctic-acidophilous-alpine-grassland-specialists

Alchemilla glomerulans
Cassiope hypnoides
Vahlodea atropurpurea

R43-Temperate-acidophilous-alpine-grassland-specialists

Agrostis rupestris
Alopecurus gerardii
Androsace carnea
Bellardiochloa variegata
Campanula alpina
Campanula scheuchzeri
Carex curvula
Carex foetida
Endressia pyrenaica
Festuca airoides
Festuca eskia
Gentiana alpina
Geum montanum
Helictochloa versicolor
Jacobaea abrotanifolia *Luzula pediformis*
Oreochloa disticha
Primula minima
Scorzoneroidea cantabrica
Scorzoneroidea pyrenaica

R44-Arctic-alpine-calcareous-grassland-specialists

Achillea clavennae
Androsace chamaejasme
Androsace villosa
Androsace vitaliana
Astragalus alpinus
Astragalus australis
Astragalus frigidus
Astragalus penduliflorus
Bartsia alpina
Bellidiastrum michelii
Campanula thyrsoidea
Carex baldensis
Carex ferruginea
Carex firma
Carex mucronata
Carex sempervirens
Dactylorhiza viridis
Draba aizoides
Dryas octopetala
Festuca versicolor
Galium anisophyllum
Gentiana clusii
Gentiana nivalis
Gentiana verna
Gymnadenia nigra aggr.
Jacobaea abrotanifolia
Leontopodium nivale
Myosotis alpestris
Oxytropis campestris
Oxytropis halleri
Pulsatilla alpina
Ranunculus thora *Rhinanthus gracilis*
Saussurea alpina aggr.
Saxifraga caesia
Sesleria coerulans
Stachys alopecuroides
Veronica aphylla

R45-Alpine-and-subalpine-calcareous-grassland-of-the-Balkans-and-Appennines-specialists

Achillea holosericea
Astragalus mayeri
Asyneuma limonifolium
Carex kitaibeliana *Sesleria nitida*
Trinia dalechampii

R51-Thermophilous-forest-fringe-of-base-rich-soils-specialists

Aegonychon purpureo-aeruleum
Dictamnus albus
Geranium sanguineum
Iris variegata *Melampyrum cristatum*
Melittis melissophyllum

Paeonia mascula
Paeonia officinalis
Peucedanum cervaria
Polygonatum odoratum
Tanacetum corymbosum
Trifolium medium
Vicia dumetorum
Vicia pisiformis
Vicia sylvatica
Vincetoxicum hirundinaria

R52-Forest-fringe-of-acidic-nutrient-poor-soils-specialists

Hypericum pulchrum
Lathyrus linifolius
Melampyrum pratense
Melampyrum sylvaticum
Teucrium scorodonia
Vicia orobus

R53-Macaronesian-thermophilous-forest-fringe-specialists

Ammi huntii
Ammi trifoliatum
Angelica lignescens
Chaerophyllum azoricum
Dactylorhiza foliosa
Geranium palmatum
Geranium reuteri
Lactuca watsoniana
Myosotis latifolia
Pericallis appendiculata
Pericallis aurita
Pericallis cruenta
Pericallis echinata
Pericallis malvifolia
Pericallis tussilaginis
Pimpinella dendrotragium
Ranunculus cortusifolius
Rumex maderensis
Scrophularia smithii
Teucrium francoi
Viola paradoxa

R56-Montane-subalpine-moist-or-wet-tall-herb-and-fern-fringe-dominants

Aconitum burnatii
Aconitum napellus aggr.
Aconogonon alpinum
Adenostyles alliariae
Adenostyles alpina
Athyrium distentifolium *Carduus personata*
Chaerophyllum villarsii
Cirsium appendiculatum

Cirsium erisithales
Cirsium pyrenaicum
Cirsium tymphaeum
Delphinium elatum
Doronicum austriacum
Doronicum grandiflorum
Geum coccineum
Heracleum elegans
Heracleum transsilvanicum
Jacobaea alpina
Jacobaea subalpina
Peucedanum ostruthium
Ranunculus aconitifolius
Ranunculus platanifolius
Rhaponticum scariosum

Rumex alpinus

Telekia speciosa

Veratrum album

Raised-bog-Sphagnum

Sphagnum capillifolium aggr.

Sphagnum fuscum Sphagnum

magellanicum aggr.

Sphagnum recurvum aggr.

Sphagnum rubellum

Sphagnum russowii

Ravine-forest-specialists Acer opalus aggr.

Acer pseudoplatanus

Aruncus dioicus

Asplenium scolopendrium

Asplenium trichomanes

Cystopteris fragilis

Gymnocarpium dryopteris

Lunaria rediviva

Polypodium cambricum

Polypodium interjectum

Polypodium vulgare

Polystichum aculeatum

Scrophularia vernalis

Tilia platyphyllos

Sclerophyllous-tree-Quercus Quercus alnifolia

Quercus aucheri

Quercus crenata

Quercus ilex

Quercus rotundifolia

Quercus suber

Semi-desert-riparian-shrubs Alhagi maurorum

Halimodendron halodendron

Karelinia caspia

Tamarix arceuthoides
Tamarix elongata
Tamarix gracilis
Tamarix hispida
Tamarix kotschyi
Tamarix laxa
Tamarix mascatensis
Tamarix octandra
Tamarix tetragyna

Semi-desert-sand-dune-with-sparse-scrub-species

Agriophyllum squarrosum
Agropyron fragile
Alyssum borzeanum
Alyssum turkestanicum
Artemisia arenaria
Centaurea adpressa
Centaurea diffusa
Ceratocarpus arenarius
Corispermum aralocaspicum
Eremopyrum triticeum
Leymus racemosus
Peganum harmala
Salsola kali aggr.
Verbascum pinnatifidum

Shrubs

Acacia mearnsii
Acacia pycnantha
Acacia retinodes
Acacia saligna
Acer campestre
Acer monspessulanum
Adenocarpus anisochilus Adenocarpus brutius
Adenocarpus complicatus
Adenocarpus decorticans
Adenocarpus hispanicus
Adenocarpus telonensis Adenocarpus viscosus
Alhagi maurorum
Alnus viridis
Alnus viridis subsp. fruticosa
Amelanchier canadensis
Amelanchier laevis
Amelanchier lamarckii
Amelanchier ovalis
Amelanchier parviflora
 Amelanchier species
 Amelanchier spicata
Amorpha fruticosa
Anagyris foetida
Anthyllis barba-jovis

Arbutus andrachne
Arbutus canariensis
Arbutus unedo
Aronia species
Aronia x prunifolia
Artemisia arborescens Artemisia argentea
Asparagus acutifolius
Asparagus albus
Asparagus horridus
Baccharis halimifolia
Berberis aetnensis
Berberis cretica
Berberis thunbergii
Berberis vulgaris
Betula humilis Betula nana
Betula pendula
Broussonetia papyrifera
Buddleja davidii
Bupleurum fruticosum
Buxus balearica
Buxus sempervirens
Buxus species
Calicotome spinosa
Calicotome villosa
Caragana arborescens Caragana frutex
Caragana grandiflora
Caragana pygmaea
Caragana scythica
Caragana species
Caragana stenophylla
Carlina salicifolia
Celtis australis
Ceratonia siliqua
Cestrum parqui
Cistus albidus
Cistus atriplicifolius Cistus calycinus
Cistus clusii
Cistus creticus
Cistus crispus
Cistus halimifolius
Cistus heterophyllus
Cistus ladanifer
Cistus lasianthus
Cistus laurifolius
 Cistus libanotis
 Cistus monspeliensis
 Cistus ocymoides
 Cistus palhinhae
 Cistus parviflorus
 Cistus populifolius
 Cistus psilosepalus

Cistus salviifolius
Cistus umbellatus
Cistus varius
Clematis vitalba
Cneorum tricoccon
Colutea arborescens
Colutea armena
Colutea atlantica Colutea cilicica
Colutea hispanica
Colutea istria
Colutea melanocalyx
Coriaria myrtifolia
Cornus alba
Cornus mas
Cornus sanguinea
Cornus sericea
Cornus species
Coronilla juncea
Corylus avellana
Corylus species
Cotinus coggygria
Cotoneaster acuminatus
Cotoneaster bullatus
Cotoneaster cinnabarinus
Cotoneaster delphinensis
Cotoneaster divaricatus
Cotoneaster franchetii
Cotoneaster frigidus
Cotoneaster granatensis
Cotoneaster horizontalis
Cotoneaster integerrimus
Cotoneaster integrifolius
Cotoneaster lucidus
Cotoneaster melanocarpus
Cotoneaster microphyllus
Cotoneaster multiflorus Cotoneaster simonsii
Cotoneaster species
Cotoneaster tomentosus
Cotoneaster x matrensis
Crataegus ambigua
Crataegus coccinea
Crataegus dipyrrena
Crataegus fallacina
Crataegus heldreichii
Crataegus intricata
Crataegus laciniata
Crataegus laevigata
Crataegus macrocarpa
Crataegus meyeri Crataegus
microphylla
Crataegus mollis aggr.

Crataegus mon. et ox.
Crataegus monogyna
Crataegus nigra
Crataegus orientalis
Crataegus pentagyna
Crataegus pycnoloba
Crataegus rhipidophylla
Crataegus sanguinea
Crataegus species
Crataegus x media
Cydonia oblonga
Cytisophyllum sessilifolium
Cytisus aeolicus
Cytisus arboreus
Cytisus arduinii
Cytisus balansae
Cytisus cantabricus
Cytisus commutatus
Cytisus eriocarpus
Cytisus fontanesii
Cytisus grandiflorus
Cytisus ingramii
Cytisus multiflorus Cytisus procumbens
Cytisus reverchonii
Cytisus scoparius
Cytisus striatus
Cytisus supranubius
Cytisus tommasinii
Cytisus villosus
Cytisus x praecox
Daphne blagayana
Daphne glomerata
Daphne gnidioides
Daphne gnidium
Daphne laureola
Daphne mezereum
Daphne pontica
Daphne rodriguezii
Daphne sericea
Daphne x savensis
Dasiphora fruticosa
Deutzia scabra
Ebenus cretica
Echium decaisnei
Elaeagnus commutata
 Elaeagnus pungens
 Elaeagnus x ebbingei
 Ephedra foeminea
 Ephedra fragilis
 Ephedra major
Erica arborea

Erica australis
Erica lusitanica
Erica manipuliflora
Erica multiflora
Erica scoparia
Erysimum arbuscula
Erysimum maderense
Euonymus europaeus
Euonymus japonicus
Euonymus latifolius
Euonymus nanus
Euonymus species
Euonymus verrucosus
Euphorbia dendroides
Euphorbia squamigera
Ficus carica
Flueggea tinctoria
Forsythia europaea Forsythia species
Forsythia suspensa
Forsythia viridissima
Forsythia x intermedia
Frangula alnus
Frangula rupestris
Frangula species
Genista aetnensis
Genista cinerascens
Genista ephedroides
Genista falcata
Genista florida
Genista hystrix
Genista linifolia
Genista majorica
Genista monspessulana
Genista obtusiramea
Genista polyanthos
Genista sessilifolia
Genista spartioides
Genista tinctoria
Genista tournefortii
Genista triacanthos
Genista valentina
Gomphocarpus fruticosus
Halimodendron halodendron
Hippocrepis emerus
Hippophae rhamnoides
Hippophae species Hypericum
 androsaemum
 Hypericum calycinum
 Hypericum hircinum
 Hypericum xylosteifolium
Chaenomeles japonica

Chamaerops humilis
Ilex aquifolium
Ilex canariensis
Ilex colchica
Jasminum fruticans
Jasminum odoratissimum
Juniperus communis subsp. communis
Juniperus communis subsp. hemisphaerica
Juniperus communis subsp. nana
Juniperus chinensis
Juniperus oxycedrus aggr.
Juniperus phoenicea
Juniperus sabina
Juniperus species
Juniperus virginiana
Karelinia caspia
Laburnum alpinum
Laburnum anagyroides
Lantana camara
Launaea arborescens
Laurus nobilis
Ligustrum japonicum
Ligustrum lucidum
Ligustrum ovalifolium
Ligustrum species
Ligustrum vulgare
Lonicera alpigena
Lonicera arborea
Lonicera biflora
Lonicera caerulea
Lonicera caucasica
Lonicera formanekiana
Lonicera hellenica
Lonicera involucrata
Lonicera maackii
Lonicera nigra
Lonicera nitida
Lonicera nummulariifolia
Lonicera pyrenaica Lonicera species
Lonicera splendida Lonicera tatarica
Lonicera xylosteum
Lycium afrum
Lycium barbarum
Lycium europaeum
Lycium chinense
Lycium intricatum Mahonia aquifolium
Malus dasycphylla
Malus sylvestris
Malva arborea
Malva olbia
Malva subovata

Maytenus senegalensis
Medicago arborea
Morella faya
Myoporum insulare
Myoporum tenuifolium
Myrica gale
Myrica species
Myricaria germanica
Myrtus communis
Nerium oleander
Nicotiana glauca
Olea europaea
Osmanthus decorus
Osyris alba
Osyris lanceolata
Paliurus species
Paliurus spina-christi
Periploca angustifolia
Philadelphus coronarius
Philadelphus pubescens Philadelphus species
Phillyrea angustifolia
Phillyrea latifolia
Phillyrea species Phlomis cretica
Phlomis fruticosa
Phlomis lanata
Physocarpus opulifolius
Pinus mugo
Pinus mugo aggr.
Pistacia atlantica
Pistacia lentiscus
Pistacia terebinthus
Polygonum equisetiforme
Polygonum scoparium
Populus tremula
Potentilla parvifolia
Prunus cerasifera
Prunus fruticosa
Prunus laurocerasus
Prunus lusitanica
Prunus lusitanica subsp. lusitanica
Prunus mahaleb
Prunus microcarpa
Prunus padus subsp. borealis
Prunus persica
Prunus prostrata
 Prunus ramburii
 Prunus serotina
 Prunus spinosa
 Prunus tenella
 Prunus virginiana
 Prunus webbii

Prunus x eminens
Prunus x fruticans
Ptelea trifoliata
Punica granatum
Pyracantha coccinea Pyrus cordata
Pyrus elaeagrifolia
Pyrus nivalis
Pyrus species
Pyrus spinosa
Quercus coccifera
Quercus infectoria
Quercus lusitanica
Retama monosperma
Retama sphaerocarpa
Rhamnus alaternus
Rhamnus alpina
Rhamnus cathartica
Rhamnus cornifolia
Rhamnus depressa
Rhamnus hirtella
Rhamnus imeretina
Rhamnus intermedia Rhamnus kurdica
Rhamnus libanotica
Rhamnus ludovici-salvatoris
Rhamnus lycioides
Rhamnus microcarpa
Rhamnus myrtifolia Rhamnus nitida
Rhamnus orbiculata
Rhamnus pallasii Rhamnus pumila
Rhamnus punctata
Rhamnus pyrella
Rhamnus saxatilis
Rhamnus sibthorpiana
Rhamnus species
Rhamnus thymifolia
Rhamnus x colmeiroi
Rhododendron luteum
Rhododendron ponticum
Rhododendron smirnowii
Rhododendron species
Rhododendron ungerii
Rhus coriaria Rhus typhina
Ribes alpinum
Ribes aureum
Ribes biebersteinii
Ribes cf. petraeum
Ribes multiflorum
Ribes nigrum
Ribes orientale
Ribes petraeum Ribes
rubrum aggr.

Ribes sanguineum
Ribes species
Ribes uva-crispa
Rosa abietina
Rosa acicularis
Rosa agrestis
Rosa arvensis
Rosa arvensis x sempervirens
Rosa balcarica
Rosa balsamica
Rosa caesia
Rosa caesia aggr.
Rosa canina aggr.
Rosa canina x deseglisei
Rosa canina x micrantha
Rosa caryophyllacea
Rosa donetzica
Rosa foetida
Rosa gallica
Rosa glabrifolia
Rosa glauca
Rosa heckeliana
Rosa inodora
Rosa majalis
Rosa marginata
Rosa marschalliana
Rosa mollis
Rosa montana
Rosa moschata Rosa
multiflora
Rosa obtusifolia aggr.
Rosa pendulina
Rosa pouzinii
Rosa pulverulenta
Rosa rhaetica
Rosa rubiginosa aggr.
Rosa rugosa
Rosa scabriuscula
Rosa sempervirens
Rosa serafinii
Rosa sherardii
Rosa species
Rosa spinosissima
Rosa squarrosa x canina
Rosa stylosa
Rosa tomentosa
Rosa turcica
Rosa villosa Rosa
virginiana
Rosa vosagiaca aggr.
Rosa x alba

Rosa x dumetorum
Rosa x pervirens
Rubus caesius
Rubus fruticosus aggr.
Rubus idaeus
Rubus sanctus
Rubus ulmifolius
Salix amplexicaulis
Salix apennina
Salix apoda
Salix appendiculata
Salix arbuscula
Salix arbuscula aggr.
Salix atrocinerea x aurita Salix aurita
Salix aurita x atrocinerea
Salix bicolor
Salix caesia
Salix cantabrica
Salix caprea
Salix caspica
Salix cinerea
Salix cinerea subsp. oleifolia
Salix daphnoides
Salix eleagnos
Salix foetida
Salix fragilis x pentandra
Salix glabra
Salix glauca
Salix glaucosericea
Salix hastata
Salix hegetschweileri
Salix helvetica
Salix krylovii
Salix laggeri
Salix lanata
Salix lapponum
Salix mielichhoferi
Salix myrsinifolia
Salix myrsinites
Salix myrsinites gr.
Salix pedicellata
Salix pentandra
Salix pentandrifolia
Salix phlebophylla
Salix phylicifolia Salix phylicifolia x glauca
Salix pulchra
Salix purpurea
Salix pyrenaica
Salix pyrolifolia
Salix salviifolia
Salix silesiaca

Salix silesiaca x aurita
Salix silesiaca x caprea
Salix starkeana Salix
triandra
Salix viminalis
Salix viminalis x purpurea
Salix vinogradovii
Salix waldsteiniana
Salix x ambigua
Salix x capreola
Salix x rubra
Salsola dendroides
Salsola laricina
Salsola vermiculata
Salvia fruticosa
Salvia officinalis
Salvia pomifera
Sambucus canadensis
Sambucus nigra
Sambucus racemosa
Sambucus sibirica
Sambucus species
Searsia pentaphylla
Searsia tripartita
Sorbaria tomentosa Sorbus aria aggr.
Sorbus aucuparia
Sorbus chamaemespilus
Sorbus rupicola
Sorbus sambucifolia
Sorbus sudetica
Spartium junceum
Spiraea alba
Spiraea cana
Spiraea cantoniensis
Spiraea crenata
Spiraea decumbens
Spiraea douglasii
Spiraea hypericifolia
Spiraea chamaedryfolia Spiraea japonica
Spiraea media
Spiraea menziesii
Spiraea salicifolia
Spiraea species
Spiraea tomentosa Spiraea x billardii
Spiraea x vanhouttei
Staphylea pinnata
Styrax officinalis
Suaeda vera
Symphoricarpos albus
Symphoricarpos species
Syringa species

Syringa vulgaris
Tamarix africana
Tamarix arborea
Tamarix arceuthoides
Tamarix boveana
Tamarix canariensis
Tamarix dalmatica
Tamarix elongata Tamarix gallica
Tamarix gracilis
Tamarix hampeana Tamarix hispida
Tamarix kotschy
Tamarix laxa
Tamarix mascatensis
Tamarix octandra
Tamarix parviflora
Tamarix ramosissima
Tamarix smyrnensis
Tamarix species
Tamarix tetragyna
Tamarix tetrandra
Teucrium flavum
Teucrium fruticans
Thymelaea hirsuta
Thymelaea tartonraira
Traganum moquinii
Ulex airensis
Ulex boivinii
Ulex europaeus
Vaccinium arctostaphylos
Vaccinium corymbosum
Vaccinium macrocarpon
Vaccinium padifolium
Viburnum lantana
Viburnum maculatum Viburnum opulus
Viburnum orientale
Viburnum species
Viburnum tinus
Vitex agnus-castus
Weigela florida
Ziziphus jujuba
Ziziphus lotus

Softwood-riparian-trees

Populus alba
Populus nigra
Salix alba
Salix euxina

Spartium junceum

Spartium junceum

Sphagnum

Sphagnum affine

Sphagnum angermanicum Sphagnum

annulatum

Sphagnum aongstroemii

Sphagnum apiculatum

Sphagnum austinii

Sphagnum balticum Sphagnum

bavaricum

Sphagnum capillifolium aggr.

Sphagnum cf. magellanicum

Sphagnum compactum

Sphagnum compactum + S. molle

Sphagnum contortum

Sphagnum cuspidatum

Sphagnum fimbriatum

Sphagnum fuscum

Sphagnum girgensohnii

Sphagnum imbricatum

Sphagnum jensenii

Sphagnum lenense Sphagnum

lindbergii

Sphagnum magellanicum aggr.

Sphagnum majus

Sphagnum molle

Sphagnum nemoreum

Sphagnum obtusum Sphagnum palustre + S.

papillosum Sphagnum palustre aggr.

Sphagnum papillosum

Sphagnum platyphyllum

Sphagnum pulchrum

Sphagnum pylaesii

Sphagnum quinquefarium

Sphagnum recurvum aggr.

Sphagnum riparium

Sphagnum rubellum

Sphagnum russowii

Sphagnum sect. Acutifolia

Sphagnum sect. Cuspidata

Sphagnum sect. Palustria

Sphagnum sect. Subsecunda

Sphagnum species

Sphagnum squarrosum Sphagnum strictum

Sphagnum subbicolor

Sphagnum subfulvum

Sphagnum subnitens

Sphagnum subsecundum

Sphagnum tenellum

Sphagnum tenerum

Sphagnum teres

Sphagnum warnstorffii

Sphagnum wulfianum Sphagnum
auriculatum+inundatum Sphagnum
palustre aggr.

Subalpine

Bellidiastrum michelii
Campanula scheuchzeri
Carduus kernerii
Carex sempervirens
Clematis alpina
Cortusa matthioli
Festuca flavescens
Gentiana lutea
Geranium sylvaticum aggr.
Hieracium prenanthoides
Homogyne alpina
Juniperus communis subsp. nana
Peucedanum ostruthium
Phyteuma orbiculare
Pinus mugo
Poa alpina
Pulsatilla alpina
Ranunculus breynius
Rhododendron ferrugineum
Rhododendron hirsutum
Rhodothamnus chamaecistus
Soldanella alpina
Soldanella hungarica
Sorbus chamaemespilus
Veratrum album
Veratrum lobelianum
Viola biflora

Subalpine-and-subarctic-deciduous-shrubs

Alnus viridis
Alnus viridis subsp. fruticosa
Prunus padus subsp. borealis
Rhamnus alpina
Salix appendiculata
Salix bicolor
Salix caesia
Salix daphnoides
Salix foetida
Salix glabra
Salix glauca
Salix glaucosericea
Salix hastata
Salix hegetschweileri
Salix helvetica
Salix laggeri
Salix lanata Salix lapponum

Salix mielichhoferi
Salix myrsinifolia
Salix pentandra
Salix phylicifolia
Salix pulchra
Salix silesiaca
Salix waldsteiniana
Sorbus chamaemespilus
Sorbus sudetica

Subalpine-conifer-trees

Larix decidua
Pinus cembra

Submediterranean-deciduous-shrubs

Acer monspessulanum
Amelanchier ovalis
Berberis vulgaris
Coriaria myrtifolia
Cornus mas
Cotinus coggygria
Cotoneaster delphinensis
Cotoneaster granatensis
Cotoneaster tomentosus
Cydonia oblonga
Cytisophyllum sessilifolium
Forsythia europaea
Malus dasyphylla
Paliurus spina-christi
Prunus cerasifera
Prunus mahaleb
Pyrus cordata
Rhamnus saxatilis
Rosa montana
Rosa pouzinii
Rosa rhaetica
Spiraea crenata
Syringa vulgaris
Viburnum lantana

Tall-fen-sedges

Carex appropinquata Carex cespitosa
Carex diandra
Carex elata
Carex lasiocarpa Carex rostrata
Cladium mariscus
Juncus subnodulosus
Schoenus ferrugineus
Schoenus nigricans

Teide-summit-plants *Adenocarpus viscosus*

Andryala pinnatifida
Argyranthemum tenerifae
Arrhenatherum calderae
Bencomia exstipulata
Cheirolophus teydis
Cytisus supranubius
Descurainia bourgaeana
Descurainia gonzalesii
Echium auberianum
Echium gentianoides
Echium wildpretii
Erigeron calderae
Erysimum scoparium
Genista benehoavensis
Helianthemum juliae
Micromeria lachnophylla
Micromeria lasiophylla
Nepeta teydea
Pimpinella cumbrae
Polycarpaea tenuis
Pterocephalus lasiospermus
Pterocephalus porphyranthus
Rhaponticum canariense
Silene nocteolens
Tolpis webbii
Viola cheiranthifolia

Temperate-Abies

Abies alba
Abies nordmanniana

Temperate-deciduous-shrubs

Acer campestre
Berberis vulgaris
Caragana arborescens
Clematis vitalba
Cornus sanguinea
Cotoneaster integerrimus
Crataegus laevigata
Crataegus macrocarpa
Crataegus monogyna
Euonymus europaeus *Ligustrum vulgare*
Lonicera xylosteum *Malus sylvestris*
Prunus spinosa
Prunus x eminens
Rhamnus cathartica
Ribes alpinum
Rosa caesia
Rosa canina aggr.
Rosa foetida

Rosa glauca
Rosa inodora
Rosa majalis
Rosa marginata Rosa mollis
Rosa pendulina Rosa
pulverulenta
Rosa rubiginosa aggr.
Rosa sherardii Rosa stylosa

Rosa tomentosa

Rosa villosa

Salix caprea

Sambucus nigra

Sambucus racemosa Sorbus aria

aggr.

Sorbus aucuparia

Spiraea chamaedryfolia

Viburnum opulus

Temperate-fen-shrubs Betula humilis

Dasiphora fruticosa

Frangula alnus

Myrica gale

Salix aurita

Salix cinerea

Salix myrsinifolia

Salix myrtilloides

Salix pentandra

Salix repens

Temperate-genistoid-shrubs

Cytisus scoparius

Ulex europaeus

Temperate-riparian-shrubs

Hippophae rhamnoides

Myricaria germanica

Salix cantabrica

Salix cinerea subsp. oleifolia

Salix daphnoides

Salix eleagnos

Salix pedicellata

Salix purpurea

Salix salviifolia

Salix triandra

Salix viminalis

Temperate-riparian-forest-species-upland Aconitum napellus aggr.

Alnus incana

Anthriscus nitida

Calamagrostis varia

Calamagrostis villosa

Carduus personata
Carex alba
Chaerophyllum hirsutum
Chrysosplenium alternifolium
Crepis paludosa
Equisetum pratense
Geranium sylvaticum
Geum rivale
Gymnocarpium dryopteris
Knautia arvernensis
Onoclea struthiopteris
Oxalis acetosella
Petasites albus
Petasites hybridus
Petasites kablikianus
Petasites paradoxus
Picea abies
Rubus saxatilis
Sambucus racemosa *Silene dioica*
Stellaria nemorum
Telekia speciosa
Tephrosia crassa
Thalictrum aquilegifolium
Vaccinium myrtillus

Temperate-riparian-forest-species-western

Allium triquetrum
Asplenium scolopendrium
Blechnum spicant
Cardamine raphanifolia
Carex pendula
Carex reuteriana
Galium broterianum
Hypericum androsaemum
Lonicera periclymenum
Myosotis lamottiana
Polystichum setiferum
Primula acaulis
Quercus canariensis
Ranunculus macrophyllus
Rhododendron ponticum subsp. *baeticum* 0
Salix cinerea subsp. *oleifolia*
Salix salviifolia
Saxifraga hirsuta
Saxifraga spathularis
Senecio bayonnensis
Teucrium scorodonia *Valeriana pyrenaica*

Temperate-riparian-forest-species-lowland

Acer negundo
Alliaria petiolata

Carex divulsa
Carex strigosa
Cornus sanguinea
Fraxinus pallisae
Gagea lutea
Iris pseudacorus
Leucojum aestivum
Polygonatum hirtum
Populus alba
Populus nigra
Quercus robur
Rubus caesius
Salix alba
Ulmus laevis
Ulmus minor

Temperate-Rubus

Rubus caesius
Rubus fruticosus aggr.
Rubus idaeus

Temperate-submediterranean-deciduous-shrubs

Acer campestre
Acer monspessulanum
Amelanchier ovalis
Berberis vulgaris
Caragana arborescens
Clematis vitalba
Coriaria myrtifolia
Cornus mas
Cornus sanguinea
Cotinus coggygria
Cotoneaster delphinensis Cotoneaster granatensis
Cotoneaster integerrimus
Cotoneaster tomentosus
Crataegus laevigata
Crataegus macrocarpa
Crataegus monogyna Cydonia oblonga
Cytisophyllum sessilifolium
Euonymus europaeus
Euonymus verrucosus
Forsythia europaea Ligustrum vulgare
Lonicera xylosteum
Malus dasyphylla
Malus sylvestris
Paliurus spina-christi
Prunus cerasifera
Prunus mahaleb
Prunus spinosa
Prunus x eminens
Pyrus cordata

Pyrus elaeagnifolia

Rhamnus cathartica

Rhamnus saxatilis

Ribes alpinum

Rosa agrestis

Rosa caesia

Rosa canina aggr.

Rosa foetida *Rosa glauca*

Rosa inodora

Rosa majalis

Rosa marginata

Rosa mollis

Rosa montana

Rosa pendulina

Rosa pouzinii

Rosa pulverulenta

Rosa rhaetica

Rosa rubiginosa aggr.

Rosa sherardii

Rosa stylosa

Rosa tomentosa

Rosa villosa

Salix caprea

Sambucus nigra

Sambucus racemosa *Sorbus aria*

aggr.

Sorbus aucuparia

Spiraea chamaedryfolia

Spiraea crenata

Viburnum lantana

Viburnum opulus

Temperate-upland-riparian-forest-species

Alnus incana

Anthriscus nitida

Chaerophyllum hirsutum

Geum rivale

Matteucia struthiopteris *Petasites albus*

Sambucus racemosa

Silene dioica

Telekia speciosa

Thalictrum aquilegifolium

Thermomediterranean-shrubs

Asparagus albus

Asparagus horridus

Chamaerops humilis

Cytisus aeolicus

Euphorbia dendroides

Genista ephedroides

Genista majorica

Maytenus senegalensis
Periploca angustifolia
Ziziphus lotus

Thermophilous-oak-forest-trees

Acer monspessulanum Acer
tataricum

Carpinus orientalis
Castanea sativa
Celtis australis
Celtis planchoniana
Corylus colurna
Fraxinus ornus
Ostrya carpinifolia
Pyrus nivalis
Quercus canariensis
Quercus cerris
Quercus congesta
Quercus dalechampii
Quercus faginea
Quercus frainetto
Quercus gussonei
Quercus hartwissiana
Quercus ichnusae
Quercus macranthera
Quercus petraea
Quercus pubescens
Quercus pyrenaica
Quercus robur
Quercus trojana
Sorbus domestica
Sorbus torminalis
Tilia tomentosa
Zelkova carpinifolia

Thermophilous-oak-forest-trees-specialists

Acer monspessulanum Acer
tataricum
Carpinus orientalis Celtis australis
Corylus colurna
Fraxinus ornus
Ostrya carpinifolia Pyrus nivalis
Quercus canariensis
Quercus cerris
Quercus congesta
Quercus dalechampii
Quercus faginea
Quercus frainetto
Quercus gussonei
Quercus hartwissiana
Quercus ichnusae

Quercus macranthera
Quercus pubescens
Quercus trojana
Sorbus domestica

Trees

Abies alba
Abies borisii-regis
Abies cephalonica
Abies cilicica
Abies concolor
Abies grandis
Abies nebrodensis
Abies nordmanniana
Abies pinsapo
Abies procera
Abies sibirica
Abies species
Acacia dealbata
Acacia karoo
Acacia melanoxylon
Acacia saligna
Acer campestre
Acer cappadocicum
Acer divergens
Acer heldreichii
Acer hyrcanum
Acer monspessulanum
Acer negundo
Acer opalus aggr.
Acer platanoides
Acer pseudoplatanus
Acer saccharinum
Acer sempervirens
Acer species
Acer tataricum
Acer trautvetteri
Acer undulatum
Aesculus carnea
Aesculus hippocastanum
Aesculus species
Ailanthus altissima
 Alnus cordata
 Alnus glutinosa
 Alnus incana
 Alnus species
 Alnus x pubescens
Araucaria araucana Betula litwinowii
Betula medwediewii
Betula obscura
Betula oycoviensis

Betula pendula
Betula pendula var. fontqueri
Betula pubescens
Betula pubescens var. glabrata
Betula pubescens var. pumila
Betula species
Carpinus betulus
Carpinus orientalis
Carpinus species Castanea sativa
Castanea species
Catalpa bignonioides
Cedrus atlantica
Cedrus deodara Cedrus libani
Cedrus species
Celtis australis
Celtis occidentalis
Celtis planchoniana
Celtis tournefortii
Cercis siliquastrum
Chamaecyparis lawsoniana
Chamaecyparis pisifera
Chamaecyparis species
Corylus colurna
Crataegus azarolus
Crataegus germanica
Cupressus arizonica
Cupressus lusitanica
Cupressus macrocarpa
Cupressus sempervirens
Cupressus species
Diospyros lotus
Elaeagnus angustifolia
Elaeagnus species
Eucalyptus camaldulensis
Eucalyptus globulus
Eucalyptus robustus
Eucalyptus species
Fagus crenata
Fagus orientalis
Fagus species
Fagus sylvatica Fagus sylvatica (cult.)
Fraxinus americana
Fraxinus angustifolia
Fraxinus excelsior
Fraxinus ornus
Fraxinus pallisae
Fraxinus pennsylvanica
Fraxinus species
Gleditsia triacanthos
Ilex aquifolium
Ilex canariensis

Ilex colchica
Juglans cinerea
Juglans mandshurica
Juglans nigra
Juglans regia
Juniperus brevifolia
Juniperus cedrus
Juniperus drupacea
Juniperus excelsa
Juniperus foetidissima
Juniperus thurifera
Larix decidua
Larix kaempferi
Larix sibirica
Larix species
Larix x eurolepis
Laurus azorica
Laurus novocanariensis
Liriodendron tulipifera
Malus baccata
Malus dasyphylla
Malus florentina
Malus prunifolia
Malus pumila
Malus species
Malus sylvestris
Malus trilobata
Metasequoia species
Morus alba
Morus nigra
Morus species
Olea europaea
Ostrya carpinifolia
Paulownia tomentosa
Phoenix canariensis
Phoenix dactylifera
Phoenix theophrasti
Picea abies
Picea glauca
Picea obovata
Picea omorika
Picea orientalis Picea pungens
Picea sitchensis
Picea species
Pinus banksiana
Pinus brutia
Pinus canariensis
Pinus cembra
Pinus contorta
Pinus halepensis

Pinus heldreichii Pinus mugo
aggr.
Pinus mugo subsp. rotundata
Pinus nigra
Pinus peuce
Pinus pinaster
Pinus pinaster (cult.)
Pinus pinea
Pinus radiata
Pinus rigida
Pinus sibirica
Pinus species
Pinus strobus
Pinus sylvestris
Pinus uncinata
Pinus wallichiana
Pinus x celakovskiorum
Pinus x rhaetica
Pistacia atlantica
Pistacia vera
Platanus occidentalis
Platanus orientalis
Platanus species
Platanus x hispanica
Platycladus orientalis
Populus alba
Populus balsamifera
Populus carolinensis
Populus laurifolia
Populus nigra
Populus nigra cv. 'Italica'
Populus simonii
Populus species
Populus suaveolens
Populus tremula
Populus tremuloides
Populus trichocarpa
Populus x canadensis Populus x canescens
Prunus armeniaca
Prunus avium
Prunus brigantina
Prunus cerasifera
Prunus cerasus Prunus cocomilia
Prunus domestica
Prunus dulcis
Prunus padus
Prunus species
Pseudotsuga menziesii
Pterocarya fraxinifolia
Pterocarya stenoptera
Pyrus bourgaeana

Pyrus communis
Pyrus nivalis
Pyrus syriaca
Quercus alnifolia
Quercus aucheri
Quercus brantii
Quercus canariensis
Quercus canariensis + petraea
Quercus cerris
Quercus coccifera
Quercus coccinea
Quercus congesta
Quercus crenata
Quercus dalechampii
Quercus faginea
Quercus frainetto
Quercus gussonei
Quercus hartwissiana
Quercus humilis + cerrioides
Quercus ichnusae
Quercus ilex
Quercus infectoria
Quercus ithaburensis
Quercus libani
Quercus macranthera
Quercus palustris
Quercus pauciradiata
Quercus petraea
Quercus pontica
Quercus pubescens
Quercus pyrenaica
Quercus robur
Quercus robur (cult.)
Quercus rotundifolia
Quercus rubra
Quercus rubra (cult.)
Quercus species
Quercus suber
Quercus trojana
Quercus x airensis
Quercus x allorgeana
Quercus x andegavensis
Quercus x arrimatensis
Quercus x bedaei
Quercus x calvescens
Quercus x cerrioides
Quercus x firmurensis
Quercus x fontanesii
Quercus x fontqueri *Quercus x gracilis*
Quercus x kernerii
Quercus x marianica

Quercus x mixta
Quercus x montserratii
Quercus x neomairei
Quercus x numantina
Quercus x nummantina
Quercus x penasii
Quercus x rosacea
Quercus x rotensis
Quercus x salcedoi
Quercus x senneniana
Quercus x streimii
Quercus x trabutii
Quercus x welwitschii
Robinia pseudoacacia
Salix alba
Salix alba cv. chermesina
Salix babylonica
Salix blanda
Salix caprea
Salix euxina
Schinus molle
Sequoia sempervirens
Sequoiadendron giganteum
Sorbus anglica
Sorbus aria aggr.
Sorbus aucuparia Sorbus borbasii
Sorbus carpatica Sorbus dacica
Sorbus domestica
Sorbus hardeggensis
Sorbus hibernica
Sorbus hybrida aggr.
Sorbus intermedia
Sorbus latifolia aggr.
Sorbus pannonica
Sorbus pekarovae
Sorbus quercea
Sorbus roopiana
Sorbus slovenica
Sorbus species
Sorbus sudetica
Sorbus torminalis
Sorbus umbellata
Styphnolobium japonicum
Taxodium distichum
Taxus baccata
Taxus species
Thuja occidentalis
Thuja plicata
Thuja species
Tilia begoniifolia Tilia cordata
Tilia platyphyllos

Tilia species
Tilia tomentosa
Tilia x vulgaris
Trachycarpus fortunei
Tsuga canadensis
Tsuga heterophylla
Tsuga species
Ulmus glabra
Ulmus laevis
Ulmus minor
Ulmus procera Ulmus pumila
Ulmus species
Ulmus x hollandica
Xanthocyparis nootkatensis
Zelkova abelicea

Valley-bog-specialists

Drosera anglica
Erica tetralix
Eriophorum angustifolium
Narthecium ossifragum
Odontoschisma sphagni
Pinguicula lusitanica
Sphagnum affine
Sphagnum austinii
Sphagnum imbricatum Sphagnum
papillosum

W-Mediterranean-coastal-spiny-shrubs

Astragalus balearicus
Astragalus tragacantha
Carthamus balearicus
Dorycnium fulgurans
Genista corsica
Genista morisii
Genista sardoa
Launaea cervicornis
Teucrium subspinosum

W-Mediterranean-mountain-thorny-cushion-shrubs

Bupleurum frutescens
Echinopartum horridum
Echinopartum ibericum
Echinopartum lusitanicum
Erinacea anthyllis
Genista lobelii subsp. longipes
Genista sanabrensis
Genista versicolor
Vella castrilensis
Vella spinosa

W-acidic-garrigue-herbs

Allium scorzonrifolium
Armeria macrophylla
Armeria pinifolia
Armeria rouyana Armeria
velutina
Centaurea alba aggr.
Centaurea carratracensis
Centaurea hanrii
Centaurea sagredo
Crepis leontodontoides
Cytinus hypocistis
Dianthus broteri
Galatella aragonensis Helichrysum italicum
Helictochloa hackelii
Hypericum australe
Klasea baetica
Narcissus triandrus
Odontarrhena serpyllifolia
Odontites lanceolatus
Orchis olbiensis
Orobanche artemisiae-campestris
Scorzonera baetica
Sideritis lacaitae
Sideritis marianica
Sideritis paulii
Sideritis perezlarae Staehelina baetica
Thymelaea lythroides
Thymus albicans
Thymus camphoratus
Thymus capitellatus
Thymus leptophyllus
Thymus zygis

W-acidic-garrigue-shrubs

Cistus albidus
Cistus atriplicifolius Cistus calycinus
Cistus crispus
Cistus halimifolius
Cistus ladanifer
Cistus lasianthus
Cistus libanotis
Cistus ocymoides
Cistus populifolius
Cistus umbellatus
Cistus varius
Lavandula stoechas
Sideritis arborescens
Sideritis hirsuta Teucrium marum
Thymus mastichina
Ulex argenteus

Ulex borgiae
Ulex genistoides
Ulex parviflorus

W-basic-garrigue-herbs

Andryala agardhii
Aphyllanthes monspeliensis
Arenaria arcuatociliata
Arenaria delaguardiae
Arenaria tomentosa
Aristolochia bianorii
Aristolochia pistolochia
Armeria filicaulis
Armeria villosa
Astragalus bourgaeanus
Astragalus glaux
Astragalus incanus
Astragalus monspessulanus
Astragalus turolensis
Atractylis cancellata
Atractylis humilis
Bupleurum rigidum
Carlina gummifera Catananche caerulea
Centaurea alba aggr. Centaurea antennata
Centaurea emigrantis
Centaurea gadorensis
Centaurea genesii-lopezii
Centaurea granatensis
Centaurea hyssopifolia
Centaurea jaennensis
Centaurea linifolia
Centaurea monticola
Centaurea pinae
Centaurea resupinata
Centaurea toletana
Convolvulus lanuginosus
Coris monspeliensis
Distichoselinum tenuifolium Echium flavum
Erodium boissieri
Erodium daucoides
 Erysimum cazorlense
 Erysimum nevadense aggr.
 Galium balearicum
 Genista scorpius
 Glandora nitida
 Globularia spinosa
 Guillonea scabra
 Helianthemum cinereum
 Helianthemum marifolium Helianthemum pannosum
 Helictochloa hackelii
 Hippocrepis commutata

Hippocrepis eriocarpa
Hippocrepis scorpioides
Hormathophylla cochleata
Iberis nazarita
Iberis procumbens
Jasione crispa
Jurinea pinnata
Klasea baetica
Klasea flavescens
Klasea pinnatifida
Knautia purpurea
Knautia subscaposa
Launaea pumila
Leontodon hirtus
Lepidium subulatum
Leucanthemopsis spathulifolia
Leucanthemum favargerii
Leucanthemum pallens
Limonium album
Limonium carthaginense
Limonium estevei
Limonium racemosum
Limonium tabernense
Lomelosia pulsatilloides
Lotus tetraphyllus
Micromeria filiformis
Micromeria inodora
Moricandia foetida
Ononis cephalotes
Onosma hispanica
Ophrys arachnitiformis
Ophrys lutea
Ophrys passionis
Ophrys sphegodes
Orobanche latisquama
Paronychia aretioides
Paronychia suffruticosa
Picris hispanica
Ptilostemon hispanicus
Ranunculus malessanus
Rhaponticum coniferum Rhodanthemum arundanum
Rothmaleria granatensis
Rumex intermedius
Santolina elegans
Santolina viscosa
Scabiosa pulsatilloides
Scorzonera albicans
Scorzonera hirsuta
Scorzonera reverchonii
Teucrium aragonense
Teucrium balthazaris

Teucrium bicolorum
Teucrium carolipau
Teucrium cavanillesianum
Teucrium compactum
Teucrium eriocephalum
Teucrium franchetianum
Teucrium leonis
Teucrium lerrouxii
Teucrium martinii
Teucrium pumilum
Teucrium webbianum
Thapsia gymnesica
Thesium humifusum
Thesium humile
Thymus funkii
Thymus granatensis
Thymus lacaitae
Thymus loscosii
Thymus moroderi
Thymus willdenowii
Thymus zygis
Valeriana tuberosa

W-basic-garrigue-shrubs

Alyssum atlanticum
Anabasis articulata
Anthyllis cytisoides
Anthyllis lagascana
Anthyllis onobrychioides
Anthyllis polycephala
Anthyllis ramburii
Anthyllis rupestris
Anthyllis tejedensis
Anthyllis terniflora
Arenaria alfacarensis
Arenaria aggregata
Asparagus albus
Astracantha granatensis
Astragalus balearicus
Astragalus cavanillesii
Astragalus hispanicus
Chamaespartium undulatum
Cheirolophus intybaceus
Cistus albidus
Cistus atriplicifolius
Cistus clusii
Cistus heterophyllus
Cistus ladanifer
Cistus palhinhae
Coronilla minima
Echinospartum boissieri

Erica multiflora
Erica terminalis
Euphorbia isatidifolia
Euphorbia maresii
Fumana baetica
Vella bourgeana
Fumana fontanesii
Fumana hispidula
Fumana laevis
Fumana paradoxa
Genista dorycnifolia
Genista hispanica
Genista ramosissima
Genista scorpius
Genista tricuspidata
Genista umbellata
Genista valdes-bermejoi
Genista versicolor Glandora nitida
Hedysarum boveanum
Helianthemum almeriense
Helianthemum asperum
Helianthemum caput-felis
Helianthemum apenninum
Helianthemum hirtum
Helianthemum marifolium
Helianthemum neopiliiferum
Helianthemum organifolium
Helianthemum violaceum
Helianthemum viscarium
Helianthemum viscidulum
Helichrysum litoreum
Herniaria fontanesii
Hippocrepis bourgaei
Hippocrepis frutescens Hippocrepis rupestris
Hippocrepis scabra
Hippocrepis squamata
Hormathophylla longicaulis
Hypericum balearicum
Hypericum ericoides
Lavandula angustifolia
Lavandula dentata
Lavandula lanata
Lavandula latifolia
Linum campanulatum
Linum suffruticosum aggr.
Lithodora fruticosa
Nepeta hispanica
Odontarrhena robertiana
Onobrychis conferta Onobrychis stenorrhiza
Ononis crispa
Ononis fruticosa

Phlomis crinita
Phlomis italica
Phlomis lychnitis
Phlomis purpurea
Polygala rupestris
Pterocephalus spathulatus
Ruta angustifolia
Ruta montana
Salvia blancoana
Salvia candelabrum
Salvia officinalis Satureja innota
Satureja intricata
Satureja obovata
Scabiosa andryalifolia
Sideritis algarviensis
Sideritis bubanii
Sideritis carbonellis
Sideritis chamaedryfolia
Sideritis dianica
Sideritis glacialis
Sideritis grandiflora
Sideritis hirsuta
Sideritis hyssopifolia
Sideritis ibanyezii
Sideritis ilicifolia
Sideritis incana
Sideritis leucantha
Sideritis murgetana
Sideritis osteoxylla
Sideritis pungens
Sideritis pusilla
Sideritis reverchonii
Sideritis sericea
Sideritis serrata
Sideritis spinulosa
Sideritis tragoriganum
Staehelina dubia
Teucrium algarbiense
Teucrium carthaginense
Teucrium charidemi
Teucrium gnaphalodes
Teucrium haenseleri
 Teucrium lanigerum
 Teucrium luteum
 Teucrium marum
 Teucrium murcicum
 Teucrium oxylepis
 Teucrium reverchonii
 Teucrium ronnigeri
 Teucrium simlatum
 Teucrium subspinosum

Thymelaea argentata
Thymelaea hirsuta
Thymelaea pubescens
Thymelaea sanamunda
Thymelaea tartonraira
Thymelaea tinctoria
Thymelaea velutina
Thymus antoninae
Thymus baeticus
Thymus hyemalis
Thymus longiflorus
Thymus lotocephalus
Thymus membranaceus
Thymus orospedanus
Thymus piperella
Thymus vulgaris
Ulex densus
Ulex parviflorus
Vella lucentina
Vella spinosa

Wet-heath-herbs-and-mosses

Aulacomnium palustre Carex panicea
Drosera rotundifolia
Gentiana pneumonanthe Juncus
squarrosus Lycopodiella inundata
Molinia caerulea aggr.
Myrica gale
Narthecium ossifragum
Sphagnum compactum
Sphagnum molle
Sphagnum palustre
Sphagnum tenellum
Thymelaea dendryobryum
Trichophorum cespitosum

+01 A25a-Arctic-coastal-salt-marsh

Argentina anserina subsp. groenlandica
Carex glareosa
Carex mackenziei
Carex salina
Carex subspathacea Carex ursina
Cochlearia anglica Cochlearia officinalis
Gentianella detonsa
Juncus gerardi
Plantago maritima
Puccinellia nutkaensis
Puccinellia phryganodes
Stellaria humifusa
Triglochin maritima

##D +01 A25b-Baltic-coastal-meadow

Argentina anserina
Blysmopsis rufa
Bolboschoenus maritimus
Calamagrostis neglecta
Carex glareosa
Carex mackenziei
Carex paleacea
Centaurium littorale
Centaurium pulchellum
Eleocharis parvula
Eleocharis uniglumis
Glaux maritima
Juncus gerardi
Lotus tenuis
Odontites litoralis
Plantago maritima
Puccinellia capillaris Puccinellia distans
Puccinellia nutkaensis
Salicornia europaea aggr.
Spergularia marina
Spergularia media
Trifolium fragiferum
Triglochin maritima

##D +01 A25c-Atlantic-coastal-salt-marsh

Alopecurus bulbosus
Apium graveolens
Argentina anserina Armeria maritima
Artemisia maritima
Atriplex littoralis Atriplex prostrata
Bassia hirsuta
Blysmopsis rufa
Bolboschoenus maritimus
Bupleurum tenuissimum Carex distans
Carex extensa
Centaurium littorale
Centaurium pulchellum
 Cochlearia anglica
 Cochlearia danica
 Cochlearia officinalis
 Eleocharis uniglumis
 Elytrigia atherica
 Frankenia laevis
 Frankenia pulverulenta
 Glaux maritima
 Halimione pedunculata
 Halimione portulacoides
 Hordeum marinum
 Hornungia procumbens
 Juncus gerardi

Juncus maritimus
Limonium vulgare
Lotus tenuis
Odontites litoralis
Oenanthe lachenalii
Parapholis strigosa
Plantago maritima
Puccinellia distans
Puccinellia fasciculata
Puccinellia maritima
Puccinellia nutkaensis
Sagina maritima
Salicornia europaea aggr.
Sarcocornia perennis
Schoenoplectus lacustris subsp. glaucus
Spartina anglica
Spartina maritima
Spergularia marina
Spergularia media
Suaeda maritima aggr.
Suaeda vera
Trifolium fragiferum
Triglochin barrelieri
Triglochin maritima
Tripolium pannonicum

##D +01 N11-Atlantic-Baltic-and-Arctic-sand-beach

Atriplex calotheca
Atriplex glabriuscula
Atriplex laciniata
Atriplex littoralis
Atriplex longipes
Atriplex prostrata
Cakile maritima
Honckenya peploides Mertensia maritima
Polygonum maritimum
Polygonum raii
Salsola kali aggr.
Tripleurospermum maritimum aggr.

##D +01 N13-Atlantic-and-Baltic-shifting-coastal-dune

Ammophila arenaria
Calystegia soldanella
Carex arenaria
Cerastium diffusum Elytrigia juncea
Eryngium maritimum
Euphorbia paralias
Glaucium flavum
Honckenya peploides Leymus
arenarius
Oenothera oakesiana

Pancratium maritimum Sonchus arvensis
x-Ammocalamagrostis baltica

##D +01 N15-Atlantic-and-Baltic-coastal-dune-grassland-grey-dune

Alyssum loiseleurii
Anacamptis pyramidalis
Anchusa calcarea
Armeria pungens
Armeria welwitschii
Bupleurum baldense
Calamagrostis epigejos
Carex arenaria
Carex caryophylla
Cerastium diffusum
Cerastium semidecandrum
Cochlearia danica
Crucianella maritima
Dianthus hyssopifolius subsp. gallicus
Ephedra distachya
Erodium lebelli
Eryngium maritimum
Euphorbia paralias
Euphorbia portlandica
Festuca juncifolia
Festuca polesica
Festuca vasconensis
Fumana procumbens
Galium arenarium
Galium maritimum
Galium verum
Helichrysum italicum subsp. picardii
Helichrysum stoechas
Herniaria ciliolata
Hieracium umbellatum
Iberis procumbens
Imperata cylindrica
Jasione montana
Koeleria albescens
Lagurus ovatus
Leontodon saxatilis
Linaria arenaria
Linaria supina
Matthiola sinuata
Medicago marina
Mibora minima
Myosotis ramosissima
Omphalodes littoralis
Ononis natrix
Ononis repens
Phleum arenarium
Pilosella officinarum

Reichardia gaditana
Saxifraga tridactylites
Sedum acre
Silene conica
Silene nutans Silene otites
aggr.
Syntrichia ruralis aggr.
Thymus carnosus
Veronica officinalis
Vicia lathyroides
Viola curtisii Viola rupestris
Viola tricolor aggr.
Vulpia fasciculata

##D +01 N1H-Atlantic-and-Baltic-moist-and-wet-dune-slack

Agrostis canina
Anacamptis palustris aggr.
Anagallis tenella
Aneura pinguis
Apium inundatum
Baldellia ranunculoides
Blackstonia perfoliata
Bolboschoenus maritimus Bryum
pseudotriquetrum
Calamagrostis canescens
Calamagrostis stricta
Calliergonella cuspidata
Campylium stellatum
Carex demissa
Carex flacca
Carex hartmanii
Carex nigra
Carex punctata
Carex trinervis
Centaurium erythraea
Centaurium littorale
Centaurium pulchellum
Centunculus minimus
Cicendia filiformis
Cirsium palustre
Cladium mariscus
Dactylorhiza incarnata Dactylorhiza purpurella
Drepanocladus aduncus
Eleocharis palustris
Eleocharis quinqueflora
Eleocharis uniglumis
Epilobium palustre
Epipactis palustris
Equisetum variegatum
Galium palustre aggr.
Gentianella amarella

Herminium monorchis
Hippuris vulgaris
Hydrocotyle vulgaris
Juncus acutus
Juncus alpinoarticulatus
Juncus arcticus
Juncus articulatus
Juncus balticus
Juncus bufonius aggr.
Juncus subnodulosus
Linum catharticum Liparis loeselii
Lythrum salicaria
Mentha aquatica
Moerckia hibernica
Oenanthe lachenalii
Ophioglossum vulgatum
Parnassia palustris
Pellia endiviifolia
Phragmites australis
Pilularia globulifera
Plantago uniflora
Platanthera bifolia
Potamogeton coloratus
Potamogeton gramineus
Potamogeton pectinatus
Potentilla erecta
Preissia quadrata
Pyrola rotundifolia Radiola linoides
Ranunculus baudotii
Ranunculus flammula Sagina nodosa
Salix repens
Samolus valerandi
Schoenus nigricans
Teucrium scordium
Vaccinium macrocarpon

##D +01 N21-Atlantic-Baltic-and-Arctic-coastal-shingle-beach

Angelica archangelica Argentina anserina
Atriplex glabriuscula
Atriplex laciniata
Atriplex littoralis
Atriplex praecox
Atriplex prostrata
Beta vulgaris subsp. maritima
Catapodium marinum
Cerastium alpinum
Cochlearia groenlandica
Crambe maritima
Eryngium maritimum
Glaucium flavum
Honckenya peploides

Isatis tinctoria
Lathyrus japonicus
Limbarda crithmoides
Linaria vulgaris
Malva arborea
Mertensia maritima
Polygonum maritimum
Polygonum raii
Rumex crispus Sagina nivalis
Salsola kali aggr.
Suaeda vera
Tripleurospermum maritimum aggr.
Tripolium pannonicum

##D +01 N31-Atlantic-and-Baltic-rocky-sea-cliff-and-shore

Allium schoenoprasum
Angelica pachycarpa
Armeria berlengensis
Armeria maritima
Armeria pubigera
Asplenium marinum
Atriplex glabriuscula
Atriplex laciniata
Atriplex littoralis
Beta vulgaris subsp. maritima
Catapodium marinum
Cerastium alpinum
Cochlearia danica
Cochlearia groenlandica Cochlearia officinalis
Cochlearia scotica
Crambe maritima
Crithmum maritimum
Dactylis marina
Daucus gummifer
Euphorbia portlandica
Frankenia laevis
Inula crithmoides Jasione crispa
Ligusticum scoticum Limbarda crithmoides
Limonium binervosum aggr.
Limonium dodartii
Limonium normannicum
Limonium ovalifolium
Malva arborea
Matthiola sinuata
Mertensia maritima
Plantago coronopus
Plantago maritima
Polygonum raii
Rumex rupestris
Sagina maritima
Sagina nivalis

Sedum acre
Sesamoides purpurascens
Silene uniflora
Spergularia rupicola
Suaeda vera
Trifolium occidentale
Trifolium scabrum

##D +01 N34-Atlantic-and-Baltic-soft-sea-cliff

Anthyllis vulneraria
Armeria maritima
Brassica oleracea
Daucus carota
Eupatorium cannabinum
Jacobaea vulgaris
Petasites spurius
Plantago coronopus
Plantago maritima
Reseda lutea
Samolus valerandi
Silene uniflora
Tragopogon heterospermus
Tussilago farfara

##D +02 A25d-Mediterranean-and-Black-Sea-coastal-salt-marsh

Aeluropus litoralis
Alopecurus bulbosus
Apium graveolens
Artemisia caerulescens
Artemisia gallica
Artemisia santonicum
Arthrocnemum macrostachyum
Atriplex prostrata Atriplex tatarica
Bassia hirsuta
Bassia sedoides
Camphorosma annua Camphorosma
 monspeliaca
 Camphorosma songorica
 Carex distachya
 Carex extensa
 Centaureum pulchellum
 Centaureum spicatum
 Centaureum tenuiflorum
 Elytrigia atherica
 Elytrigia elongata
 Elytrigia scirpea
 Frankenia hirsuta
 Frankenia laevis
 Frankenia pulverulenta
 Gladiolus communis
 Gypsophila perfoliata Gypsophila tomentosa

Halimione pedunculata
 Halimione portulacoides
 Halocnemum strobilaceum
 Hornungia procumbens
 Imperata cylindrica
 Iris spuria
 Jacobaea auricula
 Juncus acutus
 Juncus gerardi
 Juncus maritimus
 Juncus subulatus
 Lepidium perfoliatum
 Limbarda crithmoides
 Limoniastrum monopetalum
 Limonium algarvense
 Limonium angustibracteatum
 Limonium bellidifolium
 Limonium binervosum
 Limonium confusum
 Limonium danubiale
 Limonium glomeratum
 Limonium gmelinii
 Limonium narbonense
 Limonium ovalifolium
 Limonium suffruticosum
 Limonium supinum
 Limonium tschurjukiense
 Limonium virgatum Limonium vulgare
 Linum maritimum
 Lotus preslii Lotus tenuis
 Microcnemum coralloides Petrosimonia brachiata
 Plantago cornuti
 Plantago crassifolia
 Plantago maritima
 Podospermum canum
 Puccinellia bilykiana
 Puccinellia festuciformis
 Puccinellia gigantea
 Puccinellia syvaschica
 Romulea bulbocodium
 Rumex pulcher
 Salicornia europaea aggr.
 Salsola soda
 Samolus valerandi
 Sarcocornia fruticosa
 Sarcocornia perennis
 Scirpoides holoschoenus
 Silene sedoides
 Sonchus crassifolius
 Sonchus maritimus Suaeda
 acuminata

Suaeda brevifolia Suaeda
corniculata

Suaeda maritima aggr.
Suaeda splendens
Suaeda vera
Triglochin barrelieri
Triglochin maritima
Tripolium pannonicum

##D +02 N12-Mediterranean-and-Black-Sea-sand-beach

Achillea maritima
Anthemis tomentosa
Argusia sibirica
Astragalus baionensis
Atriplex glabriuscula
Atriplex laciniata
Atriplex prostrata
Beta vulgaris subsp. maritima
Beta vulgaris subsp. adanensis
Cakile maritima
Calystegia soldanella
Crambe maritima
Eryngium maritimum
Euphorbia peplis
Galium neglectum
Glaucium flavum
Hieracium eriophorum
Honckenya peploides
Hypocoum procumbens
Lactuca tatarica
Lathyrus japonicus
Leymus racemosus
Matthiola sinuata
Matthiola tricuspidata
Medicago marina
Oenothera oakesiana Pancratium maritimum
Polygonum maritimum
Polygonum raii
Raphanus maritimus Salsola kali aggr.
Silene uniflora
Sporobolus pungens Tetraena alba
Xanthium orientale

##D +02 N14-Mediterranean-Macaronesian-and-Black-Sea-shifting-coastal-dune

Achillea maritima
Ammophila arenaria
Androcymbium gramineum
Anthemis maritima
Anthemis tomentosa
Astrodaucus littoralis
Calystegia soldanella

Centaurea arenaria aggr.
Convolvulus caput-medusae
Convolvulus persicus
Cutandia maritima
Cyperus capitatus
Echinophora spinosa
Elytrigia juncea
Eryngium maritimum
Euphorbia paralias
Euphorbia peplis
Festuca vaginata
Glaucium flavum
Honckenya peploides
Leymus arenarius Maresia nana
Medicago falcata
Medicago marina
Ononis natrix
Pancratium maritimum
Peucedanum arenarium
Polycarpaea nivea
Polygonum maritimum
Secale sylvestre
Silene euxina
Silene thymifolia
Sporobolus pungens
Stachys maritima
Tetraena fontanesii

##D +02 N16-Mediterranean-and-Macaronesian-coastal-dune-grassland-grey-dune

Achillea maritima Alyssum hirsutum
Alyssum minutum
Anagallis monelli
Anthemis maritima Anthemis tomentosa
 Anthyllis hamosa
 Anthyllis hermanniae Armeria pungens
 Artemisia monosperma
 Asteriscus imbricatus
 Atractylis carduus
 Calendula suffruticosa
 Calystegia soldanella
 Carex liparocarpos
 Centaurea cuneifolia
 Centaurea greuteri
 Centaurea sphaerocephala
 Centaurea spinosa
 Centaurea tommasinii
 Cionura erecta
 Corynephorus divaricatus
 Crucianella maritima
Cynanchum acutum
Cyperus capitatus

Cyperus macrorhizus
Dianthus pyrenaicus
Echinops spinosissimus
Echiochilon fruticosum
Echium angustifolium
Ephedra distachya
Erodium lebelli
Eryngium maritimum
Erysimum diffusum
Erysimum graecum
Euphorbia paralias
Euphorbia terracina
Filago lusitanica
Fumana procumbens
Helichrysum stoechas
Hypericum olympicum
Imperata cylindrica
Jasione heldreichii
Lagurus ovatus
Launaea fragilis
Linaria pedunculata Lomelosia argentea
Lomelosia rutifolia
Lotus creticus
Lotus cytisoides
Lotus glaucus
Lotus pseudo-creticus
Malcolmia ramosissima
Malcolmia triloba
Maresia nana
Matthiola sinuata
Medicago littoralis
Medicago marina Ononis angustifolia
 Ononis natrix
 Ononis tournefortii
 Pancratium maritimum
 Phleum arenarium
 Pimpinella villosa
 Plantago albicans
 Polycarpaea nivea
 Polygonum equisetiforme Scrophularia ramosissima
 Senecio glaucus
 Seseli tortuosum
 Silene congesta
 Silene conica
 Silene dichotoma
 Silene niceensis
 Silene subconica
 Sixalix atropurpurea
Stachys atherocalyx
Trachomitum venetum
Traganum moquinii

Verbascum litigiosum
Verbascum pinnatifidum
Verbascum sinuatum Vulpia

alopecuros

Vulpia fasciculata

##D +02 N17-Black-Sea-coastal-dune-grassland-grey-dune

Achillea maritima
Alyssum hirsutum
Alyssum minutum
Artemisia arenaria
Asperula graveolens
Asterolinon linum-stellatum
Astragalus varius
Astrodaucus littoralis
Calystegia soldanella
Carex colchica Carex

liparocarpos

Centaurea arenaria aggr.
Centaurea odessana
Cionura erecta
Convolvulus persicus
Corispermum nitidum
Cynanchum acutum
Cyperus capitatus
Dianthus bessarabicus Ephedra distachya
Erodium lebelii
Eryngium maritimum
Erysimum diffusum
Erysimum montanum
Euphorbia paralias Euphorbia seguieriana

Festuca arenicola
Festuca beckeri
Festuca polesica
Fumana procumbens
Goniolimon collinum
Gypsophila perfoliata
Hypericum olympicum
Imperata cylindrica
Jasione heldreichii
Jasione montana
Jurinea kilaea
Lagurus ovatus
Lepidotrichum uechtritizianum
Linaria genistifolia
Linum tauricum
Lomelosia argentea
Lomelosia ucranica

Maresia nana

Medicago littoralis

Medicago marina

Odontarrhena borzaeana
Pancratium maritimum
Peucedanum arenarium
Secale sylvestre
Seseli tortuosum
Silene borysthenica
Silene euxina
Silene thymifolia Stachys atherocalyx
Stipa borysthenica aggr.
Trachomitum venetum
Verbascum pinnatifidum
Verbascum purpureum

##D +02 N1J-Mediterranean-and-Black-Sea-moist-and-wet-dune-slack Anacamptis palustris aggr.

Blackstonia perfoliata
Bolboschoenus maritimus
Carex distans
Centaurium pulchellum
Ceratophyllum demersum
Cladium mariscus
Colchicum soboliferum Cyperus flavescent
Juncus littoralis
Imperata cylindrica
Myriophyllum spicatum
Phragmites australis
Samolus valerandi
Schoenoplectus lacustris
Schoenus nigricans
Scirpoides holoschoenus Stuckenia pectinata
Tripidium ravennae
Typha angustifolia
Typha latifolia

##D +02 N22-Mediterranean-and-Black-Sea-coastal-shingle-beach

Achillea maritima
Argusia sibirica
Atriplex glabriuscula
Atriplex laciniata
Atriplex prostrata
Beta vulgaris subsp. maritima
Beta vulgaris subsp. adanensis
Cakile maritima
Crambe maritima
Crithmum maritimum
Elytrigia juncea
Eryngium maritimum
Euphorbia peplis
Glaucium flavum
Lactuca tatarica
Leymus racemosus
Malcolmia maritima

Matthiola sinuata
Matthiola tricuspidata
Raphanus maritimus Salsola kali aggr.
Sporobolus pungens Xanthium orientale

##D +02 N32-Mediterranean-and-Black-Sea-rocky-sea-cliff-and-shore

Achillea cretica
Allium commutatum
Allium phalereum
Allium staticiforme
Anthemis rigida
Anthyllis barba-jovis
Anthyllis hermanniae
Armeria ruscinonensis Asteriscus maritimus
Astrodaucus litoralis
Astragalus tragacantha
Atriplex prostrata
Atriplex tatarica
Bassia prostrata
Bellium crassifolium
Bellium minutum
Brassica insularis
Brassica tyrrhena
Camphorosma monspeliaca
Catapodium marinum
Centaurea cineraria
Centaurea filiformis Centaurea raphanina
 Centaurium maritimum
 Cephalaria squamiflora
 Cichorium spinosum
 Convolvulus lineatus
 Crithmum maritimum
 Crucianella maritima
 Daucus carota
 Dianthus sardous
 Elytrigia atherica
 Elytrigia bessarabica
 Elytrigia elongata
 Euphorbia pithyusa
 Frankenia corymbosa
 Frankenia hirsuta
 Frankenia laevis
 Frankenia pulverulenta
 Genista thyrrhena
Goniolimon collinum
Goniolimon sartorii
Gypsophila perfoliata
Halimione verrucifera
Helichrysum litoreum
Helichrysum stoechas
Helichrysum rupestre

Hyoseris taurina
Hypericum aegypticum
Jacobaea maritima
Lactuca saligna
Lactuca tatarica
Launaea cervicornis
Limbarda crithmoides
Limonium acutifolium
Limonium ammophilum
Limonium anfractum
Limonium antipaxorum
Limonium apulum
Limonium arcuatum
Limonium aucheri
Limonium aegaeum
Limonium albomarginatum
Limonium amopicum
Limonium anfractum
Limonium aphroditae
Limonium apulum
Limonium archeothirae
Limonium astypaleanum Limonium athinense
Limonium atticum
Limonium balearicum
Limonium biflorum
Limonium bocconeii
Limonium brevipetiolatum
 Limonium calabrum
 Limonium calliopsium
 Limonium cancellatum
 Limonium caprariense
 Limonium cordatum
Limonium coronense
 Limonium carpathum
 Limonium cephalonicum
 Limonium chrisianum
 Limonium circaeii
 Limonium compactum
 Limonium cordatum
 Limonium corinthiacum Limonium
 cornarianum
 Limonium crateriforme
 Limonium creticum
 Limonium cumana
 Limonium cythereum
Limonium diomedaeum
Limonium dolihense
Limonium doriae
Limonium dufourii
Limonium ebusitanum
Limonium elaphoniscum

Limonium fragile
Limonium frederici
Limonium gibertii
Limonium girardianum
Limonium gmelinii
Limonium graecum
Limonium helenae
Limonium heraionense
Limonium hierapetrae
Limonium hirsuticalyx
Limonium ilvae
Limonium inarimense
Limonium ikaricum
Limonium isidorum
Limonium ithacense
Limonium kardamylii
Limonium japygicum
Limonium lacinium
Limonium malacitanum
Limonium majoricum
Limonium marisolia
Limonium meandrinum
Limonium melancholicum Limonium
messeniicum
Limonium meyeri
Limonium microcycladicum
Limonium minoicum
Limonium monolithicum
Limonium multiforme Limonium ocymifolium
 Limonium oligotrichum
 Limonium parosicum
 Limonium pseudodictyocladum
 Limonium pseudominutum
 Limonium phitosianum
 Limonium pigadiense
 Limonium proliferum
 Limonium pylum
 Limonium quinnii
 Limonium recticaule
 Limonium remotispiculum
 Limonium retirameum
 Limonium roridum
 Limonium samium
 Limonium saracinatum
 Limonium sartorianum
 Limonium sougiae
Limonium schinousae
Limonium sieberi
Limonium syracusanum
Limonium sirinicum
Limonium sitiicum

Limonium sommierianum
Limonium spreitzenhoferi
Limonium stenotatum
Limonium sulcitanum Limonium taenari
Limonium tenuiculum
Limonium thirae
Limonium tremolsii
Limonium vanandense
Limonium vravronense
Limonium virgatum
Limonium xerocamposicum
Limonium xiliense
Limonium zacynthium
Lotus cytisoides
Matthiola sinuata
Pallenis maritima
Parapholis strigosa
Paronychia macrosepala
Phagnalon rupestre
Phleum crypsoides
Phleum exaratum Phleum
subulatum
Plantago coronopus aggr.
Plantago macrorrhiza
Prangos ferulacea
Psilurus incurvus
Reichardia picroides
Rhaponticum serratuloides Sagina
maritima Salsola aegaea
Scolymus hispanicus
Sedum litoreum
Seseli bocconeii
Silene caliacrae
Silene compacta
Silene fabaria Silene martinolii
 Silene rothmaleri
 Silene sedoides
 Sonchus asper
 Stachys ionica
 Thymbra capitata
 Thymelaea hirsuta
 Thymelaea tartonraira
 Trifolium uniflorum
 Valantia muralis
 Xanthium spinosum

##D +02 N33-Macaronesian-rocky-sea-cliff-and-shore

Argyranthemum frutescens
Asplenium marinum
Astydamia latifolia
Atractylis preauxiana

Azorina vidalii
Crithmum maritimum
Daucus azoricus
Euphorbia azorica
Festuca petraea
Frankenia ericifolia
Frankenia laevis
Frankenia pulverulenta
Helichrysum devium
Helichrysum obconicum
Limonium brassicifolium
Limonium fruticans
Limonium imbricatum
Limonium lowei
Limonium macrophyllum
Limonium papillatum
Limonium pectinatum
Limonium pyramidatum
Lotus glaucus
Lotus loweanus
Myosotis maritima
Plantago coronopus aggr.
Reichardia crystallina
Reichardia ligulata
Sinapidendron frutescens Solidago sempervirens
Spergularia azorica

##D +02 N35-Mediterranean-and-Black-Sea-soft-sea-cliff

Argusia sibirica
Artemisia santonicum
Bassia hirsuta
Brassica elongata
Campanula sibirica Camphorosma monspeliaca
Cynanchum acutum
Elytrigia elongata
Diplotaxis muralis
Glycyrrhiza glabra
Kochia prostrata
Lactuca tatarica
Linum tenuifolium
Matthiola odoratissima
Peganum harmala
Petrosimonia triandra
Salvia tomentosa
Senecio vernalis
Teucrium polium aggr.

##D +03 H21-Boreal-and-arctic-siliceous-scree-and-block-field

Alchemilla alpina
Arabidopsis petraea
Arabis alpina

Arabis glabra
Arctostaphylos uva-ursi
Arenaria norvegica
Armeria maritima
Avenella flexuosa
Campanula rotundifolia
Carex bigelowii
Cerastium alpinum
Cerastium nigrescens
Cerastium regelii
Cryptogramma crispa
Cystopteris fragilis
Draba daurica
Draba incana
Draba norvegica
Dryas octopetala Dryopteris carthusiana
Empetrum nigrum aggr.
Epilobium angustifolium
Epilobium collinum
Epilobium latifolium
Equisetum variegatum
Erigeron acris
Erysimum hieraciifolium
Festuca ovina
Festuca rubra aggr.
Festuca vivipara
Galium normanii
Galium verum Gentiana nivalis
Gymnocarpium dryopteris
Hieracium alpinum
Huperzia selago
Hylotelephium telephium
Juncus trifidus
Juniperus communis subsp. nana
Lotus corniculatus
Luzula arcuata
Luzula spicata
Minuartia biflora
Minuartia rubella
Minuartia stricta
Oxyria digyna
Papaver radiculatum
Poa alpina
Poa glauca
Poa nemoralis
Polygonatum odoratum
Polypodium vulgare
Polystichum lonchitis
Potentilla crantzii
Potentilla nivea
Potentilla hyparctica Ranunculus glacialis

Ranunculus sulphureus
Rhodiola rosea
Rosa villosa
Rubus idaeus
Rubus saxatilis Salix herbacea
Salix starkeana
Saxifraga aizoides
Saxifraga cernua
Saxifraga cespitosa
Saxifraga nivalis
Saxifraga oppositifolia
Sedum annuum
Silene acaulis
Silene suecica
Silene uniflora
Silene viscaria
Solidago virgaurea
Thalictrum alpinum
Tofieldia pusilla
Trisetum spicatum
Vaccinium myrtillus
Vaccinium uliginosum
Vaccinium vitis-idaea
Verbascum nigrum
Verbascum thapsus
Veronica fruticans Vicia sylvatica
Viola canina
Viola tricolor aggr.
Woodsia ilvensis

##D +03 H22-Boreal-and-arctic-base-rich-scrub

Arabidopsis petraea
Arabis alpina
Arenaria humifusa
Arenaria norvegica
Arenaria pseudofrigida
Artemisia norvegica
Braya linearis
Braya purpurascens
Campanula rotundifolia
Carex bigelowii
Carex capillaris
Carex fuliginosa
Carex glacialis
Carex rupestris
Cerastium alpinum
Draba fladnizensis
Draba nivalis
Draba norvegica
Dryas octopetala
Equisetum scirpoides

Equisetum variegatum
Gymnocarpium robertianum
Kobresia myosuroides
Kobresia simpliciuscula
Luzula arcuata
Minuartia rubella
Minuartia stricta
Oxytropis lapponica
Papaver laestadianum
Papaver radiculatum
Pinguicula alpina
Poa alpina
Poa glauca
Potentilla nivea
Salix reticulata
Saxifraga aizoides
Saxifraga nivalis
Saxifraga oppositifolia
Silene acaulis
Thalictrum alpinum
Tofieldia pusilla
Woodsia alpina

##D +03 H23-Temperate-high-mountain-siliceous-scrub

Achillea erba-rotta
Achillea nana
Aconogonon alpinum
Androsace alpina
 Androsace hedraeantha
 Armeria alpina
 Athyrium distentifolium
 Bellardiochloa variegata
 Cardamine glauca
 Cardamine resedifolia
 Cerastium pedunculatum
 Cerastium pyrenaicum
 Cerastium uniflorum
 Cochlearia tatarae
 Cryptogramma crispa
 Cystopteris fragilis
 Doronicum clusii
 Doronicum grandiflorum
 Dryopteris oreades
 Festuca picturata
 Gentiana frigida
 Geum reptans
Gymnocarpium dryopteris
Jacobaea leucophylla
Linaria alpina
Luzula alpinopilosa
Luzula spicata

Minuartia sedoides
Oreochloa disticha
Oxyria digyna
Pedicularis verticillata
Poa cenisia
Poa laxa
Ranunculus glacialis
Saxifraga adscendens
Saxifraga androsacea
Saxifraga bryoides
Saxifraga carpatica
Saxifraga cernua
Saxifraga oppositifolia
Saxifraga pedemontana
Senecio doronicum
Senecio squalidus subsp. rupestris
Silene acaulis
Veronica baumgartenii

##D +03 H24-Temperate-high-mountain-base-rich-scrub

Achillea atrata
Achillea clusiana
Achillea oxyloba
Adenostyles alpina
Adonis distorta
Alchemilla decumbens Alyssum
cuneifolium Alyssum repens
Alyssum wulfenianum
Aquilegia pyrenaica Arabidopsis neglecta
Arabis alpina
Arabis caerulea
Arabis ferdinandi-coburgii
Arenaria bertolonii
Arenaria ciliata
Asplenium fissum
Asplenium scolopendrium
Athamanta cretensis
Bunium alpinum
Campanula cochleariifolia
Campanula pulla
Campanula rotundifolia
Centaurea parlatoris
Centaurea rupestris aggr.
Cerastium carinthiacum
Cerastium tomentosum
Cerastium transsilvanicum
Cochlearia tatarae
Crepis pygmaea
Cystopteris montana
Degenia velebitica
Delphinium oxysepalum

Dioscorea pyrenaica
Doronicum carpaticum
Draba fladnizensis
Dryopteris mindshelkensis
Dryopteris villarii
Festuca glacialis
Festuca pyrenaica
Galium baldense
Galium megalospermum
Galium noricum
Galium pyrenaicum
Galium stojanovii
Gnaphalium hoppeanum
Gnaphalium pichleri
Gypsophila repens
Hornungia alpina
Hypochaeris robertia
Iberis spathulata
Leucanthemum atratum aggr.
Leucopoa dimorpha
Leucopoa pulchella
Ligusticum ferulaceum
Linaria purpurea
Minuartia cerastiifolia
Moehringia ciliata
Moehringia muscosa
Myosotis alpestris
Noccaea bellidifolia
Noccaea rotundifolia
Noccaea stilosa
 Papaver alpinum
 Papaver pyrenaicum
 Papaver suaveolens
 Petasites paradoxus
 Poa dolosa
 Poa minor
 Polystichum lonchitis
 Ranunculus breyninus
 Ranunculus carinthiacus Ranunculus parnassifolius
 Reseda glauca
 Rhodiola rosea
 Rumex scutatus
 Salix retusa
 Saxifraga aizoides
Saxifraga bryoides
Saxifraga carpatica
Saxifraga glabella
Saxifraga moschata
Saxifraga oppositifolia
Saxifraga pedemontana
Saxifraga sedoides

Saxifraga wahlenbergii
Sedum atratum
Seseli malyi
Thlaspi kernerii
Thymus pulcherrimus
Tolpis staticifolia
Trisetum distichophyllum
Trisetum spicatum
Valeriana bertisceae
Valeriana elongata
Veronica aragonensis
Veronica baumgartenii
Veronica nummularia
Veronica satyroides
Viola grisebachiana
Viola magellensis
Xatardia scabra

##D +03 H25-Temperate-lowland-to-montane-siliceous-scrub

Achnatherum calamagrostis
Anarrhinum bellidifolium
Armeria alpina
Asplenium adiantum-nigrum
Biscutella valentina
Conopodium bunioides Cryptogramma crispa
Digitalis purpurea
Digitalis thapsi
Dryopteris affinis
Dryopteris expansa
Dryopteris oreades Dryopteris tyrrhena
Epilobium collinum
Erysimum humile
Galeopsis ladanum
Galeopsis pyrenaica
Galeopsis segetum
Galeopsis tetrahit
Geranium robertianum
Holcus annuus
Hylotelephium telephium
Jacobaea leucophylla
Linaria alpina
Linaria repens
Linaria saxatilis
Melica ciliata
Pimpinella major
Poa nemoralis
Reseda gredensis
Rumex suffruticosus
Santolina oblongifolia
Scrophularia oxyrhyncha
Scrophularia scorodonia

Scrophularia sublyrata
Senecio pyrenaicus
Senecio viscosus
Taraxacum pyrenaicum
Trisetum hispidum
Xatardia scabra

##D +03 H26a-Temperate-lowland-to-montane-base-rich-scrub

Achnatherum calamagrostis
Aethionema saxatile
Arabis alpina
Biscutella neustriaca
Cystopteris fragilis
Eupatorium cannabinum
Festuca xanthina
Galeopsis angustifolia
Galeopsis ladanum
Galium fleurotii
Gymnocarpium robertianum
Hieracium bifidum Iberis violetii
Lamium garganicum
Leontodon hyoseroides
Linaria supina
Melica ciliata
Microrrhinum minus
Moehringia muscosa
Origanum vulgare
Parietaria officinalis
Rumex scutatus
Scrophularia canina Senecio squalidus subsp. rupestris
Silene saxifraga
Silene vulgaris
Sisymbrium supinum
Teucrium botrys
Teucrium montanum
Thymus comosus
Vincetoxicum hirundinaria
Viola hispida

##D +03 H26b-Western-Mediterranean-base-rich-scrub

Achillea barrelieri
Achnatherum calamagrostis
Adonis distorta
Allium palentinum
Alyssum fastigiatum
Androsace ciliata

Andryala ragusina
Aquilegia cazorlensis
Aquilegia discolor
Arabis alpina

Arenaria bertolonii
Arrhenatherum album
Biscutella valentina
Bunium alpinum
Bunium macuca
Bupleurum ranunculoides
Calamagrostis pseudophragmites
Campanula arvatica
Campanula cochleariifolia
Campanula jaubertiana
Carduus carlinoides
Centaurea rupestris aggr.
Centaurea delucae
Centaurea prolongoi
Centranthus lecoqii
Centranthus ruber
Cerastium soleirolii Cerastium thomasii
Cerastium tomentosum
Cirsium acaulon
Cochlearia aragonensis
Coincya monensis
Conopodium thalictrifolium
Crambe filiformis
Crepis granatensis
Crepis oporinoides
Crepis pygmaea
Cystopteris montana
Doronicum grandiflorum
Dryopteris mindshelkensis
Dryopteris oreades Echium albicans
Erucastrum nasturtiifolium
Eryngium glaciale
Erysimum duriaei
Erysimum gorbeanum
Euphorbia nevadensis
Festuca glacialis
Galeopsis angustifolia
 Galium cespitosum
 Galium cometerhizon
 Galium corsicum
 Galium pyrenaicum
 Galium rosellum
 Gouffeia arenarioides
 Gymnocarpium robertianum
 Hornungia alpina
 Hypochaeris robertia
 Iberis carnosa
Iberis ciliata
Iberis spathulata
Jurinea fontqueri
Lactuca singularis

Lactuca tenerrima
Lactuca viminea
Laserpitium gallicum
Leontodon hyoseroides
Leucanthemum coronopifolium
Leucanthemum laciniatum
Leucopoa dimorpha
Linaria aeruginea
Linaria badalii
Linaria filicaulis
Linaria glacialis
Linaria propinqua
Linaria purpurea
Linaria supina
Minuartia cerastiifolia
Myosotis alpestris
Nepeta amethystina
Nepeta nepetella
Noccaea stylosa
Papaver ernesti-mayeri
Papaver lapeyrousianum
Plantago monosperma
Platycapnos saxicola
Poa balbisii
Polystichum lonchitis
Ptilostemon niveus
Ptychotis saxifraga
Ranunculus alpestris
Ranunculus parnassifolius
Reseda valentina
Rumex scutatus Salix breviserrata
Saxifraga oppositifolia
Saxifraga pedemontana
Saxifraga praetermissa Scrophularia canina
Scrophularia sciophila
Secale strictum
Sedum annuum
Sedum brevifolium
Sedum monregalense
Senecio pyrenaicus
Silene boryi
Silene inaperta
Silene secundiflora
Spergula viscosa
Taraxacum sect. Alpina
Tolpis staticifolia
Trisetum distichophyllum
Verbascum conocarpum
Veronica alpina
Veronica mampodrensis
Veronica nummularia

Vicia glauca
Viola crassiuscula
Viola diversifolia
Viola magellensis

##D +03 H26c-Eastern-Mediterranean-base-rich-scrub

Acantholimon ulicinum
Achillea abrotanoides
Achillea ambrosiaca
Achnatherum calamagrostis
Aethionema cordatum
Aethionema saxatile
Aethionema speciosum
Aethionema stylosum Allium tauricola
Alopecurus textilis
Alyssum argyrophyllum
Alyssum chondrogynum
Alyssum handelii
Alyssum scardicum
Alyssum sphacioticum
Alyssum troodi
Androsace multiscapa
Androsace villosa
Anthemis plutonia
Anthriscus kotschy
Anthriscus sylvestris
Arenaria balansae
Arenaria conferta
Arenaria kotschyana
Asperula idaea Asperula muscosa
 Asperula stricta
 Astragalus haussknechtii
 Astragalus oxytropifolius
 Astragalus pelliger
 Bornmuellera baldaccii
 Bubon albanicum
 Bunium microcarpum
 Campanula hawkinsiana
 Cardamine carnosa
 Cardamine glauca
 Centaurea cyprensis
 Centaurea idaea
 Centranthus calcitrapae
 Cerastium cerastoides
 Cerastium gnaphalodes
 Cicer incisum
 Clinopodium troodi
Corydalis blanda

Corydalis rutifolia
Corydalis uniflora

Crepis frigida
Crepis sibthorpiana
Crepis willdenowii
Cyanus bourgaei
Cyclotrichium organifolium
Cynoglossum troodii
Dianthus petraeus
Dianthus sphacioticus
Dianthus strictus
Draba cretica
Drypis spinosa
Elytrigia lazica Elytrigia tauri
Euphorbia cassia
Euphorbia deflexa
Euphorbia herniariifolia
Euphorbia pestalozzae
Festuca adanensis
Festuca anatolica
Fritillaria crassifolia
Fumana paphlagonica
Galium cilicicum
Galium corrudifolium
Galium incanum
Geocaryum cynapioides
Geranium macrorrhizum
Geranium subcaulescens
Grafia golaka
Hedysarum cyprium
Hedysarum erythroleucum
Heldreichia bourgaei Heldreichia bupleurifolia
 Heldreichia rotundifolia
 Helianthemum hymettium
 Heracleum humile
 Hyacinthella millingenii
 Hypericum confertum
 Hypericum crenulatum
 Iberis simplex
 Jurinea moschus
 Lactuca glareosa
 Lactuca intricata
 Lamium eriocephalum
 Lamium garganicum
 Laserpitium petrophilum
 Leucopoa spectabilis
 Linaria corifolia
 Linaria microsepala
 Lindbergella sintenisii
Lomelosia crenata
Lomelosia sphaciotica
Malcolmia orsiniana
Mattiastrum lithospermifolium

Minuartia attica
Minuartia juniperina
Minuartia pichleri
Minuartia rimarum
Nepeta cilicica
Nepeta concolor
Nepeta sphaciotica
Noccaea oppositifolia
Noccaea sintenisii
Noccaea zaffranii
Odontarrhena akamasica
Odontarrhena bertolonii
Odontarrhena cyprica
Odontarrhena fragillima
Onosma troodi
Oxyria digyna
Peltaria alliacea
Peucedanum alpinum
Phagnalon pygmaeum
Phyllolepidum cyclocarpum
Poa cenisia
Podospermum radicosum Pseudofumaria alba
Ptilostemon afer
Ranunculus brevifolius
Ranunculus cadmicus
Ranunculus radinotrichus Ricotia cretica
Ricotia davisiana
Ricotia varians
Salvia veneris
 Scrophularia canina
 Scrophularia depauperata
 Scrophularia myriophylla
 Scrophularia rimarum
 Scutellaria hirta
 Scutellaria orientalis
 Senecio fruticosus
 Senecio squalidus subsp. rupestris
 Senecio thapsoides
 Sesleria phleoides
 Sesleria robusta
 Silene caesia
 Silene fabaria
 Silene fabarioides
 Silene haussknechtii
 Silene multicaulis
 Silene nuncupanda
 Silene pentelica Silene supina
Silene variegata
Thamnosciadium junceum
Thymus integer
Thymus leucotrichus Valantia aprica

Valeriana bertiscea
Vavilovia formosa
Veronica caespitosa
Veronica cuneifolia
Veronica tauricola
Veronica thessalica
Vicia alpestris
Vicia canescens Viola albanica
Viola calcarata
Viola crassifolia
Viola dukadjinica
Viola fragrans
Viola striis-notata

##D +03 H31a-Boreal-and-arctic-siliceous-inland-cliff

Alchemilla alpina
Arabidopsis petraea
Arenaria norvegica
Asplenium adiantum-nigrum Asplenium

septentrionale

Asplenium trichomanes
Astragalus alpinus
Cerastium alpinum
Cystopteris fragilis
Draba incana
Draba norvegica
Epilobium collinum
Hieracium schmidtii Hylotelephium maximum
Poa glauca
Polypodium vulgare
Saxifraga cotyledon
Silene rupestris
Silene suecica
Stellaria graminea
Veronica fruticans
Woodsia alpina
Woodsia ilvensis

##D +03 H31b-Temperate-high-mountain-siliceous-inland-cliff

Agrostis rupestris
Agrostis schraderiana
Androsace alpina
Androsace vandellii
Androsace wulfeniana
Anthemis pindicola
Artemisia genipi
Artemisia glacialis
Artemisia umbelliformis
Asplenium septentrionale
Aurinia saxatilis
Bupleurum stellatum

Campanula wanneri
Centaurea deustiformis
Dianthus sylvestris
Dianthus tristis
Draba dubia
Erigeron schleicheri
Eritrichium nanum
Erysimum rhaeticum
Hylotelephium anacampseros
Jacobaea carniolica
Minuartia cherlerioides
Phyteuma hemisphaericum
Phyteuma humile
Phyteuma scheuchzeri Poa laxa
Potentilla doerfleri
Potentilla haynaldiana
Primula hirsuta
Primula minima
Saxifraga aspera
Saxifraga bryoides
Saxifraga cotyledon
Saxifraga exarata
Saxifraga florulenta
Saxifraga juniperifolia
Saxifraga muscoides
Saxifraga pedemontana
Sempervivum arachnoideum
Sempervivum grandiflorum
 Sempervivum marmoreum
 Sempervivum montanum
 Sempervivum wulfenii
 Silene acaulis
 Silene dinarica
 Silene lerchenfeldiana
 Veronica baumgartenii
 Woodsia alpina

##D +03 H31c-Temperate-lowland-to-montane-siliceous-inland-cliff

Achillea chamaemelifolia
Asarina procumbens
Asplenium adiantum-nigrum
Asplenium marinum
Asplenium obovatum
Asplenium septentrionale
Asplenium trichomanes
Asplenium trichomanes x alternifolium
Aurinia saxatilis
Centaurea pectinata
Centaurea prolongoi Coincya monensis
Cystopteris fragilis
Dianthus graniticus Dianthus henteri

Dianthus pyrenaicus Epilobium collinum
Hieracium schmidtii
Jovibarba heuffelii
Leucanthemum monspeliense
Minuartia recurva
Polypodium vulgare
Primula minima
Saxifraga hypnoides
Saxifraga paradoxa
Saxifraga rosace
Sedum hirsutum
Sedum stefco
Sempervivum calcareum
Sesamoides purpurascens
Silene rupestris
Veronica bachofenii
Woodsia ilvensis

##D +03 H31d-Mediterranean-siliceous-inland-cliff

Alchemilla crenulata
Alchemilla saxatilis
Alchemilla serratisaxatilis
Allosorus hispanicus
Allosorus tinaei
Androsace vandellii Antirrhinum grosii
Aquilegia bernardii Armeria leucocephala
 Asarina procumbens
 Asplenium adiantum-nigrum
 Asplenium foreziense
 Asplenium obovatum
 Asplenium septentrionale
 Asplenium trichomanes
 Bufonia macropetala
 Campanula samothracica
 Castroviejoa frigida
 Centaurea avilae
Centranthus nevadensis
Cystopteris fragilis
Dianthus sylvestris
Draba dubia
Draba loiseleurii
Dryopteris pallida
Erigeron paolii
Erodium rupicola
Festuca sardoa
Hieracium carpetanum
Hieracium schmidtii
Hypericum cuisinii
Jasione crispa
Leucanthemum corsicum
Leucanthemum monspeliense

Linaria capraria
Linaria purpurea
Minuartia recurva
Murbeckiella boryi
Narcissus rupicola
Phyteuma serratum
Polygonum icaricum
Polypodium cambricum
Potentilla crassinervia
Saxifraga genesiana
Saxifraga nevadensis
Saxifraga pedemontana
Saxifraga pentadactylis
Saxifraga sibirica
Saxifraga vayredana Scabiosa corsica
Sempervivum minutum
Silene boryi
Silene foetida
Silene requienii
Umbilicus horizontalis

##D +03 H32a-Boreal-and-arctic-base-rich-inland-cliff

Arabidopsis petraea
Arabis alpina
Arenaria norvegica
Asplenium ruta-muraria Asplenium scolopendrium
 Asplenium trichomanes
 Asplenium viride
 Cerastium nigrescens
 Cystopteris fragilis
 Draba fladnizensis
 Draba incana
 Poa glauca
 Polypodium vulgare
 Potentilla crantzii
 Rhodiola rosea
 Saxifraga adscendens Saxifraga nivalis
 Saxifraga paniculata
 Saxifraga rivularis
 Silene suecica
 Woodsia alpina

##D +03 H32b-Temperate-high-mountain-base-rich-inland-cliff

Achillea oxyloba
Androsace cylindrica
Androsace helvetica
Androsace lactea
Arabis stellulata
Artemisia umbelliformis
Asperula hirta
Asplenium seelosii

Asplenium trichomanes
Asplenium viride
Ballota frutescens
Campanula cochleariifolia
Cystopteris fragilis
Draba aizoides
Draba kotschy
Draba norvegica Draba sauteri
Draba tomentosa
Festuca stenantha
Gypsophila petraea
Hieracium humile
Hormathophylla purpurea
Kernera saxatilis
Minuartia rupestris
Petrocallis pyrenaica Phyteuma charmelii
Phyteuma cordatum
Potentilla alchimilloides Potentilla caulescens
Potentilla nivalis
Potentilla saxifraga
Primula allionii
Primula marginata
Ramonda myconi
 Rhamnus pumila
 Saxifraga aretioides
 Saxifraga callosa
 Saxifraga longifolia
 Saxifraga marginata
 Saxifraga media
 Saxifraga moschata
 Saxifraga mutata
 Silene campanula
 Thymus pulcherrimus
 Trisetum bertolonii

##D +03 H32c-Temperate-lowland-to-montane-base-rich-inland-cliff

Androsace hausmannii
Androsace helvetica
Androsace lactea
Arabis pumila
Arabis stellulata
Asplenium scolopendrium
Asplenium trichomanes
Asplenium viride
Campanula cespitosa
Carex brachystachys
Carex ornithopoda
Cystopteris fragilis
Draba aizoides
Draba norvegica Draba sauteri
Draba tomentosa

Festuca alpina
Festuca stenantha
Hieracium bupleuroides
Hieracium humile
Kernera saxatilis
Moehringia muscosa
Petrocallis pyrenaica
Polypodium interjectum
Potentilla caulescens
Rhamnus pumila
Saxifraga cuneifolia
Sedum hispanicum
Valeriana saxatilis
Valeriana tripteris
Woodsia pulchella

##D +03 H32d-Mediterranean-base-rich-inland-cliff

Achillea ageratifolia
Achillea cretica
Achillea pindicola
Aethionema lycium
Aethionema saxatile
Aethionema schistosum
Aethionema spicatum *Alchemilla ellenbergiana*
Allium antonii-bolosii
Allium grosii
Allosorus acrosticus
Allosorus hispanicus
Allosorus persicus
Alyssoides cretica
Amelanchier parviflora
Anogramma leptophylla
Anthriscus kotschy
Antirrhinum hispanicum
Antirrhinum microphyllum
Antirrhinum pertegasii
Antirrhinum pulverulentum
Antirrhinum subbaeticum
Antirrhinum valentinum
Arabis alpina
Arabis bryoides
Arenaria balearica
Arenaria cretica
Arenaria deflexa
Arenaria kotschyana
Arenaria pamphylica
Arenaria tmolea
Arenaria uninervia
Artemisia chamaemelifolia
Asperula arcadiensis
Asperula boissieri

Asperula boryana
Asperula paui
Asperula pubescens
Asperula serotina
Asperula stricta
Asperula tournefortii
Asplenium aegaeum
Asplenium ceterach
Asplenium creticum
Asplenium fissum
Asplenium fontanum
Asplenium lepidum
Asplenium petrarchae
Asplenium ruta-muraria
Asplenium sagittatum
Asplenium seelosii
Asplenium tadei
Asplenium trichomanes
Asyneuma compactum
Asyneuma linifolium Asyneuma lycium
Athamanta vayredana
Aubrieta canescens
Aubrieta deltoidea
Aubrieta thessala
 Aurinia corymbosa
 Aurinia saxatilis
 Bellium bellidioides
 Biscutella frutescens
 Brassica balearica
 Brassica cretica
 Bubon macedonicum
 Bufonia calyculata
 Bupleurum barceloi
 Bupleurum kakiskalae
 Campanula affinis
 Campanula aizoon
 Campanula celsii
 Campanula cretica
 Campanula cymbalaria
 Campanula isaurica
 Campanula laciniata
 Campanula mollis
Campanula oreadum
Campanula pelviformis
Campanula rupestris
Campanula rupicola
Campanula tubulosa
Campanula versicolor
Capparis orientalis
Cardamine plumierii
Carex rorulenta

Carum meoides
Centaurea argentea
Centaurea boissieri
Centaurea cariensis
Centaurea clementei
Centaurea drabifolia
Centaurea lancifolia
Centaurea mariana
Centaurea ossaea
Centaurea poculatoris
Centaurea redempta
Centaurea resupinata
Centaurea rouyi
Centaurea saxicola
Centaurea segariensis
Centranthus ruber
Cephalaria squamiflora
Chaenorhinum origanifolium
Chaenorhinum tenellum
Chiliadenus glutinosus
Clinopodium rouyanum
Clinopodium serpyllifolium
Cosentinia vellea
Crepis auriculifolia Crepis triasii
Crocus cambessedesii
 Cystopteris fragilis
 Danthoniastrum compactum
 Davallia canariensis
 Dianthus elegans
 Dianthus fruticosus
 Dianthus juniperinus Dianthus rupicola
 Dianthus xylorrhizus
 Digitalis dubia
 Doronicum cacaliifolium
 Dorystaechas hastata
 Draba acaulis
 Draba lacaitae
 Draba lasiocarpa
 Draba scardica
 Ebenus cretica
 Erodium reichardii
 Eryngium ternatum
Erysimum candicum
Euphorbia herniariifolia
Festuca pseudosupina
Ficus carica
Galatella cretica Galium canum
Galium crespianum
Galium degenii
Galium erythrorrhizon
Galium fruticosum

Galium graecum
Geranium glaberrimum
Globularia majoricensis
Gnaphalium leucopilinum
Gypsophila montserratii
Helichrysum crassifolium
Helichrysum heldreichii
Helichrysum melitense
Helichrysum orientale
Helictochloa crassifolia
Hieracium amplexicaule
Hieracium aragonense
Hieracium bourgaei
Hieracium candidum
Hieracium elisaeae
Hieracium humile
Hieracium laniferum
Hieracium lawsonii
Hieracium loscosianum
Hieracium mixtum
Hieracium pannosum
Hieracium sartorianum Hieracium scapigerum
Hieracium texedense
Hippocrepis balearica
 Hippocrepis valentina
 Hirtellina fruticosa
 Hirtinella lobelii
 Hormathophylla cadevalliana
 Hormathophylla cochleata
 Hormathophylla reverchonii
 Hypericum aciferum
 Hypericum amblycalyx
 Hypericum jovis
 Hypericum organifolium
 Hypericum taygeteum
 Iberis gibraltaria
 Inula candida
 Inula heterolepis
 Inula methanaea
 Inula oxylepis
 Inula parnassica
 Inula pseudolimonella
Inula verbascifolia
Jacobaea gnaphalioides
Jankaea heldreichii
Jasione foliosa
Lactuca acanthifolia
Lafuentea rotundifolia
Laserpitium petrophilum
Lepidium villarsii
Linaria anticaria

Linaria cavanillesii
Linaria verticillata Linum arboreum
Lomelosia albocincta
Lomelosia crenata
Lomelosia cretica
Lomelosia hymettia
Lomelosia minoana
Lomelosia variifolia
Macrotomia densiflora
Melica rectiflora
Michauxia tchihatcheffii
Micromeria filiformis
Micromeria myrtifolia
Minuartia verna
Moehringia intricata
Myosotis speluncicola Narcissus calcicola
Naufraga balearica
Nepeta concolor
Nepeta phylloclamys
Odontites linkii
Omphalodes luciliae
Onobrychis sphaciotica
Onosma graeca
Origanum dictamnus
 Papaver rupifragum
 Petromarula pinnata
 Petrohragia dianthoides
 Phagnalon rupestre
 Phagnalon sordidum
 Phyllolepidum cyclocarpum
 Poa cenisia
 Polypodium cambricum
 Polypodium interjectum Polypodium vulgare
 Potentilla deorum
 Potentilla kotschyana
 Potentilla pulvinaris
 Potentilla speciosa
 Pseudoscabiosa grosii
 Pseudoscabiosa saxatilis
 Ptilostemon chamaepeuce
 Ramonda myconi
Ranunculus creticus
Ranunculus weyleri Rhamnus alpina
Rhamnus libanotica
Rhamnus pumila
Rhamnus sibthorpiana
Rosularia libanotica
Rosularia serrata
Rubia angustifolia
Rupicapnos africana
Sanguisorba ancistroides

Sanguisorba cretica
Sarcocapnos baetica
Sarcocapnos crassifolia
Sarcocapnos enneaphylla
Sarcocapnos pulcherrima
Satureja parnassica
Saxifraga biternata
Saxifraga bourgaeana
Saxifraga camposii
Saxifraga corsicaSaxifraga cuneata
Saxifraga exarata
Saxifraga federici-augusti
Saxifraga fragilis
Saxifraga glabella
Saxifraga granatensis
Saxifraga kotschy
Saxifraga latepetiolata
Saxifraga longifolia
Saxifraga losae
Saxifraga luteoviridis
Saxifraga marginata
Saxifraga moncayensis
Saxifraga paniculata
Saxifraga porophylla
 Saxifraga reuteriana
 Saxifraga rigoi
 Saxifraga scardica
 Saxifraga sempervivum
 Saxifraga sibthorpii
 Saxifraga spruneri
 Saxifraga taygetea
Scorzonera cretica
Scrophularia depauperata
Scrophularia heterophylla
Scrophularia kotschyana
Scrophularia libanotica
Scutellaria hirta
Securigera globosa
Sedum dasyphyllum
Sedum magellense
Selaginella denticulata
Sempervivum marmoreum
Senecio castagneanus
Sesleria doerfleri
Sesleria insularis
Sibthorpia africana
Sideritis glauca
Sideritis perfoliata
Sideritis stachydioides
Silene andryalifolia
Silene auriculata

Silene boryi
Silene congesta
Silene gazulensis Silene gigantea
Silene hifacensis
Silene leptoclada
Silene mollissima
Silene odontopetala
Silene parnassica
Silene pusilla
Silene saxifraga
Silene tomentosa
Solenopsis balearica
Stachys candida
Stachys chrysantha
Stachys parolinii
Stachys spreitzenhoferi
Stachys swainsonii
Staehelina petiolata
Symphytum creticum
Tanacetum argenteum
Tanacetum armenum
Teucrium aroanium
Teucrium buxifolium
Teucrium cuneifolium
Teucrium fragile Teucrium francisci-
 weneri
 Teucrium freynii
 Teucrium halacsyanum
 Teucrium hifacense
 Teucrium intricatum
 Teucrium rivas-martinezii
 Teucrium rivasii
 Teucrium rotundifolium
 Teucrium thymifolium
Thymus richardii
Trisetum velutinum
Umbilicus horizontalis
Umbilicus luteus
Umbilicus rupestris
Valeriana apula
Valeriana asarifolia
Valeriana longiflora
Valeriana sisymbriifolia
Valeriana speluncaria
Valeriana tripteris
Verbascum arcturus
Verbascum pestalozzae
Veronica bellidioides
Veronica kotschyana
Viola chelmea
Viola herzogii

Viola parnonia
Viola perinensis
Viola poetica

##D +03 H32ef-Ultramafic-inland-cliff

Asplenium adiantum-nigrum subsp. serpentini
Asplenium adulterinum
Asplenium alternifolium
Asyneuma limonifolium
Drymocallis malacophylla
Halacsya sendtneri
Noccaea praecox
Odontarrhena muralis
Onosma echioides
Paragymnopteris marantae
Silene flavescens

##D +03 H32g-Mediterranean-ultramafic-inland-cliff

Allosorus guanchicus
Allosorus pteridioides
Asplenium balearicum
Asplenium foreziense
Asplenium obovatum Cosentinia vellea
Paragymnopteris marantae
Pellaea calomelanos
Rosularia serpentinica
Viola sandrasea

##D +03 H33-Macaronesian-inland-cliff

Adiantum reniforme
Aeonium aizoon
Aeonium aureum
Aeonium balsamiferum
Aeonium canariense
Aeonium castello-paivae
Aeonium cuneatum
Aeonium decorum
Aeonium diplocyclum
Aeonium glandulosum
Aeonium glutinosum
Aeonium gomerense Aeonium
goochiae
Aeonium haworthii
Aeonium hierrense
Aeonium holochrysum
Aeonium lancerottense
Aeonium manriqueorum
Aeonium mascaense
Aeonium nobile
Aeonium palmense
Aeonium percarneum

Aeonium rubrolineatum
Aeonium saundersii
Aeonium sedifolium
Aeonium simsii
Aeonium smithii
Aeonium spathulatum
Aeonium subplanum
Aeonium tabulaeforme
Aeonium undulatum
Aeonium urbicum
Aeonium valverdense
Aeonium vestitum
Aeonium virgineum
Aeonium viscatum
Aeonium x burchardii
Aeonium x meyerheymii
Aichryson bethencourtianum
Aichryson bituminosum
Aichryson bollei
Aichryson brevipetalum
Aichryson divaricatum
Aichryson dumosum
Aichryson laxum
Aichryson pachycaulon Aichryson parlatorei
Aichryson punctatum
Aichryson tortuosum
Aichryson villosum Allagopappus canariensis
 Allosorus acrosticus
 Allosorus fragilis
 Allosorus guanchicus
 Allosorus pteridioides
 Allosorus tinaei
 Andryala crithmifolia Andryala glandulosa
 Anogramma leptophylla
 Asplenium aethiopicum
 Asplenium aureum
 Asplenium hemionitis
 Asplenium lolegnamense
 Asplenium marinum
 Asplenium monanthes
 Asplenium septentrionale
 Athamanta cervariifolia Babcockia platylepis
Bethencourtia palmensis
Cosentinia vellea
Crambe arborea
Crambe laevigata
Crambe scaberrima
Crepis vesicaria subsp. andryaloides
Cyrtomium falcatum
Cystopteris fragilis
Davallia canariensis

Dendriopoterium menendezii
Festuca agustini
Galium productum
Greenovia dodrentalis
Habenaria tridactylites
Hypericum grandifolium
Hypericum reflexum
Hypochaeris oligocephala
Matthiola maderensis
Micromeria teneriffae
Micromeria varia
Minuartia platyphylla
Monanthes adenoscepes
Monanthes anagensis
Monanthes brachycaulon
Monanthes ictERICA
Monanthes laxiflora
Monanthes lowei
Monanthes muralis
Monanthes pallens
Monanthes polyphylla
Monizia edulis
Musschia aurea
Paragymnopteris marantae
Parietaria filamentosa
Pericallis lanata
 Phyllis viscosa
 Plantago leiopetala
 Polycarpaea carnosa
 Polypodium cambricum subsp. azoricum
 Polypodium cambricum subsp. macaronesicum
 Polypodium x fontqueri
 Rhamnus integrifolia Salvia
 broussonetii
 Saxifraga maderensis
 Saxifraga portosanctana
 Sedum brissemoretii
 Sedum farinosum
Sedum fusiforme
Sedum nudum
Selaginella kraussiana
Silene berthelotiana
Sinapidendron angustifolium
Sinapidendron frutescens
Sinapidendron gymnocalyx
Sinapidendron rupestre
Sonchus acaulis
Sonchus congestus
Sonchus gummifer
Sonchus pendulus
Sonchus radicans

Sonchus tectifolius
Sonchus tuberifer
Thelypteris pozoi
Tolpis calderae
Tolpis crassiuscula
Tolpis lagopoda
Tolpis macrorhiza
Tolpis succulenta
Vieraea laevigata
Woodwardia radicans

##D +03 H34-Wet-inland-cliff

Adiantum capillus-veneris
Alchemilla glabra
Asplenium scolopendrium
Borago pygmaea
Carex brachystachys
Cystopteris fragilis
Dianthus nitidus
Hypericum hircinum
Hypericum nummularium
Moehringia muscosa
Phegopteris connectilis
Pinguicula grandiflora *Pinguicula hirtiflora*
Polypodium interjectum

##D +03 H51b-Polar-desert *Alopecurus magellanicus*

Cerastium nigrescens
Cerastium regelii
Draba corymbosa
Draba pauciflora
Luzula confusa
Papaver radiculatum
Phippsia algida
Poa arctica
Ranunculus sabinii
Saxifraga cespitosa
Saxifraga hyperborea
Saxifraga oppositifolia

##D +03 H61-Mediterranean-and-temperate-volcanic-field

Agrostis canina subsp. *monteluccii*
Anthemis aetnensis
Argyranthemum tenerifae
Cerastium tomentosum
Rumex aetnensis
Saponaria sicula
Scleranthus perennis subsp. *vulcanicus*
Senecio squalidus subsp. *aethnensis*
Silene nocteolens
Viola cheiranthifolia

##D +04 N16-Mediterranean-and-Macaronesian-coastal-dune-grassland-grey-dune

Achillea maritima
Alyssum hirsutum
Alyssum minutum
Anagallis monelli
Anthemis maritima
Anthemis tomentosa
Anthyllis hamosa
Anthyllis hermanniae Armeria pungens
Artemisia monosperma
Asteriscus imbricatus
Atractylis carduus
Calendula suffruticosa
Calystegia soldanella
Carex liparocarpus
Centaurea cuneifolia
Centaurea greuteri
Centaurea sphaerocephala
Centaurea spinosa
Centaurea tommasinii Cionura erecta
Corynephorus divaricatus
Crucianella maritima
Cynanchum acutum
Cyperus capitatus
Cyperus macrorhizus
 Dianthus pyrenaicus
 Echinops spinosissimus
 Echiochilon fruticosum
 Echium angustifolium
 Ephedra distachya
 Erodium lebelli
 Eryngium maritimum
 Erysimum diffusum
 Erysimum graecum
 Euphorbia paralias
 Euphorbia terracina
 Filago lusitanica
 Fumana procumbens
 Helichrysum stoechas
 Hypericum olympicum
 Imperata cylindrica
 Jasione heldreichii
 Lagurus ovatus
Launaea fragilis
Linaria pedunculata Lomelosia argentea
Lomelosia rutifolia
Lotus creticus
Lotus cytisoides
Lotus glaucus
Lotus pseudo-creticus

Malcolmia ramosissima
Malcolmia triloba
Maresia nana
Matthiola sinuata
Medicago littoralis
Medicago marina
Ononis angustifolia Ononis natrix
Ononis tournefortii
Pancratium maritimum
Phleum arenarium
Pimpinella villosa
Plantago albicans
Polycarpaea nivea
Polygonum equisetiforme
Scrophularia ramosissima
Senecio glaucus
Seseli tortuosum Silene congesta
Silene conica
Silene dichotoma
Silene niceensis
Silene subconica
Sixalix atropurpurea
Stachys atherocalyx
Trachomitum venetum
Traganum moquinii
Verbascum litigiosum
Verbascum pinnatifidum
Verbascum sinuatum Vulpia
alopecuros
Vulpia fasciculata

##D +04 N17-Black-Sea-coastal-dune-grassland-grey-dune

Alyssum hirsutum
Alyssum
Anchusa velenovskyi
Artemisia campestris
Asperula graveolens
Asterolinon linum-stellatum
Astragalus varius
Carex colchica Carex
liparocarpos
Centaurea arenaria aggr.
Centaurea odessana
Cionura erecta
Corispermum nitidum
Cynanchum acutum
Cyperus capitatus
Dianthus bessarabicus
Ephedra distachya
Erodium lebelii
Eryngium maritimum

Erysimum diffusum
Erysimum montanum
Euphorbia paralias
Euphorbia seguieriana
Festuca arenicola
Festuca beckeri
Festuca polesica
Fumana procumbens
Goniolimon collinum
Jasione heldreichii
Jasione montana
Jurinea kilaea
Lagurus ovatus
Lepidotrichum uechtritzianum
Linaria genistifolia
Linum tauricum
Lomelosia argentea
Medicago littoralis
Odontarrhena borzaeana
Pancratium maritimum
Peucedanum arenarium Rumex

acetosella

Schoenoplectus mucronatus
Secale sylvestre
Seseli tortuosum
Silene borysthenica
Silene euxina
Silene thymifolia Stachys atherocalyx
Stipa borysthenica aggr.
Teucrium polium aggr.
Trachomitum venetum
Verbascum pinnatifidum
Verbascum purpureum

##D +04 C11a-Permanent-oligotrophic-waterbody-with-very-soft-water-species Eleocharis palustris

Eriocaulon aquaticum
Isoetes boryana
Isoetes lacustris
Isoetes longissima
Isoetes setacea
Isolepis fluitans
Lobelia dortmanna
Luronium natans
Myriophyllum alterniflorum
Plantago uniflora
Potamogeton epihydrus
Ranunculus reptans Subularia aquatica

##D +04 C11b-Permanent-oligotrophic-to-mesotrophic-waterbody-with-soft-water-species

Alisma gramineum
Antinoria agrostidea

Aristavena setacea
Baldellia alpestris
Baldellia ranunculoides
Eleocharis acicularis
Eleocharis multicaulis
Eleocharis palustris
Hydrocotyle vulgaris
Isoetes lacustris Isoetes setacea
Isolepis fluitans
Juncus bulbosus
Juncus emmanuelis
Juncus heterophyllus
Lobelia dortmanna
Luronium natans
Lycopodiella inundata
Myriophyllum alterniflorum
Pilularia globulifera Plantago uniflora
Potamogeton gramineus
Potamogeton polygonifolius
Ranunculus ololeucos Ranunculus reptans
Samolus valerandi
Sparganium angustifolium
Subularia aquatica

##D +04 C12a-Permanent-oligotrophic-to-mesotrophic-waterbody-with-Characeae Nitella flexilis

##D +04 C12b-Mesotrophic-to-eutrophic-waterbody-with-vascular-plants

Ceratophyllum demersum
Elodea canadensis
Hydrocharis morsus-ranae
Myriophyllum spicatum
Nelumbo nucifera
Nuphar lutea
Nuphar pumila
Nymphaea alba
Potamogeton acutifolius Potamogeton alpinus
Potamogeton berchtoldii
Potamogeton compressus
Potamogeton friesii
Potamogeton lucens
Potamogeton natans
Potamogeton perfoliatus
Potamogeton trichoides
Ranunculus aquatilis
Ranunculus circinatus
Stratiotes aloides
Trapa natans
Utricularia vulgaris

##D +04 C14-Permanent-dystrophic-waterbody

Juncus bulbosus

Myriophyllum alterniflorum
Potamogeton alpinus
Potamogeton perfoliatus
Sparganium angustifolium
Sparganium emersum
Sparganium natans
Utricularia intermedia
Utricularia minor
Utricularia vulgaris

##D +04 C15-Permanent-inland-saline-and-brackish-waterbody

Althenia filiformis
Althenia orientalis
Callitriche lenisulca
Callitriche stagnalis
Callitriche truncata
Najas marina
Najas minor
Ranunculus peltatus subsp. baudotii
Ranunculus polyphyllus Ruppia cirrhosa
Ruppia maritima
Stuckenia pectinata
Zannichellia obtusifolia Zannichellia palustris
Zannichellia pedicellata

##D +04 C16b-Mediterranean-temporary-waterbody

Agrostis salmantica
Baldellia ranunculoides
Bellis annua
Briza minor
Callitriche brutia
Callitriche platycarpa
Callitriche truncata
Centaurium maritimum
Centaurium spicatum
Chaetopogon fasciculatus
Cicendia filiformis
Crassula tillaea
Crassula vaillantii
Cyperus longus
Cyperus michelianus Damasonium alisma
Damasonium bourgaei
Damasonium polyspermum
Elatine gussonei
Elatine macropoda
Eryngium corniculatum
Exaculum pusillum
Illecebrum verticillatum
Isoetes azorica
Isoetes boryana
Isoetes durieui

Isoetes heldreichii
Isoetes hystrix
Isoetes setacea
Isoetes velata
Juncus capitatus
Juncus foliosus
Juncus pygmaeus
Lotus angustissimus
Lotus conimbricensis
Lotus parviflorus
Lythrum castellanum
Lythrum flexuosum
Lythrum thymifolia
Lythrum tribracteatum
Marsilea batardae
Marsilea strigosa
Mentha cervina
Mentha pulegium
Nanthea perpusilla
Neoschischkinia pourrettii
Ophioglossum lusitanicum
Pilularia minuta Polypogon subspatheus
Ranunculus batrachoides
Ranunculus dichotomiflorus
Ranunculus lateriflorus
Ranunculus muricatus
Ranunculus ophioglossifolius
Ranunculus revelieri
Ranunculus sardous
Ranunculus trilobus
Sisymbrella aspera
Solenopsis corsica
Solenopsis laurentia
Solenopsis minuta

##D +04 C21a-Base-poor-spring-and-spring-brook

Cardamine acris
Cardamine amara
Cardamine flexuosa
Carex remota
Carex vaginata
Chrysosplenium alternifolium
Chrysosplenium oppositifolium
Circaea alpina
Circaea x intermedia
Crepis paludosa
Epilobium alsinifolium
Epilobium hornemannii
Epilobium nutans
Epilobium obscurum
Epilobium palustre

Impatiens noli-tangere
Montia fontana
Myosotis stolonifera Petasites frigidus
Pinguicula balcanica
Poa remota
Ranunculus hederaceus
Ranunculus omiophyllus
Saxifraga aizoides
Saxifraga stellaris
Stellaria alsine
Veronica nevadensis

##D +04 C21b-Calcareous-spring-and-spring-brook

Arabis soyeri
Carex acutiformis
Carex appropinquata
Carex atrofusca
Carex capillaris Carex capitata
Carex flava
Carex saxatilis
Cochlearia pyrenaica
 Deschampsia argentea Epilobium
 davuricum
 Equisetum scirpoides
 Equisetum variegatum
 Juncus biglumis
 Juncus triglumis
 Montia fontana
 Oenanthe divaricata
 Pinguicula longifolia
 Pinguicula vulgaris
 Saxifraga aizoides

##D +04 C22a-Permanent-non-tidal-fast-turbulent-watercourse-of-montane-to-alpine-regions-with-mosses

Blindia acuta
Brachythecium plumosum
Brachythecium rivulare
Scapania undulata
Porina clorotica
Dermatocarpon luridum
Cinclidotus fontinaloides
Cinclidotus riparius
Dichodontium pellucidum
Fontinalis antipyretica
Hydrogrimmia mollis
Hygrohypnum molle
Hygrohypnum smithii
Schistidium rivulare
Jungermannia exsertifolia
Philonotis fontana

Platyhypnidium riparioides
Pohlia wahlenbergii
Rhacomitrium fasciculare

##D +04 C22b-Permanent-non-tidal-fast-turbulent-watercourse-of-plains-montane-regions-withRanunculus

Berula erecta
Butomus umbellatus
Callitriche cophocarpa
Callitriche hamulata
Glyceria fluitans
Myriophyllum alterniflorum
Potamogeton alpinus
Potamogeton berchtoldii
Potamogeton coloratus
Potamogeton gramineus
Potamogeton nodosus
Potamogeton perfoliatus
Potamogeton polygonifolius
Ranunculus aquatilis
Ranunculus circinatus
Ranunculus fluitans
Ranunculus peltatus Ranunculus penicillatus
 Ranunculus penicillatus subsp. pseudofluitans
 Ranunculus trichophyllus Sium latifolium
 Sparganium angustifolium
 Sparganium emersum
 Sparganium erectum aggr.
 Veronica anagallis-aquatica
 Veronica beccabunga

##D +04 C23-Permanent-non-tidal-smooth-flowing-watercourse

Berula erecta
Butomus umbellatus
Callitriche cophocarpa
Callitriche hamulata
Helosciadium nodiflorum
Mentha aquatica
Nasturtium officinale
Potamogeton berchtoldii
Potamogeton coloratus Potamogeton crispus
Potamogeton gramineus
Potamogeton lucens
Potamogeton natans
Potamogeton nodosus
Potamogeton perfoliatus
Potamogeton polygonifolius
Potamogeton pusillus
Ranunculus aquatilis
Ranunculus circinatus
Ranunculus trichophyllus
Rorippa amphibia

Sagittaria sagittifolia
Schoenoplectus lacustris
Sium latifolium Sparganium emersum
Sparganium erectum aggr.
Stuckenia pectinata
Veronica anagallis-aquatica
Veronica beccabunga
Zannichellia palustris

##D +04 C24-Tidal-river-upstream-from-the-estuary

Bolboschoenus maritimus
Callitriche truncata
Deschampsia wibeliana
Elatine hydropiper
Elatine triandra
Jacobaea paludosa Najas marina
Najas minor
Nasturtium officinale
Oenanthe conioides Potamogeton nodosus
 Potamogeton perfoliatus
 Sagittaria sagittifolia
 Schoenoplectus triqueter
 Senecio sarracenicus
 Sparganium emersum
 Vallisneria spiralis
 Veronica anagallis-aquatica
 Veronica catenata
 Zannichellia palustris

##D +04 C25a-Temperate-temporary-running-watercourse

Glyceria fluitans
Glyceria notata
Helosciadium nodiflorum
Mentha aquatica
Myosotis scorpioides aggr.
Nasturtium officinale
Ranunculus peltatus
Ranunculus penicillatus subsp. pseudofluitans
Veronica anagallis-aquatica

##D +04

C35a-Periodically-exposed-shore-with-stable-eutrophic-sediments-with-pioneer-

vegetation

Alopecurus aequalis
Bidens cernuus
Bidens connata
Bidens frondosus
Bidens radiatus
Bidens tripartitus
Corrigiola litoralis
Oxybasis glauca
Oxybasis rubra

Persicaria dubia
Persicaria foliosa
Persicaria hydropiper
Persicaria lapathifolia
Persicaria minor
Potentilla supina
Pulicaria vulgaris
Ranunculus sceleratus
Rorippa palustris
Rumex maritimus
Tephrosia palustris

##D +04

C35b-Periodically-exposed-shore-with-stable-mesotrophic-sediments-with-pioneer-

vegetation

Anagallis minima
Blackstonia perfoliata
Carex bohemica
Centaurium pulchellum
Cerastium dubium
Chaetopogon fasciculatus
Cicendia filiformis
Coleanthus subtilis
Corrigiola litoralis
Crassula aquatica
Crassula tillaea
Cyperus flavescens
Cyperus fuscus
Cyperus michelianus
Damasonium alisma
Elatine alsinastrum
Elatine hexandra
Elatine hydropiper
Elatine macropoda
Elatine triandra
Eleocharis acicularis
Eleocharis ovata
Fimbristylis dichotoma
Gnaphalium uliginosum
Gypsophila muralis
Hypericum humifusum
Illecebrum verticillatum
Isoetes duriei
Isoetes hystrix
Isoetes velata *Isolepis setacea*
Juncus bufonius aggr.
Juncus capitatus
Juncus pygmaeus
Juncus tenageia
Koenigia islandica
Limosella aquatica
Lindernia dubia

Lindernia procumbens Ludwigia palustris
Lythrum hyssopifolia
Lythrum tribracteatum
Mentha pulegium
Myosurus minimus
Neoschischkinia pourrettii
Potentilla supina
Pulicaria vulgaris
Radiola linoides
Ranunculus lateriflorus
Ranunculus muricatus
Ranunculus ophioglossifolius
Ranunculus sardous
Sagina apetala
Sagina nodosa
Samolus valerandi
Solenopsis laurentia Solenopsis minuta
Spergularia echinosperma
Spergularia rubra Verbena supina
Veronica anagalloides
Veronica catenata Veronica scardica

##D +04 C35c-Periodically-exposed-saline-shore-with-pioneer-vegetation

Centaurium pulchellum
Corrigiola telephiifolia
Cressa cretica
Crypsis aculeata
Crypsis alopecuroides
Crypsis schoenoides
Cyperus flavescens
Cyperus pannonicus
Digitaria debilis
Eleocharis carniolica
Fimbristylis bisumbellata
Fimbristylis dichotoma
Glinus lotoides
Heliotropium supinum
Juncus biglumis
Juncus tenageia
Juncus triglumis
Koenigia islandica
Lepidium coronopus
Lepidium latifolium
Lythrum hyssopifolia
Lythrum tribracteatum
Oxybasis glauca
Panicum debile
Paspalum distichum
Polygonum salsugineum
Polypogon maritimus
Polypogon monspeliensis

Pulicaria arabica Pulicaria sicula
Samolus valerandi
Spergularia marina
Spergularia media
Verbena supina

##D +04 C35d-Unvegetated-or-sparsely-vegetated-shore-with-mobile-sediments-in-montane-alpine-
regions

Astragalus alpinus
Calamagrostis neglecta
Calamagrostis pseudophragmites
Cerastium alpinum
Chaerophyllum hirsutum
Chondrilla chondrilloides
Cotoneaster cinnabarinus
Elymus fibrosus
Elymus alakanus
Elymus transbaicalensis
 Epilobium colchicum
 Epilobium dodonaei
 Epilobium fleischeri
 Epilobium latifolium Epilobium roseum
 Equisetum variegatum
 Erigeron acris
 Festuca vivipara
 Gnaphalium uliginosum
 Hippophae rhamnoides
 Luzula spicata
 Myosotis scorpioides aggr.
 Myosoton aquaticum
 Oenanthe crocata
 Petasites hybridus
 Petasites kablikianus
 Ptychotis saxifraga
 Rumex scutatus
Saxifraga aizoides
Scrophularia canina
Tolpis staticifolia
Trifolium saxatile

##D +04 C35e-Unvegetated-or-sparsely-vegetated-shore-with-mobile-sediments-in-theMediterranean-region

Agrostis semiverticillata
Andryala integrifolia
Arenaria montana
Asperula purpurea
Centranthus ruber
Conopodium thalictrifolium
Cyperus fuscus
Dittrichia viscosa Dysphania botrys
Epilobium dodonaei
Erucastrum nasturtiifolium

Festuca duriotagana
Galium corrudifolium
Glaucium flavum *Iberis carnosae*
Lactuca viminea
Lotus creticus
Paspalum dilatatum
Paspalum distichum
Paspalum vaginatum
Polypogon viridis
Reseda valentina
Santolina etrusca
Santolina chamaecyparissus aggr.
Saponaria officinalis
Satureja montana
Scrophularia canina
Scrophularia sciophila *Seseli tortuosum*
Xanthium orientale

##D +04 Q51-Tall-helophyte-bed

Acorus calamus
Bolboschoenus laticarpus
Bolboschoenus maritimus *Butomus*
umbellatus
Calamagrostis canescens
Calamagrostis purpurea
Equisetum fluviatile
Galium palustre aggr.
Glyceria maxima
Iris pseudacorus
Lycopus europaeus
Lysimachia vulgaris
Lythrum salicaria
Mentha aquatica
Myosotis scorpioides aggr.
Phalaroides arundinacea
Phragmites australis
Ranunculus lingua
Schoenoplectus corymbosus
Schoenoplectus lacustris *Scolochloa festuacea*
Scutellaria galericulata *Sium latifolium*
Sparganium erectum aggr.
Thelypteris palustris
Typha angustifolia
Typha domingensis
Typha latifolia
Typha laxmannii
Typha minima
Typha shuttleworthii

##D +04 Q52-Small-helophyte-bed

Alisma gramineum

Alisma lanceolata
Alisma plantago-aquatica
Alopecurus aequalis
Alopecurus magellanicus
Arctophila fulva
Beckmannia syzigachne Berula erecta
Bolboschoenus glaucus
Bolboschoenus planiculmis Bolboschoenus yagara
Butomus umbellatus
Calla palustris
Carex pseudocyperus
Carex reuteriana
Catabrosa aquatica
 Cicuta virosa
 Comarum palustre
 Eleocharis mamillata
 Eleocharis palustris
 Eleocharis uniglumis
 Festuca rothmaleri
 Galium broterianum
 Galium palustre aggr.
 Glyceria declinata
 Glyceria fluitans
 Glyceria nemoralis
 Glyceria notata
 Glyceria spicata
 Helosciadium bermejoi
 Helosciadium nodiflorum
 Hippuris vulgaris
 Hydrocotyle vulgaris
 Hypericum undulatum
Juncus subnodulosus
Leersia oryzoides
Lycopus europaeus
Lysimachia vulgaris
Mentha aquatica Menyanthes trifoliata
Myosotis scorpioides aggr.
Nasturtium officinale
Oenanthe aquatica
Oenanthe crocata
Persicaria amphibia
Ranunculus flammula
Ranunculus gmelinii
Ranunculus lingua
Ranunculus omiophyllus
Rorippa amphibia
Rumex hydrolapathum
Sagittaria sagittifolia
Scutellaria galericulata
Sium latifolium
Sparganium emersum

Thelypteris palustris
Veronica anagallis-aquatica
Veronica beccabunga

##D +04 Q53-Tall-sedge-bed

Calamagrostis purpurea
Carex acuta
Carex acutiformis
Carex appropinquata
Carex aquatilis
Carex buxbaumii
Carex canescens
Carex cespitosa
Carex diandra
Carex disticha
Carex elata *Carex hispida*
Carex lasiocarpa
Carex lyngbyei
Carex melanostachya
Carex paniculata
Carex randalpina
Carex rhynchophysa
Carex riparia
Carex rostrata
Carex vesicaria
Carex vulpina
Cladium mariscus
Lysimachia thyrsiflora
Peucedanum palustre
Scolochloa festuacea

##D +04 Q54-Inland-saline-or-brackish-helophyte-bed

Atriplex prostrata
Bolboschoenus maritimus
Carex distachya
Carex extensa
Carex melanostachya
Cirsium brachycephalum
Juncus acutus
Juncus gerardi
Juncus maritimus
Juncus subulatus
Melilotus dentatus
Mentha pulegium
Phragmites australis *Puccinellia distans*
Puccinellia peisonis
Schoenoplectus lacustris subsp. *glaucus*
Schoenoplectus litoralis *Schoenoplectus pungens*
Schoenoplectus triqueter
Scorzonera parviflora
Tripolium pannonicum

Typha domingensis

Typha laxmannii

##D +04 Bog-species

Alectoria nigricans

Andromeda polifolia

Aulacomnium palustre *Betula nana*

Breutelia chrysocoma

Calluna vulgaris

Calypogeia sphagnicola

Campylopus atrovirens

Carex duriei *Carex pauciflora*

Cephalozia connivens

Cephalozia loitlesbergeri

Cephaloziella elachista *Cetraria delisei*

Chamaedaphne calyculata

Cladonia stellaris

Dicranum elongatum

Dicranum leioneuron

Dicranum undulatum *Drosera*

rotundifolia

Empetrum nigrum aggr.

Erica ciliaris

Erica mackaiana

Erica tetralix

Eriophorum vaginatum

Gymnocolea inflata

Isomadophila ericetorum

Juncus squarrosus

Kurzia pauciflora

Lophozia laxa

Mylia anomala

Narthecium ossifragum

Odontoschisma sphagni

Pinguicula villosa

Pleurozia purpurea

Pleurozium schreberi

Polytrichum strictum

Racomitrium lanuginosum

Rhododendron tomentosum

Rhynchospora alba

Rhynchospora fusca *Rubus*

chamaemorus *Schoenus nigricans*

Sphaerophorus globosus aggr.

Sphagnum auriculatum+*inundatum*

Sphagnum austinii

Sphagnum balticum

Sphagnum capillifolium aggr.

Sphagnum compactum

Sphagnum fuscum

Sphagnum magellanicum aggr.

Sphagnum papillosum
Sphagnum recurvum aggr.
Sphagnum rubellum
Sphagnum russowii
Sphagnum strictum
Sphagnum subnitens
Sphagnum tenellum
Trichophorum cespitosum Vaccinium
microcarpum
Vaccinium oxycoccos
Vaccinium uliginosum

##D +04 Fen-species Agrostis canina

Anagallis tenella
Andromeda polifolia
Aneura pinguis
Aulacomnium palustre
Bartsia alpina
Bellis bernardii
Bellium nivale
Blysmus compressus
Bryum pseudotriquetrum
Calamagrostis neglecta
Calliergon giganteum
Calliergon richardsonii
Campyliadelphus elodes
Campylium stellatum
Campylopus atrovirens
Carex appropinquata
Carex aquatilis
Carex atrofusca Carex bicolor
Carex bulgarica
Carex buxbaumii
Carex canescens
Carex capillaris Carex capitata
Carex davalliana
Carex demissa
Carex diandra
Carex dioica
Carex echinata
Carex elata
Carex flava
Carex frigida
Carex heleonastes
Carex hostiana
Carex chordorrhiza
Carex lachenalii Carex lapponica
Carex lasiocarpa
Carex laxa
Carex lepidocarpa
Carex limosa

Carex livida
Carex magellanica
Carex maritima
Carex microglochin
Carex nevadensis
Carex nigra
Carex norvegica Carex panicea
Carex parallela
 Carex pulicaris
 Carex rariflora Carex rostrata
 Carex rotundata
 Carex saxatilis
 Carex tenuiflora
 Carex trinervis
 Carex vaginata
 Carex viridula
 Catoscopium nigratum
 Centaurium littorale
 Cinclidium arcticum
 Cinclidium stygium
 Cinclidium subrotundum Cirsium
 heterotrichum
 Cladopodiella fluitans
 Comarum palustre
 Dactylorhiza cordigera
Dactylorhiza incarnata
Dactylorhiza majalis
Dactylorhiza traunsteineri
Dicranum bonjeanii
Dicranum leioneuron
Drepanocladus polygamus
Drepanocladus pseudostramineus
Drepanocladus sendtneri
Drepanocladus trichophyllus
Drepanocladus tundrae
Drosera intermedia
Drosera longifolia
Drosera rotundifolia
Dupontia fisheri
Eleocharis quinqueflora
Epilobium palustre
Epipactis palustris
Equisetum palustre
Equisetum variegatum
Eriophorum angustifolium
Eriophorum gracile
Eriophorum latifolium
Eriophorum russeolum
Eriophorum scheuchzeri Festuca frigida
Fissidens adiantoides Fissidens osmundoides
Gymnadenia frivaldii

Gymnocolea inflata
Hamatocaulis lapponicus
Hamatocaulis vernicosus
Hammarbya paludosa
Helodium blandowii
Hypericum elodes
Juncus alpinoarticulatus
 Juncus arcticus
 Juncus articulatus
 Juncus biglumis
 Juncus bulbosus
 Juncus castaneus
 Juncus requienii
 Juncus stygius
 Juncus subnodulosus
 Juncus thomasi
 Juncus triglumis
Kobresia simpliciuscula
Leiocolea badensis
Leiocolea bantriensis
Liparis loeselii
Loeskyphnum badium
Meesia hexasticha
Meesia longiseta
Meesia triquetra
Meesia uliginosa
Menyanthes trifoliata
Moerckia hibernica
Myrica gale
Narthecium scardicum
Oncophorus virens Paludella squarrosa
Palustriella commutata aggr.
Parnassia palustris
Pedicularis mixta
Pedicularis palustris
Pedicularis sceptrum-carolinum
Pedicularis sylvatica
Pedicularis verticillata
Peucedanum palustre
Philonotis calcarea
Philonotis fontana
Pinguicula balcanica
Pinguicula corsica
Pinguicula grandiflora
Pinguicula lusitanica
Pinguicula nevadensis
Pinguicula vulgaris
Plantago gentianoides
Polygala amarella
Polytrichum commune
Polytrichum hyperboreum

Potamogeton polygonifolius
Potentilla anglica Preissia quadrata
Primula deorum
Primula farinosa
Primula nutans
Primula scandinavica
Primula stricta Pseudobryum cinclidioides
 Pseudocalliergon lycopodioides
 Pseudocalliergon trifarium
 Pseudocalliergon turgescens
 Ranunculus cordiger
 Ranunculus pyrenaeus
 Rhizomnium pseudopunctatum
 Rhynchospora alba
 Rhynchospora fusca
 Riccardia chamedryfolia
 Riccardia incurvata
 Riccardia multifida
 Salix lapponum
 Salix myrsinites
 Salix myrtilloides
 Salix repens
 Salix reticulata Salix
 rosmarinifolia
Saussurea alpina aggr.
Saxifraga foliolosa
Saxifraga hirculus
Scorpidium revolvens aggr.
Scorpidium scorpioides
Scorzoneroideis microcephala
Scorzoneroideis rilaensis
Scheuchzeria palustris
Schoenus ferrugineus
Schoenus nigricans
Silene asterias
Soldanella pindicola
Sphagnum angermanicum
Sphagnum annulatum
Sphagnum aongstroemii
Sphagnum auriculatum+inundatum
Sphagnum balticum
Sphagnum capillifolium aggr.
Sphagnum contortum
Sphagnum cuspidatum
Sphagnum fimbriatum
Sphagnum jensenii
Sphagnum lenense
Sphagnum lindbergii
Sphagnum majus
Sphagnum molle
Sphagnum obtusum

Sphagnum palustre aggr.
Sphagnum papillosum
Sphagnum platyphyllum
Sphagnum pulchrum
Sphagnum recurvum aggr.
Sphagnum riparium
Sphagnum russowii
Sphagnum subfulvum
 Sphagnum subnitens
 Sphagnum subsecundum
 Sphagnum teres
 Sphagnum warnstorffii
Spiranthes aestivalis
Stellaria palustris
Straminergon stramineum
Succisa pratensis
Thalictrum alpinum
Tofieldia calyculata
Tofieldia pusilla
Tomentypnum nitens
Triglochin maritima
Triglochin palustris
Trichophorum alpinum
Trichophorum cespitosum
Trichophorum pumilum
Tritomaria quinquedentata
Typha lugdunensis
Typha minima
Typha shuttleworthii
Utricularia intermedia
Utricularia ochroleuca
Utricularia bremii
Utricularia minor
Vaccinium oxycoccos Valeriana dioica
Veronica nevadensis
Veronica scutellata
Viola epipsila
Viola palustris
Warnstorfia exannulata
Warnstorfia sarmentosa
Willemetia stipitata

##D +06 Atlantic-bog

Anagallis tenella
Arnica montana
Breutelia chrysocoma
Campylopus atrovirens
Carex durieui
Cladonia portentosa
Cladonia uncialis
Diplophyllum albicans Erica mackaiana

Erica tetralix
Eriophorum vaginatum Hypericum elodes
Mylia taylorii
Narthecium ossifragum Nowellia curvifolia
Odontoschisma sphagni
Pinguicula grandiflora
 Pinguicula lusitanica
 Pleurozia purpurea
 Racomitrium lanuginosum
 Serratula tinctoria
 Schoenus nigricans
 Sphagnum auriculatum+inundatum
 Sphagnum compactum
 Sphagnum magellanicum aggr.
 Sphagnum papillosum
 Sphagnum pylaesii
 Sphagnum recurvum aggr.

##D +06 Continental-bog

Betula nana
Carex pauciflora Cladonia stellaris
Empetrum nigrum aggr.
Eriophorum vaginatum
Chamaedaphne calyculata
Melampyrum pratense Pinus mugo
aggr.

Rhododendron tomentosum
Rubus chamaemorus
Sphagnum compactum
Sphagnum fuscum
Sphagnum magellanicum aggr.
Sphagnum papillosum
Sphagnum recurvum aggr.
Sphagnum russowii
Vaccinium myrtillus
Vaccinium uliginosum
Vaccinium vitis-idaea

##D +07 Non-calcareous-quaking-mire

Calla palustris
Carex aquatilis
Carex diandra
Carex elata
Carex chordorrhiza
Carex lasiocarpa
Carex limosa
Carex livida
Carex magellanica
Carex rariflora Carex rostrata
Carex rotundata
Carex saxatilis

Cladopodiella fluitans
Comarum palustre
Drosera intermedia
Drosera longifolia
Drosera rotundifolia
Equisetum fluviatile Eriophorum angustifolium
 Eriophorum gracile
 Eriophorum scheuchzeri Juncus bulbosus
 Lysimachia thyrsiflora
 Menyanthes trifoliata
 Pedicularis palustris
 Rhynchospora alba
 Rhynchospora fusca
 Scheuchzeria palustris
 Sphagnum annulatum
 Sphagnum balticum
 Sphagnum cuspidatum
 Sphagnum jensenii
 Sphagnum lindbergii
 Sphagnum majus
 Sphagnum recurvum aggr.
 Sphagnum riparium
Sphagnum tenellum
Trichophorum alpinum
Utricularia bremii
Utricularia intermedia
Utricularia minor
Utricularia ochroleuca
Warnstorfia fluitans

##D +07 Poor-fen

Agrostis canina
Aulacomnium palustre Betula nana
Bistorta officinalis
Calluna vulgaris
Carex canescens
Carex echinata
Carex nigra
Carex panicea
Carex magellanica
Crepis paludosa
Dactylorhiza maculata aggr.
Dicran scoparium
Drosera longifolia
Drosera rotundifolia
Epilobium palustre
Eriophorum angustifolium Festuca rubra aggr.
Galium palustre aggr.
Juncus filiformis Melampyrum pratense
Molinia caerulea aggr.
Peucedanum palustre

Polytrichum commune
Polytrichum strictum
Potentilla anglica
 Potentilla erecta Sphagnum capillifolium
 aggr.
 Sphagnum palustre aggr. Sphagnum
 papillosum
 Sphagnum recurvum aggr.
 Sphagnum russowii
 Sphagnum squarrosum
 Straminergon stramineum
 Vaccinium oxycoccus
 Vaccinium uliginosum
 Viola palustris

##D +08 Q11-Raised-bog

Andromeda polifolia
Cladonia stellaris
Eriophorum vaginatum
Mylia anomala
Polytrichum strictum
Rubus chamaemorus
Sphagnum capillifolium aggr.
Sphagnum fuscum
Sphagnum magellanicum aggr.
Sphagnum papillosum
Sphagnum recurvum aggr.
Sphagnum rubellum
Sphagnum russowii
Vaccinium microcarpum

##D +08 Q31-Palsa-mire

Alectoria nigricans
Andromeda polifolia
Cladonia amaurocraea
Cladonia stellaris
Cladonia subfurcata
Coelocaulon divergens
Dicranum elongatum
Eriophorum vaginatum
Ochrolechia androgyna
Ochrolechia inaequatula
Polytrichum strictum
Rubus chamaemorus
Sphaerophorus globosus aggr.
Sphagnum fuscum
Thamnolia vermicularis
Vaccinium microcarpum

##D +09 Acidophilous-fen-species Calypogeia sphagnicola

Cladopodiella fluitans Eriophorum vaginatum
Gymnocolea inflata
Mylia anomala
Odontoschisma sphagni Polytrichum commune
Polytrichum strictum
Racomitrium lanuginosum
Sphagnum affine
Sphagnum annulatum Sphagnum
 aongstroemii
 Sphagnum austinii
 Sphagnum balticum Sphagnum
 capillifolium aggr.
 Sphagnum compactum
 Sphagnum cuspidatum
 Sphagnum fuscum
 Sphagnum jensenii Sphagnum
 lindbergii
 Sphagnum magellanicum aggr.
 Sphagnum majus Sphagnum
 obtusum
 Sphagnum palustre aggr.
Sphagnum papillosum
Sphagnum pulchrum
Sphagnum recurvum aggr.
Sphagnum riparium
Sphagnum rubellum
Sphagnum russowii
Sphagnum strictum
Sphagnum tenellum
Straminergon stramineum
Warnstorfia fluitans

##D +09 Non-acidophilous-fen-species

Aneura pinguis
Bryum pseudotriquetrum
Calliergon giganteum
Calliergon richardsonii
Campyliadelphus elodes
Campylium stellatum
Carex davalliana
Carex lepidocarpa
Catoscopium nigrum
Centaurium littorale
Cephalozia connivens
Cephalozia loitlesbergeri
Cinclidium arcticum
Cinclidium stygium
Cinclidium subrotundum
Dicranum bonjeanii
Drepanocladus polygamus

Drepanocladus sendtneri
Drepanocladus trichophyllus
Drepanocladus tundrae
Eleocharis quinqueflora
Fissidens adianthoides
Fissidens osmundoides Hamatocaulis lapponicus
Hamatocaulis vernicosus
Helodium blandowii
Juncus subnodulosus
Leiocolea badensis
Leiocolea bantriensis
Loeskygnum badium
Meesia hexasticha
Meesia longiseta
Meesia triquetra
Meesia uliginosa
Moerckia hibernica
Narthecium scardicum
Oncophorus virens Paludella squarrosa
Palustriella commutata aggr.
Parnassia palustris
Philonotis calcarea
Philonotis fontana
Pinguicula balcanica
Pinguicula corsica
Pinguicula vulgaris
Pleurozia purpurea
Polygala amarella
Polytrichum hyperboreum
Preissia quadrata
Pseudocalliergon lycopodioides
Pseudocalliergon trifarium
Pseudocalliergon turgescens
Rhizomnium pseudopunctatum
Riccardia chamedryfolia
Riccardia incurvata
Riccardia multifida
Scorpidium revolvens aggr.
Scorpidium scorpioides
Schoenus ferrugineus
Sphagnum auriculatum+inundatum
Sphagnum contortum
Sphagnum fimbriatum
Sphagnum obtusum
Sphagnum platyphyllum
Sphagnum subfulvum
Sphagnum subnitens
Sphagnum subsecundum Sphagnum teres
Sphagnum warnstorffii
Straminergon stramineum Tofieldia calyculata
Tomentypnum nitens

Tritomaria quinquedentata
Warnstorfia exannulata
Warnstorfia sarmentosa

##D +40 Arcto-alpine-rich-fen-species

Alopecurus magellanicus
Aneura pinguis
Aulacomnium palustre
Aulacomnium turgidum
Bistorta vivipara
Blymus compressus
Bryum bimum
Bryum cryophyllum
Bryum pseudotriquetrum
Campylium stellatum
Carex aquatilis
Carex atrofusca
Carex bicolor
Carex capillaris
Carex capitata
Carex concolor *Carex dioica*
Carex maritima
Carex microglochin
Carex nigra
Carex norvegica
Carex panicea
Carex parallela
Carex rariflora *Carex rostrata*
Carex saxatilis
Carex vaginata
Catoscopium nigrum
Cinclidium arcticum
Cinclidium stygium
Cinclidium subrotundum
Cyrtomnium hymenophyllum
Drepanocladus polygamus
Dupontia fisheri
Dupontia pelligera
Euphrasia frigida
Equisetum variegatum
Eriophorum angustifolium
Fissidens adianthoides
Fissidens osmundoides
Juncus alpinoarticulatus
Juncus arcticus
Juncus biglumis
Juncus castaneus *Juncus stygius*
Juncus triglumis
Kobresia simpliciuscula
Loeskyopnum badium
Meesia hexasticha

Meesia longiseta

Meesia triquetra

Meesia uliginosa Oncophorus virens

Parnassia palustris

Pedicularis hirsuta Pinguicula alpina

Pinguicula vulgaris

Primula nutans

Primula scandinavica

Primula stricta

Pseudobryum cinclidioides Ranunculus hyperboreus

Salix polaris Salix reticulata

Saussurea alpina aggr.

Saxifraga aizoides

Saxifraga foliolosa

Saxifraga rivularis

Scorpidium revolvens aggr.

Selaginella selaginoides

Tayloria lingulata

Thalictrum alpinum Tofieldia pusilla

Tomentypnum nitens

Trichophorum cespitosum

Trichophorum pumilum

Triglochin palustris

Warnstorfia tundrae

##D +40 Calcareous-non-quaking-fen-species

Aneura pinguis

Blysmus compressus

Bryum pseudotriquetrum

Campyliadelphus elodes

Campylium stellatum

Carex capillaris

Carex davalliana

Carex dioica

Carex flacca

Carex flava

Carex hordeistichos

Carex hostiana

Carex lepidocarpa

Carex nigra

Carex panicea

Carex trinervis

Carex viridula

Centaurium littorale

Ctenidium molluscum

Cratoneuron filicinum

Dactylorhiza incarnata

Dactylorhiza majalis

Drepanocladus polygamus

Drepanocladus sendtneri

Eleocharis quinqueflora

Epipactis palustris
Eriophorum angustifolium
Eriophorum latifolium
Eupatorium cannabinum
Equisetum palustre
Equisetum telmateia
Equisetum variegatum
Fissidens adianthoides
Gymnadenia conopsea
Hamatocaulis vernicosus
Juncus alpinoarticulatus
Juncus articulatus
Juncus inflexus
Juncus subnodulosus
Linum catharticum
Liparis loeselii Menyanthes trifoliata
Palustriella commutata aggr.
Parnassia palustris
Philonotis calcarea Pinguicula alpina
Pinguicula vulgaris
Polygala amara
Polygala amarella
Primula farinosa
Pseudocalliergon lycopodioides
Salix repens
Sesleria caerulea
Sesleria uliginosa
Scorpidium revolvens aggr.
Schoenus ferrugineus
Schoenus nigricans
Spiranthes aestivalis
Succisa pratensis
Tofieldia calyculata
Tomentypnum nitens
Triglochin maritima
Triglochin palustris
Valeriana dioica

##D +04 R11-Pannonian-and-Pontic-sandy-steppe

Achillea micrantha
Agropyron dasyanthum
Alkanna tinctoria Allium guttatum
Alyssum tortuosum
Anchusa gmelinii
Anchusa ochroleuca
Androsace septentrionalis
Asperula graveolens
Astragalus arenarius
Astragalus varius
Bassia laniflora

Carex colchica Carex
stenophylla
Centaurea arenaria aggr.
Colchicum arenarium
Corispermum nitidum
Dianthus arenarius
Dianthus borbassii
Dianthus diutinus
Dianthus platyodon
Dianthus serotinus
Echinops ritro
Ephedra distachya
Equisetum ramosissimum
Erysimum canum
Erysimum diffusum
Erysimum montanum
Festuca beckeri
Festuca vaginata
Festuca wagneri
Fumana procumbens
Gypsophila paniculata
Helichrysum arenarium
Jacobaea borysthenea
Jurinea cyanoides
Koeleria glauca
Myosotis stricta
Odontarrhena borzseaana
Odontarrhena tortuosa
Onosma arenaria
Pilosella echioides
Polygonum arenarium
Scabiosa ucrainica
Scorzonera ensifolia
Secale sylvestre
Sedum urvillei
Seseli tortuosum Silene chlorantha
Silene otites aggr.
Silene subconica
Stipa borysthenea aggr.
Thymus pallasianus
Tragopogon borystenicus
Tragopogon floccosus
Veronica dillenii
Veronica praecox

##D +04 R12-Cryptogam-and-annual-dominated-vegetation-on-siliceous-rock-outcrops

Aira caryophyllea
Aphanes microcarpa
Arenaria serpyllifolia Armeria rumelica
Cerastium pumilum Draba verna
aggr.

Gagea bohemica
Jasione montana
Lens nigricans
Linaria genistifolia
Micropyrum tenellum
Minuartia greuteriana
Myosotis ramosissima
Myosotis stricta
Plantago subulata
Poa bulbosa
Poa glauca
Poa perconcinna
Potentilla argentea
Potentilla tabernaemontani
Scleranthus perennis
Sedum acre
Sedum album
Sedum anglicum
Sedum annuum
Sedum brevifolium *Sedum rupestre*
Sedum sexangulare
Sempervivum arachnoideum
Sempervivum montanum
Sempervivum ruthenicum
Silene rupestris
Thymus caespititius
Trifolium arvense
Trifolium dalmaticum
Trifolium subterraneum
Veronica dillenii
Veronica verna
Vulpia bromoides

##D +04

R13-Cryptogam-and-annual-dominated-vegetation-on-calcareous-and-ultramafic-rock-

outcrops

Abietinella abietina
Aethionema saxatile
Allium sphaerocephalon
Alyssum alyssoides
Alyssum montanum
Androsace elongata
Androsace septentrionalis
Arabidopsis thaliana *Arabis auriculata*
Arenaria leptoclados
Arenaria serpyllifolia
Artemisia rupestris
Asperula tenella
Athalamia hyalina
Barbula convoluta
Bryum caespititium
Bryum elegans

Cerastium brachypetalum Cerastium pumilum
Cerastium semidecandrum
Cladonia symphylicarpa
Clinopodium acinos
Clinopodium suaveolens
Crepis foliosa
Didymodon fallax
Didymodon ferrugineus
Didymodon rigidulus
Distichium capillaceum Draba verna
aggr.
Encalypta rhaptocarpa
Encalypta streptocarpa
Encalypta vulgaris
Festuca oelandica
Galium oelandicum
Gypsophila fastigiata
Holosteum umbellatum
Homalothecium sericeum
Hornungia petraea
Jovibarba globifera
Leptogium schraderi
Linaria genistifolia Medicago minima
Medicago monspeliaca
Minuartia mesogitana
Mycobilimbia lurida
Noccaea ochroleuca
Noccaea perfoliata
Petrohragia saxifraga
Poa bulbosa
Poa compressa
Poa perconcinna
Potentilla tabernaemontani
Psora decipiens
Saxifraga tridactylites
Sedum acre
Sedum album
Sedum rupestre
Sedum sediforme
Sedum sexangulare
Silene uniflora
Sisymbrium supinum
Taraxacum sect. Erythrosperma
Tortella inclinata
Tortella rigens
Tortella tortuosa
Valeriana tuberosa
Veronica praecox

##D +04 R14-Perennial-rocky-grassland-of-the-Italian-Peninsula
Alyssoides utriculata

Anthyllis vulneraria
Armeria canescens
Armeria denticulata
Artemisia alba
Asperula aristata
Asperula purpurea
Asphodeline lutea
Brachypodium genuense
Carex humilis
Carex macrolepis
Centaurea ambigua
Centaurea aplolepa
Centaurea rupestris aggr.
Cephalaria leucantha
Crepis lacera
Cyanus triumfettii
Cytisus spinescens
Dianthus ciliatus
Eryngium amethystinum
Erysimum pseudorhaeticum
Euphorbia spinosa
Festuca circummediterranea
Festuca inops
Festuca robustifolia
Genista januensis
Globularia meridionalis
Hyssopus officinalis
Inula montana
Jurinea mollis
Knautia purpurea
Koeleria lobata
Koeleria splendens
Minuartia laricifolia subsp. ophiolitica
Odontarrhena bertolonii
Phleum ambiguum
Pimpinella saxifraga
Plantago holosteum
Potentilla rigoana Ruta graveolens
Salvia officinalis
Scorzoneroideis cichoriacea
Sesleria nitida
Silene otites aggr.
Stipa dasyvaginata Stipa etrusca
Thymus longicaulis
Thymus striatus
Trinia glauca
Valeriana tuberosa
Viola eugeniae

##D +04 R15-Continental-dry-rocky-steppic-grassland-and-dwarf-scrub-on-chalk-outcrops

Allium sphaeropodium Alyssum tortuosum

Anthemis trotzkiana
Artemisia hololeuca
Artemisia nutans
Artemisia salsoloides
Asperula tephrocarpa
Astragalus albicaulis
Atraphaxis decipiens
Brassica elongata subsp. pinnatifida
Centaurea marschalliana
Diplotaxis cretacea
Echinops meyeri
Gypsophila altissima
Hedysarum razoumovianum
Jurinea arachnoidea
Koeleria talievii
Linum ucranicum
Matthiola fragrans
Meniocus linifolius
Onosma simplicissima
Polygala cretacea
Rhaponticoides ruthenica
Scabiosa isetensis
Scrophularia cretacea
Seseli glabratum
Silene cretacea
Silene supina
Thymus calcareus
Zygophyllum pinnatum

##D +04 R16-Perennial-rocky-grassland-of-Central-and-South-Eastern-Europe

Allium flavum
Anthericum ramosum
Anthyllis vulneraria
Asperula cynanchica
Bromopsis pannonica
Campanula sibirica
Carex humilis
Centaurea stoebe
Erysimum odoratum
Euphorbia cyparissias
Festuca csikhegyensis
Festuca dalmatica
Festuca pallens
Fumana procumbens
Galium austriacum
Globularia cordifolia
Helianthemum nummularium
Helictotrichon decorum
Inula ensifolia
Jovibarba globifera
Melica ciliata

Minuartia setacea

Poa badensis aggr.
Potentilla incana
Sanguisorba minor
Satureja pilosa
Satureja montana
Scabiosa ochroleuca
Sedum album
Seseli austriacum
Seseli leucospermum
Seseli osseum
Sesleria rigida
Stachys recta
Stipa eriocalis
Teucrium chamaedrys
Teucrium montanum
Thymus comosus
Thymus praecox
Vincetoxicum hirundinaria

##D +04 R17-Heavy-metal-dry-grassland-of-the-Balkans

Achillea pseudopectinata
Anchusa stridii
Armeria canescens
Asperula ophiolitica
Asplenium adiantum-nigrum subsp. serpentini
Bufonia euboica
Centaurea grisebachii
Centaurea kosaninii
Centaurea vlachorum
Cerastium neoscardicum
Dianthus giganteus
Drymocallis rupestris
Erysimum linariifolium Euphorbia glabriflora
Euphorbia montenegrina
Fumana bonapartei
Gentiana nopscae
Gypsophila spergulifolia
Halacsya sendtneri
Haplophyllum boissierianum
Minuartia verna
Noccaea kovatsii
Odontarrhena heldreichii Odontarrhena markgrafii
Paragymnopteris marantae
Pistorinia hispanica
Plantago holosteum
Polygonum albanicum
Potentilla astracanica
Potentilla mollis
Potentilla visianii
Scabiosa achaeta

Scabiosa leucophylla

Scleranthus perennis

Scrophularia canina

Sedum hispanicum

Sedum ochroleucum

Sedum serpentine

Sesleria latifolia

Silene armeria

Silene bupleuroides subsp. *staticifolia*

Stachys goulimyi

Stachys scardica

Thesium vlachorum

Tulipa serbica

Verbascum glabratum

##D +04 R18-Perennial-rocky-calcareous-grassland-of-subatlantic-submediterranean-Europe

Anthyllis vulneraria

Aphyllanthes monspeliensis

Asperula cynanchica

Bothriochloa ischaemum

Bromopsis erecta

Carex halleriana *Carex humilis*

Coronilla minima

Fumana procumbens

Genista scorpius

Globularia bisnagarica *Globularia repens*

Helianthemum apenninum

Helianthemum canum

Helictochloa bromoides

Helictochloa pratensis

Helichrysum stoechas

Hippocrepis comosa

Koeleria vallesiana

Linum suffruticosum aggr.

Ononis striata

Potentilla tabernaemontani

Sedum sediforme

Seseli montanum

Sesleria autumnalis

Teucrium chamaedrys

Teucrium montanum

Thymus vulgaris

##D +04 R19-Dry-steppic-submediterranean-pasture-of-the-Amphi-Adriatic-region

Alyssum diffusum

Anthyllis montana

Bromopsis condensata

Bupleurum veronense

Carex humilis

Centaurea cristata

Centaurea rupestris aggr.

Chrysopogon gryllus Cytisus

pseudoprocumbens

Dianthus garganicus

Dianthus sylvestris

Edraianthus tenuifolius

Eryngium amethystinum

Euphorbia spinosa

Fumana procumbens

Galium corrudifolium

Genista sericea

Genista sylvestris

Globularia cordifolia

Hippocrepis glauca

Iris pseudopumila

Koeleria lobata

Koeleria splendens Linum

tommasinii

Medicago prostrata

Melica transsilvanica

Plantago holosteum

Salvia officinalis

Sanguisorba minor

Satureja montana

Satureja subspicata Scorzonera villosa

Sesleria juncifolia

Stipa austroitalica

Teucrium chamaedrys

Teucrium montanum

##D +04 R1A-Semi-dry-perennial-calcareous-grassland

Adonis vernalis

Agrimonia eupatoria

Anacamptis pyramidalis

Anthericum ramosum

Arabis hirsuta

Asperula cynanchica

Astragalus austriacus

Astragalus onobrychis Avenula pubescens

Brachypodium pinnatum

Brachypodium rupestre

Briza media

Bromopsis erecta

Campanula bononiensis Campanula glomerata

Carex caryophylllea

Carex flacca

Carex michelii

Carex montana

Carlina acaulis

Carlina biebersteinii

Carlina vulgaris

Centaurea scabiosa Chamaespartium sagittale

Chrysopogon gryllus
Cirsium acaulon
Cirsium pannonicum
Clematis integrifolia
Cruciata glabra
Cytisus austriacus
Danthonia alpina
Dianthus carthusianorum
Dianthus hyssopifolius
Euphorbia cyparissias
Euphrasia nemorosa
Festuca stricta subsp. sulcata
Filipendula vulgaris
Fragaria viridis
Galium pumilum
Galium verum
Gentiana cruciata
Gentianella amarella
Gentianella ciliata
Gentianella germanica Gymnadenia conopsea
Gypsophila paniculata
Helictochloa pratensis
Helictotrichon desertorum
Hippocrepis comosa
Homalothecium lutescens
Hypochaeris maculata
Jacobaea erucifolia
Jacobaea vulgaris
Knautia illyrica
Koeleria pyramidata
Leontodon hispidus
Linum catharticum
Linum hirsutum
Neotinea ustulata
Onobrychis arenaria
Onobrychis montana
Onobrychis viciifolia
Ononis spinosa
Ophrys apifera
Ophrys holosericea
Ophrys insectifera
Ophrys sphegodes
Orchis anthropophora
Orchis mascula
Orchis militaris Orchis purpurea
Origanum vulgare
Peucedanum arenarium Peucedanum cervaria
Pimpinella nigra
Pimpinella saxifraga
Plantago media
Poa pratensis aggr.

Polygala amarella
Polygala comosa
Polygala major Potentilla heptaphylla

Primula veris
Prunella grandiflora
Prunella laciniata
Ranunculus bulbosus
Ranunculus polyanthemus
Salvia nemorosa
Salvia pratensis
Salvia verticillata
Sanguisorba minor
Scabiosa canescens
Scabiosa columbaria
Scabiosa ochroleuca

Scorzonera villosa
Securigera varia
Seseli annuum
Teucrium chamaedrys
Teucrium pyrenaicum Thalictrum minus
Thesium linophyllon
Thymus praecox
Tragopogon pratensis
Trifolium montanum
Trifolium ochroleucon
Veronica austriaca
Veronica prostrata
Vincetoxicum hirundinaria
Viola hirta

##D +04 R1B-Continental-dry-grassland-true-steppe

Agropyron cristatum
Allium flavum
Allium globosum Allium rubens
Alyssum lenense
Alyssum obovatum
Artemisia austriaca
Artemisia pontica
Asperula petraea
Astragalus austriacus
Astragalus dasyanthus
Astragalus exscapus
Astragalus helmii
Astragalus karelinianus
Astragalus onobrychis
Astragalus subuliformis
Bassia prostrata
Bothriochloa ischaemum
Campanula sibirica
Carex humilis
Carex pediformis

Carex stenophylla
Carex supina
Centaurea ruthenica
Centaurea sibirica Centaurea stoebe
Centaurea turgaica
Cephalaria uralensis
Clausia aprica
Cleistogenes serotina
Cotoneaster melanocarpus
Crambe tataria
Cytisus austriacus
Dianthus acicularis
Dianthus pontederiae
Dianthus uralensis
Dracocephalum austriacum
Elytrigia intermedia
Elytrigia pruinifera
Elytrigia reflexiaristata
Ephedra distachya
Eryngium campestre
Erysimum diffusum
Festuca valesiaca aggr.
Galatella villosa
Galium octonarium
Galium ruthenicum
Goniolimon besseranum
Goniolimon collinum
Goniolimon tataricum
Hedysarum argyrophyllum
Hedysarum grandiflorum
Helictotrichon desertorum
Hylotelephium triphyllum
Hypericum elegans
Inula ensifolia
Inula oculus-christi
Iris pumila
Jurinea arachnoidea
Jurinea mollis
Jurinea stoechadifolia
Koeleria brevis
Koeleria macrantha
Koeleria sclerophylla
Linaria uralensis Linum austriacum
Linum hirsutum
Marrubium peregrinum
Medicago cancellata
Minuartia krascheninnikovii
Nepeta ucranica
Nonea pulla
Orostachys spinosa
Oxytropis floribunda

Oxytropis pilosa
Paeonia tenuifolia
Phlomis herba-venti
Phlomis tuberosa
Polygala sibirica
Pontechium maculatum
Potentilla argentea
Potentilla incana
Pulsatilla uralensis
Ranunculus illyricus
Salvia aethiopis
Salvia austriaca
Salvia nemorosa
Salvia nutans
Scabiosa isetensis
Scorzonera austriaca
Sedum hybridum
Seseli tortuosum
Silene altaica
Stipa borysthena aggr.
Stipa capillata
Stipa dasyphylla
Stipa korshinskyi
Stipa lessingiana
Stipa orientalis
Stipa pennata
Stipa pulcherrima
Stipa ucrainica
Stipa zalesskii
Tanacetum kittaryanum
Taraxacum serotinum
Teucrium chamaedrys
Thalictrum foetidum
Thymus bashkiriensis
Thymus guberlinensis
Thymus minussinensis
Thymus pannonicus aggr.
Thymus punctulosus
Thymus talijevii
Thymus uralensis
Verbascum phoeniceum
Veronica austriaca
Veronica prostrata

##D +04 R1C-Desert-steppe

Agropyron desertorum
Alyssum turkestanicum
Anabasis cretacea
Anthemis trotzkiana
Artemisia austriaca
Artemisia lerchiana

Artemisia lessingiana
Artemisia salsoloides Artemisia taurica
Asparagus inderiensis
Astragalus macropus
Astragalus tenuifolius
Atraphaxis decipiens
Atraphaxis frutescens
Bassia prostrata
Centaurea carbonata
Centaurea kasakorum
Crambe aspera
Echinops meyeri
Ephedra distachya
Eremogone koriniana
Ferula caspica
Ferula orientalis
Ferula tatarica
Galatella tatarica
Galatella villosa
Gypsophila rupestris
Hedysarum cretaceum
Hedysarum razoumovianum
Hedysarum tscherkassovae
Jurinea kirghisorum
Jurinea multiflora
Lepidium meyeri
Leymus akmolinensis
Leymus ramosus
Limonium cretaceum
Matthiola fragrans
Meniocus linifolius
Odontarrhena tortuosa
Psathyrostachys hyalantha
Psathyrostachys juncea
Seseli glabratum
Sterigmostemum tomentosum
Stipa lessingiana
Stipa sareptana
Tanacetum achilleifolium
Tulipa biebersteiniana
Xeranthemum annuum
Zygophyllum pinnatum

##D +04 R1D-Mediterranean-closely-grazed-dry-grassland

Achillea coarctata
Allium guttatum
Alyssum turkestanicum
Ammoides pusilla
Anthemis arvensis
Arenaria pomelii
Astragalus cymbicarpos

Astragalus echinatus
Astragalus incanus
Astragalus macrorrhizus Astragalus pelecinus
Astragalus scorpioides
Astragalus sesameus
Astragalus stella
Barbarea bracteosa
Bellis annua
Biscutella baetica Biscutella lyrata
Carex caryophylla
Clinopodium alpinum
Colchicum filifolium
Convolvulus lineatus
Crepis zacintha
Daucus muricatus
Erodium botrys
Erodium cicutarium
Erodium laciniatum
Festuca trichophylla
Galium murale
Hedypnois cretica
Hedysarum humile
Hypochaeris cretensis
Lagurus ovatus
Linaria simplex
Lotus angustissimus Lupinus micranthus
Medicago intertexta Moenchia erecta
Molineriella minuta
Moraea sisyrinchium
Myosotis ramosissima
Ophrys sphegodes
Ornithogalum collinum
Otospermum glabrum
Parentucellia latifolia
Paronychia argentea
Paronychia echinulata
Plantago albicans
Plantago coronopus aggr.
Plantago lagopus
Plantago loeflingii Plantago serraria
Poa bulbosa
Potentilla calabra
Ranunculus bullatus
Ranunculus paludosus
Ranunculus pseudomillefoliatus
Romulea bulbocodium
Romulea linaresii
Romulea ramiflora Scorpiurus vermiculatus
Scorzonera villosa
Taraxacum obovatum
Teucrium polium aggr.

Thymus spinulosus
Trifolium bionae
Trifolium bocconeii
Trifolium cherleri
Trifolium gemellum
Trifolium glomeratum
Trifolium micranthum
Trifolium nigrescens
Trifolium scabrum
Trifolium subterraneum
Trifolium suffocatum
Trifolium tomentosum
Trigonella gladiata
Urospermum picroides
Vicia lutea
Vulpia sicula

##D +04 R1E-Mediterranean-tall-perennial-dry-grassland

Allium agrigenum
Allium baeticum
Allium chamaemoly
Allium melananthum
Allium moschatum
Allium pallens
Allium sphaerocephalon
Allium subvillosum
Ampelodesmos mauritanicus
Anacamptis papilionacea
Andropogon distachyos
Andryala integrifolia
Andryala laxiflora
Anthemis muricata
Anthyllis cytisoides
Arenaria valentina
Arenaria x decipiens
Aristida adscensionis
Armeria arenaria
Armeria castroviejoi
Arrhenatherum album
Asparagus aphyllus
Asparagus horridus Asphodeline lutea
Asphodelus ayardii
Asphodelus cerasiferus
Asphodelus macrocarpus
Asphodelus ramosus
Atractylis humilis
Bellis sylvestris
Biarum dispar Bituminaria bituminosa
 Brachypodium boissieri
 Brachypodium retusum
 Camphorosma monspeliaca

Carex flacca
Carlina corymbosa Carlina graeca
Cenchrus setaceus
Centaurea pulvinata
Cistus clusii
Drimia maritima
Colchicum triphyllum
Convolvulus althaeoides
Dactylis glomerata
Daucus carota
Daucus crinitus
Daucus setifolius
Dipcadi serotinum
Distichoselinum tenuifolium
Drimia maritima
Drimia undata
Eryngium dichotomum Eryngium dilatatum
Eryngium triquetrum
Ferula loscosii
Festuca caerulescens
Festuca capillifolia
Festuca scariosa
Fumana ericoides
Fumana thymifolia
Gladiolus italicus
Helianthemum cinereum
Helictochloa bromoides
Helictochloa gervaisii
Helictotrichon filifolium
Heteropogon contortus
Hyparrhenia hirta
Hyparrhenia sinaica
Lapiedra martinezii Lathyrus clymenum
Lavandula multifida
Leontodon tuberosus
Leucojum valentinum
Linum narbonense
Linum strictum aggr.
Lobularia maritima
Lotus ornithopodioides Lygeum spartum
Macrochloa tenacissima
Malva agrigentina
Micromeria graeca
Moricandia arvensis
Narcissus dubius Ophrys bombyliflora
Ophrys lutea
Ophrys omegaifera
Ophrys speculum
Ophrys tenthredinifera
Ornithogalum narbonense
Pallenis spinosa

Phagnalon rupestre
Phagnalon saxatile
Phlomis lychnitis
Polygonum tenorii
Prangos ferulacea
Ranunculus bullatus
Ranunculus paludosus
Reichardia picroides
Rhaponticum coniferum
Ruta angustifolia
Salvia verbenaca
Scorzonera cretica
Sedum sediforme
Stipa apertifolia
Stipa barbata
Stipa capillata
Stipa cazorlensis
Stipa clausa
Stipa iberica
Stipa juncea
Stipa lagascae
Stipa offneri
Stipa parviflora
Teucrium pseudochamaepitys
Thapsia villosa
Thymus orospedanus
Thymus vulgaris
Thymus zygis
Trisetum velutinum
Vella pseudocytisus

##D +04 R1F-Mediterranean-annual-rich-dry-grassland

Aegilops geniculata
Aizoanthemopsis hispanica
Allium pentadactyli
Alyssum alyssoides
Alyssum granatense
Alyssum simplex
Ammoides pusilla
Anacamptis coriophora Androsace elongata
Anisantha fasciculata
Arabis auriculata
Arenaria arundana
Arenaria capillipes
Arenaria conimbricensis
 Arenaria leptoclados Arenaria modesta
 Arenaria obtusiflora
 Arenaria pomelii
 Arenaria retusa
 Asteriscus aquaticus
 Asterolinon linum-stellatum

Atractylis cancellata
Avena barbata
Bombycilaena erecta
Buglossoides incrassata
Bupleurum baldense
Bupleurum gerardi
Bupleurum gracile
Bupleurum semicompositum
Callipeltis cucullaria
Campanula dichotoma
Campanula erinus
Catananche lutea
Catapodium rigidum
Cerastium pumilum
Chaenorhinum grandiflorum
Chaenorhinum macropodium
Chaenorhinum rubrifolium
Clypeola jonthlaspi
Coronilla scorpioides
Crepis neglecta
Crucianella angustifolia
Ctenopsis gypsophila
Daucus durieua
Dianthus humilis
Echinaria capitata
Erodium recoderi Eryngium grosii
Erysimum incanum
Euphorbia exigua
Euphorbia falcata
Euphorbia sulcata
Filago eriocephala
Filago pyramidata
Galium parisiense
Gastridium ventricosum
Hedysarum spinosissimum
Helianthemum angustatum
Helianthemum salicifolium
Hippocrepis biflora
Hippocrepis ciliata
Hornungia petraea
Hypericum perforatum
Hypochaeris achyrophorus Iberis fontqueri
Jasione montana
Jasione penicillata Lactuca viminea
Lathyrus sphaericus
Limonium echioides
Linaria huteri
Linaria micrantha
Linaria oblongifolia
Linaria platycalyx
Linaria salzmannii

Linaria saturejoides
Linaria simplex
Linum strictum aggr.
Lomelosia stellata
Lotus ornithopodioides
Medicago littoralis
Medicago minima
Medicago rigidula
Melilotus neapolitana
Micropus supinus
Microrrhinum minus
Minuartia hamata
Minuartia hybrida aggr.
Minuartia mediterranea
Minuartia montana
Moraea sisyrinchium
Neatostema apulum
Nepeta hispanica
Odontites longiflora
Odontites purpurea
Odontites viscosus
Omphalodes commutata
Omphalodes linifolia
Onobrychis caput-galli
Ononis ornithopodioides
Ononis pendula
Ononis pubescens
Ononis reclinata
Ononis viscosa
Orlaya grandiflora
Parapholis strigosa
Petrorhagia saxifraga
Pistorinia breviflora
Plantago albicans
Plantago amplexicaulis
Plantago bellardi
Platycapnos tenuiloba Polygala monspeliaca
Ptilostemon stellatus
Romulea columnae
Salvia verbenaca
Scorpiurus muricatus Sherardia arvensis
Sideritis romana
Silene almolae
 Silene germana
 Silene inaperta
 Silene psammitis
 Stipa capensis
 Thymelaea passerina
 Trachynia distachya Trifolium cherleri
 Trifolium stellatum
 Trisetaria loeflingiana Trisetaria scabriuscula

Valerianella eriocarpa
Valerianella multidentata
Valerianella rimosa
Velezia rigida
Vulpia ciliata
Vulpia ligustica
Vulpia unilateralis
Wangenheimia lima
Xeranthemum annuum

##D +04 R1G-Iberian-oromediterranean-siliceous-dry-grassland

Agrostis tileni
Androsace rioxana
Armeria caespitosa
Armeria duriaei
Artemisia granatensis
Erigeron frigidus
Eryngium glaciale
Festuca clementei
Festuca indigesta
Festuca pseudeskia
Herniaria boissieri
Hormathophylla purpurea
Jasione crispa
Leucanthemopsis flaveola
Luzula caespitosa
Luzula spicata subsp. nevadensis
Pilosella vahliei
Potentilla nevadensis
Silene ciliata
Teesdalia conferta
Trisetum glaciale

##D +04 R1H-Iberian-oromediterranean-basiphilous-dry-grassland

Allium moly
Anthyllis vulneraria
Arenaria aggregata
Artemisia pedemontana
Asperula pyrenaica Asphodelus albus
Astragalus cavanillesii Astragalus incanus
Astragalus tremolsianus
 Brimeura amethystina Carex
 brevicollis
 Carlina acanthifolia
 Centaurea podospermifolia
 Crepis albida
 Cytisus ardoinii
 Dichoropetalum schottii
 Draba hispanica
 Erodium cazorlanum
 Erodium daucoides

Erodium glandulosum
Eryngium bourgatii
Erysimum humile
Erysimum seipkae
Euphorbia duvalii
Festuca altopyrenaica
Festuca burnatii
Festuca hystrix
Festuca liviensis
Festuca marginata subsp. andres-molinae
Festuca nevadensis
Festuca ochroleuca
Fritillaria pyrenaica
Genista lobelii
Genista pilosa
Genista pulchella
Helianthemum nummularium
Helictotrichon sedenense
Helictotrichon sempervirens
Hieracium cerinthoides
Iberis saxatilis
Koeleria vallesiana
Laserpitium nestleri
Lavandula angustifolia
Lavandula latifolia
Leontodon crispus
Leucanthemum burnatii
Leucanthemum graminifolium
Linaria aeruginea
Linum milletii
Linum viscosum
Lomelosia graminifolia
Minuartia villarii
Narcissus assoanus
Onobrychis pyrenaica
Ononis cristata
Ononis striata
Onosma fastigiata
Ornithogalum collinum Pimpinella trragium
Plantago argentea
Plantago monosperma
Saponaria caespitosa
Saxifraga conifera
Sempervivum calcareum
Senecio doronicum
Senecio lagascanus
Senecio provincialis
Seseli montanum
Sesleria autumnalis
Sideritis glacialis
Sideritis hyssopifolia

Taraxacum aragonicum
Teucrium luteum
Thesium catalaunicum
Thymelaea tinctoria
Thymus godayanus
Thymus mastigophorus
Thymus willkommii
Veronica tenuifolia

##D +04 R1J-Cyrno-Sardean-oromediterranean-siliceous-dry-grassland

Armeria multiceps
Armeria sardoa
Cerastium soleirolii
Festuca morisiana
Genista lobelii
Pilosella soleiroliana
Poa balbisii
Sagina pilifera
Scleranthus perennis subsp. burnatii
Trisetum conradiae

##D +04 R1K-Balkan-and-Anatolian-oromediterranean-dry-grassland

Alopecurus gerardi
Beta nana
Corydalis blanda
Corydalis densiflora
Erigeron epiroticus
Gnaphalium supinum
Herniaria parnassica Luzula pindica
Phleum alpinum aggr.
Plantago atrata
Plantago holosteum
Poa pumila
Ranunculus sartorianus Rorippa thracica
Thesium parnassi
Trifolium heldreichianum
Trifolium noricum
Trifolium pallescens Trifolium parnassii
Trinia guicciardii

##D +04 R1L-Madeiran-oromediterranean-siliceous-dry-grassland

Andryala glandulosa
Anthoxanthum maderense
Anthyllis lemanniana
Argyranthemum pinnatifidum subsp. montanum
Armeria maderensis
Crepis vesicaria subsp. andryaloides
Deschampsia maderensis
Festuca jubata
Micromeria varia subsp. thymoides
Odontites holliana

Orchis mascula subsp. scopulorum
Parafestuca albida
Rumex bucephalophorus subsp. canariensis
Saxifraga maderensis
Sinapidendron frutescens
Teucrium francoi
Vicia capreolata
Viola paradoxa

##D +04 R1M-Lowland-to-submontane-dry-to-mesic-grassland-usually-Nardus

Ajuga tenorei
Antennaria dioica
Arnica montana
Campanula serrata
Carex ericetorum
Carex leporina
Carex pilulifera
Danthonia decumbens
Dianthus deltoides
Festuca filiformis
Festuca microphylla
Galium saxatile
Gentiana pannonica
Gentiana pneumonanthe
Gnaphalium sylvaticum
Hypericum maculatum
Jasione laevis
Juncus squarrosus Lathyrus linifolius
Luzula campestris aggr.
Meum athamanticum
Nardus stricta
Pedicularis sylvatica
Pilosella aurantiaca
Pilosella lactucella
Platanthera bifolia
Polygala serpyllifolia Polygala vulgaris
Potentilla aurea
Potentilla erecta
Ranunculus pollinensis
Scorzoneroideis helvetica
Veronica officinalis
Viola canina

##D +04 R1N-Open-Iberian-supramediterranean-dry-acid-and-neutral-grassland

Armeria caballeroi Armeria ciliata
Armeria eriophylla
Armeria langei
Armeria merinoi
Armeria transmontana
Bufonia macropetala
Centaurea borjae

Centaurea toletana
Dianthus loricifolius
Festuca brigantina
Festuca gredensis
Festuca longiauriculata
Festuca rivas-martinezii
Festuca summilusitana
Herniaria scabrida
Leucanthemopsis pallida
Leucanthemopsis pulverulenta
Linaria aeruginea
Ornithogalum concinnum
Ortegia hispanica
Pilosella castellana
Reseda virgata
Sagina merinoi
Thymus izcoi

##D +04 R1P-Oceanic-to-subcontinental-inland-sand-grassland-on-dry-acid-and-neutral-soils

Agrostis castellana
Agrostis vinealis
Aira caryophyllea
Aira praecox
Arenaria serpyllifolia
Armeria maritima
Armeria rumelica
Carex arenaria
Carex colchica
Cerastium arvense
Cerastium semidecandrum
Cetraria aculeata
Dianthus armeria
Dianthus carthusianorum
Dianthus deltoides Draba verna aggr.
Erysimum diffusum
Festuca filiformis
Festuca polesica
Festuca stricta subsp. trachyphylla
Filago arvensis
Filago minima
Helichrysum arenarium
 Herniaria glabra
 Hypochaeris radicata
 Jasione heldreichii
 Jasione montana
 Koeleria glauca
 Leontodon saxatilis
 Micropyrum tenellum
 Myosotis ramosissima
 Myosotis stricta
 Ornithopus perpusillus

Phelipanche arenaria
Phelipanche purpurea
Pilosella officinarum
Potentilla argentea Rumex
thyrsiflorus
Saxifraga bulbifera
Sedum acre Sedum
sexangulare
Silene otites aggr.
Taraxacum sect. Erythrosperma
Thymus serpyllum
Trifolium arvense
Trifolium campestre
Veronica dillenii Veronica
verna Vicia lathyroides
Viola tricolor aggr.
Vulpia bromoides
Vulpia myuros

##D +04 R1Q-Inland-sanddrift-and-dune-with-siliceous-grassland

Agrostis vinealis
Aira caryophyllea
Aira praecox
Campylopus introflexus
Carex arenaria
Cetraria aculeata
Corynephorus canescens
Filago minima
Jasione montana
Ornithopus perpusillus
Spergula morisonii
Teesdalia nudicaulis
Thymus serpyllum
Vulpia myuros

##D +04 R1R-Mediterranean-to-Atlantic-open-dry-acid-and-neutral-grassland

Aira caryophyllea
Aira cupaniana
Aira elegantissima
Aira tenorii
Airoopsis tenella
Andryala integrifolia Anthoxanthum aristatum
Anthyllis cornicina
Anthyllis lemanniana
Anthyllis lotoides
Apera interrupta
Aphanes cornucopioides
Arabis nova
Asterolinon linum-stellatum
Astragalus pelecinus
Briza maxima

Briza minor
Campanula lusitanica Cerastium gracile
Chamaemelum fuscatum
Coronilla dura
Corynephorus divaricatus
Crassula tillaea
Crucianella angustifolia
Ctenopsis delicatula
Eryngium tenue
Filago carpetana Filago gallica
Filago lutescens
Filago minima
Filago pygmaea
Galium divaricatum
Gaudinia coarctata
Gnaphalium teydeum
Helianthemum aegypticum
Helianthemum sanguineum
Hispidella hispanica
Holcus annuus
Holcus gayanus
Hypochaeris glabra
Jacobaea minuta
Lathyrus angulatus
Lathyrus inconspicuus
Lathyrus sphaericus
Leontodon saxatilis
Linaria elegans
Linaria intricata
Linaria pelisseriana
Linaria saxatilis
Linum trigynum
Lotus conimbricensis
Micropyrum patens
Micropyrum tenellum
Moenchia erecta
Molineriella australis
Molineriella laevis
Molineriella minuta
Myosotis incrassata
Myosotis stricta Onobrychis caput-galli
Ononis cintrana
Ornithopus compressus
Ornithopus perpusillus
Ornithopus pinnatus
Paronychia cymosa
Paronychia echinulata
Periballia involucrata
Petrorhagia prolifera
Plantago bellardii
Psilurus incurvus

Pterocephalidium diandrum
Rostraria azorica
Rumex bucephalophorus
Scleranthus delortii
Sedum andegavense
Sedum arenarium
Sedum caespitosum
Sedum pedicellatum
Silene mariana
Silene portensis
Silene psammitis
Silene scabriflora
Teesdalia coronopifolia
Teesdalia nudicaulis
Thymus caespititius
Tolpis barbata
Tolpis umbellata
Trifolium bocconeii
Trifolium cherleri
Trifolium phleoides
Trifolium stellatum
Trifolium striatum
Trifolium strictum
Trifolium sylvaticum
Trisetaria ovata
Tuberaria guttata
Viola parvula
Vulpia bromoides
Vulpia ciliata
Vulpia muralis
Vulpia myuros
Vulpia unilateralis

##D +04 R1T-Azorean-open-dry-acid-to-neutral-grassland

Agrostis congestiflora
Agrostis gracililaxa
Brachypodium gaditanum
Carex hochstetteriana Carex
peregrina Carex vulcani
Centaurium scilloides
Deschampsia foliosa
Euphorbia azorica
Euphrasia azorica
Euphrasia grandiflora
Festuca francoi
Festuca petraea
Holcus rigidus
Leontodon filii
Leontodon rigens
Luzula purpureosplendens
Lysimachia azorica

Myosotis azorica
Scabiosa nitens
Tolpis azorica
Veronica dabneyi

##D +04 R21-Mesic-permanent-pasture-of-lowlands-and-mountains Achillea millefolium aggr.

Agrostis capillaris
Agrostis stolonifera
Alopecurus geniculatus
Anacamptis coriophora
Anthoxanthum odoratum aggr.
Bellis perennis
Carum carvi
Carum verticillatum
Cerastium fontanum subsp. vulgare
Chamaemelum nobile
Crepis aurea
Cynosurus cristatus
Euphrasia rostkoviana Festuca rubra aggr.
Hordeum bulbosum
Hordeum secalinum
Hypochaeris radicata
Leontodon hispidus Lolium perenne
Lotus corniculatus
Phleum pratense
Plantago alpina
Plantago lanceolata
Poa alpina
Poa pratensis aggr.
Poa trivialis
Prunella vulgaris
Ranunculus bulbosus
Ranunculus repens
Schedonorus pratensis
Scorzoneroideis autumnalis
Taraxacum sect. Taraxacum Trifolium badium
Trifolium campestre
Trifolium dubium
Trifolium micranthum Trifolium pratense
Trifolium repens
Trifolium striatum
Trifolium thalii
Veronica serpyllifolia

##D +04 R22-Low-and-medium-altitude-hay-meadow Achillea millefolium aggr.

Agrostis capillaris
Alopecurus pratensis
Anthoxanthum odoratum aggr.
Anthriscus sylvestris
Arrhenatherum elatius

Avenula pubescens Briza

media

Bromus hordeaceus
Campanula patula
Centaurea debeauxii Centaurea jacea
Centaurea nemoralis
Cerastium fontanum subsp. vulgare
Crepis biennis
Crepis capillaris
Dactylis glomerata
Daucus carota Festuca rubra

aggr.

Galium mollugo aggr. Geranium pratense
Gladiolus imbricatus
Heracleum sphondylium
Holcus lanatus
Knautia arvensis
Lathyrus pratensis
Leontodon hispidus
Leucanthemum vulgare aggr.
Lotus corniculatus
Luzula campestris aggr.
Pastinaca sativa
Pimpinella major
Plantago lanceolata Poa pratensis

aggr.

Poa trivialis
Prunella vulgaris
Ranunculus acris
Ranunculus bulbosus
Ranunculus neapolitanus
Rhinanthus minor
Rumex acetosa
Rumex thyrsiflorus
Salvia pratensis
Schedonorus pratensis
Taraxacum sect. Taraxacum Trifolium dubium
Trifolium pratense
Trisetum flavescens
Veronica chamaedrys
Vicia cracca

##D +04 R23-Mountain-hay-meadow

Agrostis capillaris
Anthoxanthum odoratum aggr.
Arabidopsis halleri
Astrantia major
Bistorta officinalis
Bistorta vivipara
Briza media
Campanula patula

Campanula serrata
Centaurea phrygia
Cirsium heterophyllum
Crepis mollis
Crepis pyrenaica
Crocus vernus Festuca rubra
aggr.
Geranium sylvaticum aggr.
Hypericum maculatum
Knautia nevadensis
Lathyrus pratensis
Luzula campestris aggr.
Meum athamanticum
Muscari botryoides
Narcissus poeticus
Phleum alpinum aggr.
Phyteuma halleri
Phyteuma orbiculare Phyteuma spicatum
Phyteuma tetramerum
Phyteuma vagneri
Pimpinella major
Pimpinella serbica
Poa chaixii
Poa pratensis aggr.
Primula elatior
Rhinanthus mediterraneus
Rumex acetosa
Rumex arifolius
Silene dioica
Trifolium pratense
Trisetum flavescens
Viola cornuta

##D +04 R24-Iberian-summer-pasture-vallicar

Agrostis castellana
Anthoxanthum ovatum
Celtica gigantea
Festuca ampla Festuca elegans
Festuca summilusitana
Gaudinia fragilis
Holcus annuus
Malva tournefortiana
Molineriella minuta
Periballia involucrata
Phalacrocarpum sericeum
Sedum forsterianum
Trifolium cernuum
Trifolium retusum
Vulpia bromoides
Vulpia ciliata
Vulpia myuros

##D +04 R31-Mediterranean-tall-humid-inland-grassland

Agrostis reuteri Agrostis stolonifera

Anacamptis palustris aggr.

Blackstonia perfoliata

Briza minor

Carex mairei

Centaurea jacea

Cirsium monspessulanum Cirsium pyrenaicum

Cochlearia glastifolia

Cochlearia megalosperma

Cyperus longus

Dittrichia viscosa

Dorycnium hirsutum

Dorycnium rectum

Epipactis palustris

Eupatorium cannabinum

Euphorbia hirsuta

Galium debile

Galium viridifolium

Genista tinctoria

Hypericum caprifolium

Hypericum hircinum

Hypericum pubescens

Hypericum tetrapterum

Hypericum tomentosum

Imperata cylindrica

Juncus acutus

Juncus inflexus

Juncus littoralis

Juncus maritimus Juncus striatus

Linum tenue

Lotus maritimus

Lysimachia ephemerum

Melilotus indica

Molinia caerulea aggr.

 Oenanthe lachenalii

 Oenanthe pimpinelloides

 Peucedanum hispanicum

 Phalaris aquatica

 Prunella vulgaris

Pulicaria dysenterica

 Ranunculus bulbosus

 Ranunculus granatensis

 Ranunculus macrophyllus

 Schedonorus arundinaceus

 Schoenus nigricans

 Scirpoides holoschoenus

 Scrophularia auriculata Senecio doria aggr.

 Serapias vomeracea aggr.

 Serratula tinctoria

Succisella andreae-molinae
Thalictrum flavum
Thalictrum minus
Thalictrum speciosissimum
Trifolium resupinatum

##D +04 R32-Mediterranean-short-moist-grassland-of-lowlands

Achillea ageratum
Blackstonia perfoliata
Carex flacca
Centaurium pulchellum Cirsium rosulatum
Deschampsia cespitosa
Deschampsia media
Festuca trichophylla
Gaudinia fragilis
Gentianella amarella Hordeum bulbosum
Hypericum tomentosum
Jasonia tuberosa
Leontodon hirtus Leucanthemum aligulatum
Linum suffruticosum aggr.
Phalaris coerulescens
Plantago maritima
Prunella hyssopifolia
Sanguisorba lateriflora
Schedonorus arundinaceus Senecio carpetanus
Trifolium lappaceum

##D +04 R33-Mediterranean-short-moist-grassland-of-mountains

Agrostis castellana
Agrostis nevadensis
Allium schoenoprasum
Armeria sampaioi
Armeria splendens Bellium bellidioides
 Botrychium matricariifolium
 Botrychium simplex
 Campanula herminii
 Carex caryophyllea
 Carex flava
 Carex furva
 Carex leporina
 Carex nigra
 Carum verticillatum
 Colchicum alpinum
 Cynosurus cristatus Dactylis glomerata
 Danthonia decumbens
 Deschampsia cespitosa
 Dianthus langedanus
 Dianthus legionensis
 Erodium carvifolium
Festuca henriquesii
Festuca iberica

Festuca microphylla
Festuca rothmaleri
Galium saxatile
Gentiana boryi
Gentiana lutea
Gentiana pneumonanthe
Jasione laevis
Juncus squarrosus
Lotus glacialis
Lotus glareosus
Luzula campestris aggr.
Luzula spicata
Meum athamanticum
Narcissus bulbocodium
Ophioglossum azoricum
Ophioglossum vulgatum
Pedicularis sylvatica
Phleum bertolonii
Pilosella officinarum
Plantago alpina
Plantago nivalis
Plantago subulata
Poa legionensis
Polygala serpyllifolia
Potentilla anglica
Potentilla asturica
Potentilla erecta
Potentilla nevadensis
Potentilla reuteri
Ranunculus abnormis
Ranunculus acetosellifolius
Ranunculus bulbosus
Ranunculus demissus Sagina saginoides
Scorzoneroides carpetana
Scorzoneroides microcephala
Sedum melanantherum
Trifolium repens
Veronica repens

##D +04 R34-Submediterranean-moist-meadow Achillea millefolium aggr.

Agrostis stolonifera
Alopecurus pratensis
Alopecurus rendlei Anthoxanthum odoratum
aggr.
Anacamptis palustris aggr.
Bellevia romana
Bromus racemosus
Carex cuprina
Carex distans
Carex hirta
Centaurea jacea

Cichorium intybus
Cirsium canum
Clematis integrifolia
Colchicum lusitanum Crepis setosa
Cynosurus cristatus
Daucus carota
Deschampsia cespitosa
Deschampsia media
Elytrigia repens
Galium debile
Galium verum
Gaudinia fragilis
Gratiola officinalis
Holcus lanatus
Hordeum secalinum
Lathyrus nissolia
Lathyrus pannonicus
Lathyrus pratensis
Leucanthemum vulgare aggr.
Leucojum aestivum
Lolium perenne
Lotus corniculatus
Lysimachia nummularia
Medicago arabica
Medicago polymorpha
Moenchia mantica
Molinia caerulea aggr.
Narcissus poeticus
Oenanthe peucedanifolia
Oenanthe silaifolia
Ophioglossum vulgatum
Ornithogalum collinum Peucedanum coriaceum
Peucedanum officinale
Plantago lanceolata Poa pratensis
aggr.
Poa trivialis Podospermum canum
Potentilla reptans
Prunella vulgaris
Ranunculus acris
Ranunculus marginatus
Ranunculus pedatus
Ranunculus polyanthemus
Ranunculus repens
Ranunculus sardous
Ranunculus velutinus
Rhinanthus minor
Rumex acetosa
Rumex crispus
Schedonorus pratensis
Scilla litardierei
Scutellaria hastifolia

Serratula tinctoria
Silene flos-cuculi
Taraxacum sect. Taraxacum
Tragopogon pratensis
Trifolium angulatum
Trifolium cinctum
Trifolium dubium
Trifolium fragiferum
Trifolium michelianum
Trifolium pallidum
Trifolium patens
Trifolium pratense
Trifolium repens
Trifolium resupinatum
Trifolium subterraneum

##D +04 R35-Moist-or-wet-mesotrophic-to-eutrophic-hay-meadow Achillea millefolium aggr.

Agrostis stolonifera
Allium angulosum
Alopecurus arundinaceus
Alopecurus bulbosus
Alopecurus pratensis
Bistorta officinalis
Bromus racemosus
Caltha palustris
Cardamine matthioli
Cardamine pratensis
Carex melanostachya
Centaurea jacea
Centaurea nigrescens
Cerastium dubium
 Cirsium canum
 Cirsium heterophyllum
 Cirsium oleraceum
 Cirsium palustre
 Cirsium rivulare
 Colchicum autumnale
 Crepis paludosa
 Dactylorhiza majalis
 Deschampsia cespitosa
 Elytrigia repens
 Equisetum palustre
 Filipendula ulmaria
 Fritillaria meleagris
 Galium debile
 Galium uliginosum
 Geranium palustre
 Geum coccineum
 Geum rivale
Gratiola officinalis
Holcus lanatus

Inula britannica
Jacobaea aquatica
Juncus conglomeratus
Juncus effusus
Lathyrus palustris
Lathyrus pratensis Leucojum aestivum
Lotus pedunculatus
Lysimachia nummularia
Lysimachia vulgaris
Lythrum virgatum
Myosotis scorpioides aggr.
Oenanthe fistulosa
Oenanthe silaifolia
Plantago altissima
Potentilla reptans
Ranunculus acris
Ranunculus ophioglossifolius
Rhinanthus angustifolius
Sanguisorba officinalis
Scirpus sylvaticus
Scutellaria hastifolia
Selinum dubium
Silaum silaus
Silene flos-cuculi
Stachys palustris
Symphytum officinale
Thalictrum flavum
Thalictrum lucidum
Thalictrum simplex
Trifolium michelianum Trollius europaeus
Valeriana officinalis
Veronica longifolia
Viola elatior
Viola pumila

##D +04 R36-Moist-or-wet-mesotrophic-to-eutrophic-pasture Achillea millefolium aggr.

Agrostis stolonifera
Alopecurus bulbosus
Alopecurus geniculatus
Argentina anserina
Blysmus compressus
Cardamine parviflora
Carex cuprina
Carex hirta
Carex vulpina
Inula britannica
Juncus articulatus
Juncus compressus
Juncus conglomeratus
Juncus effusus
Juncus inflexus

Lathyrus pratensis
Lolium perenne
Mentha longifolia Mentha pulegium
Mentha suaveolens
Nasturtium microphyllum
Oenanthe fistulosa
Plantago major
Poa trivialis
Potentilla reptans
Pulicaria dysenterica
Pulicaria vulgaris Ranunculus repens
Ranunculus sardous
Rorippa sylvestris
Rumex conglomeratus
Rumex crispus
Schedonorus arundinaceus
Teucrium scordium
Trifolium fragiferum Trifolium repens
Triglochin palustris

##D +04 R37-Temperate-and-boreal-moist-or-wet-oligotrophic-grassland Achillea millefolium aggr.

Anthoxanthum odoratum aggr.
Avenula pubescens
Briza media
Cardamine pratensis
Carex echinata
Carex flacca
Carex hartmanii Carex pallescens
 Carex panicea
 Cirsium dissectum
 Cirsium tuberosum
 Crepis paludosa
 Dactylorhiza maculata aggr.
 Dianthus superbus Galium boreale
 Galium uliginosum
 Gentiana pneumonanthe
 Gladiolus imbricatus
 Holcus lanatus
 Hypericum undulatum
 Inula salicina
 Iris sibirica
 Juncus acutiflorus
 Listera ovata
 Molinia caerulea aggr.
Parnassia palustris
Polygala amarella
Potentilla erecta
Ranunculus acris
Sanguisorba officinalis
Scorzonera humilis Scutellaria minor
Selinum carvifolia

Serratula tinctoria
Silaum silaus
Stachys alopecuros
Stachys officinalis
Succisa pratensis
Tofieldia calyculata
Viola stagnina

##D +04 R41-Snow-bed-vegetation

Achillea clusiana
Alchemilla fissa
Alchemilla pentaphyllea
Alopecurus gerardi
Alopecurus riloensis
Arabis caerulea
Cardamine alpina
Carex foetida
Carex kitaibeliana Carex lachenalii
Carex norvegica
Carex pyrenaica
Cerastium cerastoides
Crocus scardicus
Crocus veluchensis
Draba crassifolia
Festuca picturata
Gnaphalium hoppeanum
 Gnaphalium supinum
 Hornungia alpina
 Juncus biglumis
 Leucanthemopsis alpina
 Luzula alpinopilosa
 Luzula confusa
 Luzula desvauxii
 Luzula nivalis
 Phippsia algida
 Plantago atrata
 Poa arctica
 Poa dolosa
 Poa granitica
 Pohlia drummondii
 Polytrichum sexangulare
 Potentilla brauneana
 Potentilla hyparctica
 Primula integrifolia
Ranunculus alpestris
Ranunculus crenatus
Ranunculus glacialis
Ranunculus montanus
Ranunculus nivalis
Ranunculus pseudomontanus
Ranunculus pygmaeus

Ranunculus sulphureus
Sagina saginoides
Salix herbacea
Salix polaris
Saxifraga androsacea
Saxifraga cernua
Saxifraga nivalis
Saxifraga rivularis
Saxifraga tenuis
Saxifraga wahlenbergii
Sedum alpestre
Sedum candolleanum
Sibbaldia procumbens Soldanella alpina
Soldanella carpatica
Soldanella minima
Taraxacum apenninum
Taraxacum bithynicum
Taraxacum croceum
Veronica alpina

##D +04 R42-Boreal-and-arctic-acidophilous-alpine-grassland

Alchemilla glomerulans
Anthoxanthum odoratum aggr.
Bistorta vivipara Carex bigelowii
Carex brunnescens
Carex lachenalii Cassiope hypnoides
 Cassiope tetragona
 Cerastium alpinum
 Epilobium anagallidifolium
 Erigeron uniflorus
 Gnaphalium supinum
 Juncus trifidus
 Nardus stricta
 Potentilla crantzii
 Ranunculus pygmaeus
 Saussurea alpina aggr.
 Sibbaldia procumbens
 Thalictrum alpinum
 Trisetum spicatum
 Vahlodea atropurpurea
 Veronica alpina
 Viola biflora

##D +04 R43-Temperate-acidophilous-alpine-grassland

Agrostis rupestris
Alchemilla catalaunica
Alopecurus gerardii
Androsace carnea
Astragalus alpinus
Bellardiochloa variegata
Campanula alpina

Campanula scheuchzeri
Carex bigelowii
Carex brunnescens
Carex curvula
Carex foetida
Carex lachenalii
Carex macrostyla
Cerastium alpinum
Colchicum montanum
Endressia pyrenaica
Epilobium anagallidifolium
Erigeron uniflorus
Festuca airoides
Festuca eskia
Gentiana alpina
Geum montanum
Globularia meridionalis
Gnaphalium supinum
Helictochloa versicolor
Hieracium alpinum
Holcus lanatus
Homogyne alpina
Iris latifolia
Jacobaea abrotanifolia
Jacobaea incana
Juncus squarrosus
Juncus trifidus
 Koeleria lobata
 Leontodon pyrenaicus
 Leucanthemopsis alpina
 Ligusticum corsicum
 Ligusticum mutellina
 Lotus alpinus
 Luzula pediformis
 Luzula spicata
 Minuartia verna
 Nardus stricta
 Oreochloa disticha
 Pedicularis pyrenaica Phleum alpinum
 aggr.
 Plantago alpina
 Plantago holosteum
 Plantago monosperma
 Poa alpina
 Polygala edmundii
Potentilla aurea
Potentilla crantzii
Primula minima
Pulsatilla alpina
Ranunculus pyrenaicus
Sagina pilifera

Saussurea alpina aggr.
Scorzoneroideis cantabrica
Scorzoneroideis microcephala
Selinum pyrenaicum
Thalictrum alpinum
Thymus alpestris
Thymus nervosus
Trifolium alpinum
Trisetum spicatum
Veronica alpina
Viola biflora

##D +04 R44-Arctic-alpine-calcareous-grassland

Achillea clavennae
Androsace chamaejasme
Androsace villosa
Androsace vitaliana
Aster alpinus
Astragalus alpinus
Astragalus frigidus
Astragalus penduliflorus
Bartsia alpina
Bellidiastrum michelii Biscutella laevigata
Calamagrostis varia
Campanula thyrsoidea Carex australpina
Carex baldensis
Carex ferruginea Carex firma
Carex mucronata
Carex ornithopoda
Carex sempervirens
Dactylorhiza viridis
Draba aizoides Dryas octopetala
 Festuca versicolor
 Galium anisophyllum
 Gentiana clusii
 Gentiana nivalis
 Gentiana verna Globularia cordifolia
 Gymnadenia nigra aggr.
 Helianthemum alpestre
 Helianthemum nummularium
 Hieracium villosum
 Homogyne discolor
Jacobaea abrotanifolia
Kobresia myosuroides
Kobresia simpliciuscula
Leontopodium nivale
Minuartia langii
Myosotis alpestris
Onobrychis montana
Oxytropis campestris
Oxytropis carpatica Oxytropis halleri

Pedicularis foliosa
Pedicularis rostratocapitata
Phyteuma orbiculare
Phyteuma sieberi
Primula auricula
Primula clusiana
Ranunculus hybridus Ranunculus thora
Rhinanthus gracilis
Rhodax alpestris
Saussurea alpina aggr.
Saussurea pygmaea
Saxifraga caesia
Saxifraga paniculata
Senecio doronicum
Sesleria caerulea
Sesleria coerulans
Stachys alopecuros
Thesium alpinum
Thymus pulcherrimus
Veronica aphylla
Veronica fruticans

##D +04 R45-Alpine-and-subalpine-calcareous-grassland-of-the-Balkans-and-Apennines

Achillea holosericea
 Aethionema saxatile
 Anthyllis aurea
 Asperula aristata
 Asplenium fissum
 Aster alpinus
 Astragalus mayeri
 Asyneuma limonifolium
 Biscutella laevigata
 Carex kitaibeliana
 Clinopodium alpinum
 Cyanus triumfettii
 Dianthus integer
 Dianthus sylvestris
 Dichoropetalum schottii
 Draba aizoides
 Draba lasiocarpa
 Edraianthus graminifolius
 Fritillaria orientalis
Galium oreophilum
Geranium subcaulescens
Helianthemum canum
Helianthemum nummularium
Hieracium pannosum
Iberis sempervirens
Leontodon crispus
Linum alpinum
Linum capitatum

Minuartia verna
Oxytropis campestris
Oxytropis neglecta
Oxytropis purpurea
Pedicularis comosa
Pedicularis verticillata
Phyteuma orbiculare
Plantago argentea
Polygala alpestris
Polygala comosa
Potentilla crantzii
Pulsatilla alpina
Ranunculus breynius
Satureja montana
Senecio procerus
Sesleria juncifolia
Sesleria nitida
Sideritis raeseri
Teucrium montanum
Thalictrum minus
Thymus ciliatopubescens
Thymus praecox
Trinia dalechampii

##D +04 R51-Thermophilous-forest-fringe-of-base-rich-soils

Aconitum anthora
Aegonychon purpureocaeruleum
Agrimonia eupatoria
Anemone sylvestris
Aquilegia vulgaris
Astragalus glycyphyllos
Bupleurum falcatum Campanula bononiensis
 Campanula persicifolia
 Clematis recta
 Clinopodium nepeta Clinopodium vulgare
 Crepis praemorsa aggr.
 Cyanus triumfettii
 Dictamnus albus
 Digitalis grandiflora
 Ferulago campestris
 Ferulago granatensis
 Geranium sanguineum
Hesperis sylvestris
Inula conyzae
Inula germanica
Inula hirta
Inula salicina Iris graminea
Iris variegata
Knautia drymeia
Knautia fleischmannii
Knautia illyrica

Lactuca quercina
Laser trilobum
Laserpitium latifolium
Laserpitium siler
Lathyrus heterophyllus
Lathyrus pannonicus
Lathyrus sylvestris
Lembotropis nigricans
Lithospermum officinale
Melampyrum cristatum
Melampyrum nemorosum aggr.
Melampyrum velebiticum
Melittis melissophyllum
Odontites tenuifolius
Origanum vulgare
Paeonia mascula
Paeonia officinalis
Peucedanum alsaticum
Peucedanum cervaria
Peucedanum oreoselinum
Polygonatum odoratum
Potentilla hirta
Pseudoturritis turrita
Seseli libanotis
Silene coronaria
 Silene italica
 Stachys officinalis
 Tanacetum corymbosum
 Tephrosia longifolia
 Trifolium medium
 Trifolium rubens
 Valeriana stolonifera
 Verbascum chaixii
 Veronica bartheletii
 Vicia cassubica
 Vicia dumetorum
 Vicia pisiformis
 Vicia sylvatica
 Vincetoxicum hirsutum

##D +04 R52-Forest-fringe-of-acidic-nutrient-poor-soils

Campanula baumgartenii
Hieracium lachenalii
Hieracium laevigatum
Hieracium murorum
Hieracium sabaudum Holcus mollis
Hypericum pulchrum
Jacobaea adonidifolia Lathyrus linifolius
Lonicera periclymenum Melampyrum pratense
Melampyrum sylvaticum
Peucedanum gallicum

Peucedanum oreoselinum
Pulmonaria longifolia
Solidago virgaurea
Teucrium scorodonia
Vicia orobus

##D +04 R53-Macaronesian-thermophilous-forest-fringe

Ammi huntii
Ammi trifoliatum
Angelica lignescens
Chaerophyllum azoricum
Dactylorhiza foliosa
Geranium palmatum
Geranium reuteri
Lactuca watsoniana
Myosotis latifolia
Pericallis appendiculata
Pericallis aurita
Pericallis cruenta
Pericallis echinata
Pericallis malvifolia
Pericallis tussilaginis
Pimpinella dendrotragium
Ranunculus cortusifolius Rumex maderensis
Scrophularia smithii
Teucrium francoi
Viola paradoxa

##D +04 R55-Lowland-moist-or-wet-tall-herb-and-fern-fringe

Achillea ptarmica
Aegopodium podagraria
Agrostis stolonifera
Alliaria petiolata
Althaea officinalis
Angelica archangelica
Angelica heterocarpa
Angelica sylvestris
Anthriscus sylvestris
Aristolochia clematitis
Asparagus asparagoides
Bidens pilosa
Brachypodium sylvaticum
Caltha palustris
Calystegia sepium
Calystegia silvatica
Cardiospermum grandiflorum
Carduus crispus Carex pendula
Carex sylvatica
Chaerophyllum aromaticum
Chaerophyllum hirsutum
Circaea lutetiana

Conyza primulifolia
Crepis paludosa
Cuscuta europaea
Cynanchum acutum
Dactylorhiza maculata aggr.
Dipsacus fullonum
Dipsacus laciniatus
Dorycnium rectum
Dryopteris filix-mas
Echinochloa crus-galli
Echinocystis lobata
Epilobium hirsutum
Epilobium montanum
Equisetum ramosissimum
Equisetum telmateia
Eupatorium cannabinum
Euphorbia lucida
Fallopia dumetorum
Filipendula ulmaria
Fragaria vesca
Galeopsis speciosa
Galium aparine
Galium odoratum
Galium uliginosum
 Geranium palustre
 Geranium phaeum
 Geranium robertianum
 Geum rivale
 Geum urbanum
 Glechoma hederacea
 Glycyrrhiza echinata
 Heracleum sphondylium
 Humulus lupulus
 Impatiens balfourii
 Impatiens glandulifera
 Impatiens noli-tangere
 Inula helenium
 Ipomoea indica
 Ipomoea sagittata
 Juncus inflexus
 Lactuca muralis
 Lamium album
Lamium maculatum
Lapsana communis
Leersia oryzoides Lunaria rediviva
Lycopus europaeus
Lysimachia vulgaris
Lythrum salicaria
Mentha longifolia
Myosoton aquaticum
Parietaria officinalis

Petasites albus
Petasites hybridus
Phalaroides arundinacea
Physalis alkekengi
Poa trivialis
Pulicaria dysenterica
Rubus caesius
Rubus ulmifolius
Rumex conglomeratus
Salvia glutinosa
Schedonorus giganteus
Scrophularia umbrosa
Silene baccifera
Silene dioica
Solidago canadensis
Solidago gigantea
Stachys sylvatica
Symphyotrichum novi-belgii aggr.
Symphytum officinale Tanacetum vulgare
Telekia speciosa
Trifolium repens
Trollius europaeus
Tropaeolum majus
Urtica dioica
Valeriana excelsa
Veronica longifolia

R55-Lowland-moist-or-wet-tall-herb-and-fern-fringe-dominants

Carex pendula
Chaerophyllum aromaticum
Chaerophyllum hirsutum
Echinocystis lobata
Equisetum telmateia
Eupatorium cannabinum
Filipendula ulmaria
Geranium palustre
Humulus lupulus
Impatiens balfourii
Impatiens glandulifera
Inula helenium
Lysimachia vulgaris
Scrophularia umbrosa
Symphyotrichum novi-belgii aggr.

##D +04 R56-Montane-subalpine-moist-or-wet-tall-herb-and-fern-fringe

Aconitum burnatii Aconitum
lycoctonum
Aconitum napellus aggr.
Aconogonon alpinum
Adenostyles alliariae Adenostyles alpina
Angelica archangelica

Aquilegia bernardii
Aquilegia cazorlensis
Athyrium distentifolium
Atropa baetica
Cardamine acris
Cardamine rivularis
Carduus personata
Chaerophyllum villarsii
Cirsium appendiculatum
Cirsium erisithales
Cirsium pyrenaicum
Cirsium tymphaeum
Delphinium elatum
Doronicum austriacum
Doronicum corsicum
Doronicum grandiflorum Epilobium
lactiflorum Geranium asphodeloides
Geranium sylvaticum aggr.
Geum coccineum
Heracleum elegans
Heracleum sphondylium
Heracleum transsilvanicum
Jacobaea alpina
Jacobaea subalpina
 Lactuca alpina
 Lactuca pancicii
 Lactuca plumieri
 Laserpitium longiradium
 Leucanthemum rotundifolium
 Myosotis soleirolii
 Pedicularis foliosa
 Petasites albus
 Petasites kablikianus
 Peucedanum ostruthium
 Ranunculus aconitifolius
 Ranunculus platanifolius
 Rhaponticum scariosum
 Rhodiola rosea
 Rumex alpinus
 Rumex arifolius
 Saxifraga rotundifolia
 Scrophularia auriculata
Scrophularia scopoli
Silene dioica
Telekia speciosa
Tephrosia elodes
Thalictrum aquilegifolium
Thelypteris limbosperma
Valeriana pyrenaica
Veratrum album
Viola biflora

##D +04 R57-Herbaceous-forest-clearing-vegetation

Ageratina adenophora
Alliaria petiolata
Anaphalis margaritacea
Arctium nemorosum
Atropa bella-donna
Avenella flexuosa
Bromopsis ramosa aggr.
Calamagrostis epigejos
Carex muricata
Carex spicata
Centaurium erythraea
Chaerophyllum temulum Chelidonium majus
Digitalis grandiflora
Digitalis purpurea
Epilobium angustifolium
Erechtites hieraciifolius
Eupatorium cannabinum Fallopia convolvulus
Fallopia dumetorum
Fragaria vesca
Galeopsis bifida
Galeopsis pubescens
Galeopsis speciosa
Galeopsis tetrahit
Galium aparine
Geranium robertianum
Geum urbanum
Glechoma hederacea
Gnaphalium sylvaticum
Hypericum hirsutum
Impatiens parviflora
 Lactuca muralis
 Lamium maculatum
 Lapsana communis
 Lupinus polyphyllus
 Myosotis sylvatica
 Sambucus ebulus
 Senecio nemorensis aggr.
 Senecio sylvaticus
 Senecio viscosus
 Sisymbrium strictissimum
Stachys alpina
Stachys sylvatica
Torilis japonica
Urtica dioica
Valeriana officinalis
Verbascum thapsus
Veronica sublobata

##D +04 R61-Mediterranean-inland-salt-steppe

Aeluropus littoralis
Bassia hirsuta
Camphorosma monspeliaca
Carex lainzii
Elytrigia curvifolia
Frankenia corymbosa
Frankenia pulverulenta
Gypsophila tomentosa
Halocnemum strobilaceum
Halopeplis amplexicaulis
Helianthemum polygonoides
Hordeum marinum
Hornungia procumbens
Jacobaea auricula
Juncus subulatus
Lepidium cardamines
Limonium angustebracteatum Limonium aragonense
Limonium caesium
Limonium carpetanicum
Limonium catalaunicum
Limonium cofrentanum
Limonium cordovillense Limonium
cossonianum Limonium costae
Limonium delicatulum
 Limonium dichotomum
 Limonium erectum
 Limonium eugeniae
 Limonium furfuraceum
 Limonium insigne
 Limonium latebracteatum
 Limonium lobetanicum
 Limonium majus
 Limonium minus
 Limonium pinillense
 Limonium quesadense
 Limonium ruizii
 Limonium santapolense
 Limonium soboliferum
 Limonium squarrosum
 Limonium stenophyllum
 Limonium sucronicum
 Limonium supinum
Limonium toletanum
Limonium tournefortii
Limonium viciosoi
Microcnemum coralloides
Parapholis strigosa
Plantago maritima
Puccinellia caespitosa
Puccinellia festuciformis Puccinellia hispanica
Salicornia europaea aggr.

Sonchus crassifolius
Sphenopus divaricatus
Suaeda braun-blanquetii Suaeda maritima

aggr.

Suaeda splendens
Suaeda vera

##D +04 R62-Continental-inland-salt-steppe

Artemisia santonicum
Artemisia taurica
Bassia hirsuta
Bassia sedoides
Bupleurum tenuissimum
Camphorosma annua
Camphorosma monspeliaca
Carex stenophylla
Dianthus guttatus
Eremopyrum orientale
Eremopyrum triticeum
Ferula euxina
Galatella sedifolia
Hordeum geniculatum
Lepidium cartilagineum
Limonium gmelinii
Limonium meyeri
Limonium tomentellum
Lotus angustissimus
Petrosimonia brachiata
Petrosimonia oppositifolia
Petrosimonia triandra
Pholiurus pannonicus
Plantago maritima
Plantago tenuiflora
 Podospermum canum
 Puccinellia distans
 Puccinellia dolicholepis
 Puccinellia festuciformis Ranunculus pedatus
 Salicornia europaea aggr.
 Spergularia marina Suaeda
 acuminata Suaeda corniculata
 Suaeda maritima aggr.
Trifolium retusum

##D +04 R63-Temperate-inland-salt-marsh

Atriplex prostrata
Bassia hirsuta
Bolboschoenus maritimus
Bolboschoenus planiculmis
Bupleurum tenuissimum
Carex cuprina Carex divisa
Carex distans

Centaurium pulchellum
Cerastium dubium
Cirsium brachycephalum
Cirsium esculentum
Eleocharis uniglumis
Glaux maritima
Halimione pedunculata
Halimione verrucifera
Halocnemum strobilaceum
Hordeum geniculatum
Hordeum marinum
Iris spuria
Juncus gerardi
Limonium tomentellum
Lotus tenuis
Melilotus dentatus
Mentha pulegium
Plantago maritima
Plantago tenuiflora Podospermum canum
Puccinellia distans
Puccinellia gigantea
Ranunculus sardous
Salicornia europaea aggr.
Schoenoplectus lacustris subsp. glaucus
Spergularia marina
Spergularia media
Taraxacum besarabicum
Trifolium fragiferum Triglochin maritima
Tripolium pannonicum

##D +04 R64-Semi-desert-salt-pan

Aeluropus lagopoides
Anabasis aphylla Anabasis salsa
Atriplex aucheri
Atriplex cana
Atriplex sphaeromorpha Bienertia cycloptera
Climacoptera aralensis
Climacoptera brachiata
Climacoptera crassa
Climacoptera lanata
Climacoptera transoxana
Climacoptera turcomanica
Corispermum aralocaspicum
Corispermum filifolium
Corispermum orientale
Corispermum uralense
Girgensohnia oppositifolia
Halimione verrucifera
Halimocnemis sclerosperma
Halocnemum strobilaceum
Halogeton glomeratus

Halostachys belangeriana
Kalidium caspicum
Kalidium foliatum
Karelinia caspia
Limonium danubiale Limonium gmelinii
Limonium scoparium
Limonium suffruticosum
Nanophyton erinaceum
Noaea mucronata
Ofaiston monandrum
Petrosimonia brachiata
Petrosimonia brachyphylla Petrosimonia glaucescens
Petrosimonia litwinowii
Petrosimonia monandra
Petrosimonia oppositifolia
Petrosimonia triandra
Puccinellia dolicholepis Salsola acutifolia
Salsola dendroides
Salsola foliosa
Salsola laricina
Salsola nitraria Salsola orientale
Salsola kali aggr.
Suaeda dendroides Suaeda
physophora

##D +04 R65-Continental-subsaline-alluvial-pasture-and-meadow

Aeluropus littoralis
Bassia hyssopifolia
Beckmannia eruciformis
Carex stenophylla
Dodartia orientalis
Eryngium planum
Limonium reniforme Medicago
caerulea
Rhaponticum repens

##D +04 I1-Arable-land-and-market-gardens

Abutilon theophrasti
Adonis aestivalis
Adonis annua
Adonis flammea
Adonis microcarpa
Aethusa cynapium
Agrostemma githago
Ajuga chamaepitys
Ajuga iva
Allium vineale
Alopecurus myosuroides Amaranthus powellii
Amaranthus retroflexus
Ambrosia artemisiifolia
Ammi majus

Ammi visnaga
Anagallis arvensis
Anagallis foemina Androsace maxima
Anthemis arvensis
Anthemis ruthenica
Anthoxanthum aristatum
Anthoxanthum ovatum
Apera spica-venti Aphanes arvensis
Aphanes australis
Arabidopsis thaliana
Arnoseris minima
Asperula arvensis
Avena sativa
Bifora radians
Bifora testiculata
Brassica napus
Brassica rapa Bromus arvensis
 Bromus grossus
 Bromus secalinus
 Buglossoides arvensis
 Bupleurum rotundifolium
 Camelina alyssum
 Camelina microcarpa
 Camelina rumelica
 Camelina sativa
 Capsella bursa-pastoris
 Caucalis platycarpos
 Cephalaria transsylvanica
 Chrozophora plicata
 Chrozophora tinctoria
 Cirsium arvense
 Conringia orientalis
 Consolida ajacis
 Consolida hispanica
Consolida mauritanica
Consolida orientalis
Consolida pubescens
Consolida regalis
Convolvulus arvensis
Coriandrum sativum
Cota austriaca
Cota segetalis
Cuscuta campestris
Cuscuta epilinum
Cyanus segetum
Diplotaxis catholica
Diplotaxis eruroides
Euphorbia exigua
Euphorbia falcata
Euphorbia helioscopia
Euphorbia lagascae

Euphorbia lathyris
Euphorbia peplus
Euphorbia platyphyllos
Euphorbia segetalis
Euphorbia taurinensis
Fagopyrum esculentum
Fagopyrum tataricum
Fallopia baldschuanica
Fallopia convolvulus
Fumaria agraria
Fumaria officinalis
Gagea villosa
Galeopsis segetum
Galeopsis tetrahit
Galinsoga parviflora
Galinsoga quadriradiata
Galium parisiense
Galium spurium Kickxia elatine
 Kickxia spuria
 Lamium amplexicaule
 Lamium purpureum
 Lathyrus tuberosus
 Legousia speculum-veneris
 Lens culinaris
 Linaria arvensis
 Linum usitatissimum
 Lipandra polysperma
 Lolium remotum
 Lolium temulentum
 Lycopsis arvensis
 Matricaria chamomilla
 Melampyrum arvense
 Melampyrum barbatum
 Mentha arvensis
 Mercurialis annua
Mibora minima
Myagrum perfoliatum
Myosotis arvensis
Neslia paniculata
Nigella arvensis
Ornithogalum umbellatum
Ornithopus perpusillus
Oxalis corniculata
Oxalis debilis
Oxalis dillenii
Oxalis pes-caprae
Oxalis stricta
Papaver argemone
Papaver dubium
Papaver hybridum
Papaver rhoeas

Papaver somniferum
Persicaria lapathifolia
Persicaria maculosa
Persicaria orientalis
Persicaria pennsylvanica
Pisum sativum
Potentilla norvegica
Ranunculus arvensis
Raphanus raphanistrum
Raphanus sativus
Ridolfia segetum
Roemeria hybrida
Rumex acetosella
Scandix pecten-veneris
Scleranthus annuus
Senecio vulgaris
Sherardia arvensis
Silene linicola
Sinapis alba Sinapis arvensis
 Solanum nigrum
 Sonchus asper
 Sonchus oleraceus
 Spergula arvensis
 Stachys annua
 Stachys arvensis
 Stellaria media
 Thlaspi alliaceum
 Thlaspi arvense
 Thymelaea passerina
 Torilis arvensis
 Tripleurospermum maritimum aggr.
 Ventenata dubia
 Veronica agrestis
 Veronica arvensis
 Veronica hederifolia
 Veronica opaca
Veronica persica
Veronica polita
Veronica triloba
Veronica triphyllos
Vicia hirsuta
Vicia pannonica
Vicia sativa
Vicia tetrasperma
Viola arvensis

##D +04 I14-Inundated-or-inundatable-croplands-including-rice-fields

Ammannia auriculata
Ammannia baccifera
Ammannia coccinea
Ammannia robusta

Ammannia verticillata
Bergia capensis
Crassula peduncularis
Cyperus difformis
Cyperus iria
Cyperus serotinus
Echinochloa colonum
Echinochloa crus-galli
Echinochloa oryzicola
Echinochloa oryzoides
Fimbristylis bisumbellata
Heteranthera reniformis
Lindernia dubia
Monochoria korsakowii
Rotala filiformis
Rotala indica
Schoenoplectus mucronatus
Schoenoplectus supinus

##D +04 IE16-Subnitrophilous-annual-grassland

Althaea longiflora
Anisantha madritensis
Astragalus hamosus
Avena barbata
Avena sterilis
Bromus diandrus
Bromus lanceolatus
Bromus rigidus
Bromus rubens
Catapodium rigidum
Centaurea melitensis
Centaurea pullata
Cullen americanum
Dasypyrum villosum
Gastridium phleoides
Hedypnois cretica
Hordeum murinum
Leontodon salzmännii
Lolium rigidum
Lotus edulis
Lotus ornithopodioides
Lupinus angustifolius
Lupinus luteus
Malva hispanica
Matthiola parviflora
Medicago orbicularis
Medicago rigidula
Medicago truncatula
Melilotus spicatus
Melilotus sulcatus
Nonea vesicaria

Phalaris brachystachys
Phalaris canariensis
Phalaris minor
Plantago afra
Reichardia picroides
Podospermum laciniatum
Senecio gallicus
Silene gallica
Thesium humile
Trifolium angustifolium
Trifolium cherleri
Trifolium hirtum
Trigonella foenum-graecum
Trigonella monspeliaca
Trigonella polyceratia
Trisetum paniceum
Urospermum picroides
Vulpia ciliata

##D +04 IE1E-Trampled-xeric-grassland-with-annuals

Alternanthera caracasana
Alternanthera pungens
 Ceratodon purpureus
 Cotula australis
 Crepis pusilla
 Cynodon dactylon
 Dichondra micrantha
 Digitaria ischaemum
 Digitaria sanguinalis Diplotaxis muralis
 Diplotaxis tenuifolia
 Dysphania pumilio
 Eleusine tristachya
 Eleusine indica
 Eragrostis barrelieri
 Eragrostis cilianensis
 Eragrostis frankii
 Eragrostis minor
 Eragrostis multicaulis
 Eragrostis papposa
Eragrostis pectinacea
Eragrostis pilosa
Eragrostis virescens
Erigeron bonariensis
Erigeron sumatrensis Euclidium syriacum
Euphorbia chamaesyce
Euphorbia humifusa
Euphorbia maculata
Euphorbia nutans
Euphorbia prostrata
Euphorbia serpens
Euphorbia humistrata

Filago congesta
Heliotropium europaeum
Heliotropium curassavicum
Guizotia abyssinica
Filago desertorum
Filago petro-ianii
Herniaria hirsuta
Lepidium densiflorum
Matricaria aurea
Ochlopoa infirma
Plantago coronopus aggr.
Polygonum aviculare
Polygonum depressum
Pseudocrossidium hornschuchianum
Ptychostomum archangelicum
Ptychostomum imbricatum Sclerochloa dura
Setaria adhaerens
Setaria verticillata
Soliva stolonifera
Tribulus terrestris
Trifolium suffocatum

##D +04 IE28-Trampled-mesophilous-grassland-with-annuals

Barbula convoluta
Barbula unguiculata
Bryum argenteum
Polycarpon tetraphyllum
Plantago major
Ochlopoa annua
Bryum dichotomum
Bryum funckii
Bryum gemmilucens
Bryum ruderae
Bryum versicolor
Herniaria glabra
Lepidium didymum
Lepidium perfoliatum
Lepidium ruderae
Lepidium squamatum
Lunularia cruciata
Marchantia polymorpha
Matricaria discoidea
Sagina apetala
Sagina procumbens
Spergularia purpurea
Spergularia rubra

##D +04 IE51-Anthropogenic-herb-stands

Acalypha virginica
Acanthus mollis
Achillea filipendulina

Achillea santolinoides
Aegilops cylindrica
Aegilops neglecta
Aegilops triuncialis
Aegilops ventricosa
Aegopodium podagraria
Aethusa cynapium
Ageratina adenophora
Aizoanthemopsis hispanica
Aizoon canariense
Alcea biennis
Alcea rosea
Alchemilla glabra
Allium neapolitanum
Allium nigrum
Allium paradoxum
Allium polyanthum
Allium scaberrimum
Allium scorodoprasum Allium
trifoliatum Allium triquetrum
Althaea longiflora
Amaranthus bouchonii
 Amaranthus caudatus
 Amaranthus hybridus
 Amaranthus hypochondriacus
 Amaranthus palmeri
 Amaranthus powellii
 Amaranthus retroflexus
 Amaranthus standleyanus
 Ambrosia artemisiifolia
 Ambrosia psilostachya
 Ambrosia trifida
 Anacyclus clavatus
 Anacyclus radiatus
 Anacyclus valentinus
 Anagallis arvensis
 Anagallis foemina
 Anaphalis margaritacea
 Anchusa azurea
 Anchusa ochroleuca
Anchusa officinalis
Androsace maxima
Andryala arenaria
Anethum graveolens
Anisantha diandra
Anisantha fasciculata
Anisantha madritensis
Anisantha rigida
Anisantha rubens
Anisantha sterilis
Anisantha tectorum

Anredera cordifolia
Anthemis arvensis
Anthemis cotula
Anthoxanthum amarum
Anthriscus caucalis
Anthriscus cerefolium
Anthriscus sylvestris
Arctium lappa
Arctium minus
Arctotheca calendula
Arenaria cerastioides
Arenaria hispanica
Armoracia rusticana
Artemisia abrotanum
Artemisia absinthium
Artemisia annua
Artemisia biennis
Artemisia dracunculus Artemisia scoparia
Artemisia verlotiorum Artemisia vulgaris
Arum italicum
Asparagus asparagoides Asperugo
procumbens Asphodelus albus
Asphodelus fistulosus Asphodelus lusitanicus
 Asphodelus macrocarpus
 Astragalus hamosus
 Astragalus longidentatus
 Atriplex hortensis
 Atriplex micrantha
 Atriplex oblongifolia
 Atriplex patula
 Atriplex rosea
 Atriplex sagittata
 Atriplex tatarica
 Avena barbata
 Avena fatua
 Avena longiglumis
 Avena nuda
 Avena sativa
Avena sterilis
Avena strigosa
Axyris amaranthoides
Ballota nigra
Barbarea bracteosa
Barbarea stricta
Bassia hyssopifolia
Bellardia trixago Berteroa incana
Bidens bipinnatus
Bidens subalternans
Biscutella auriculata
Blitum bonus-henricus
Blitum capitatum

Blitum petiolare
Blitum virgatum
Bonannia graeca
Bongardia chrysogonum
Borago officinalis
Bowlesia glandulosa
Brassica barrelieri
Brassica elongata
Brassica fruticulosa
Brassica geniculata
Brassica nigra
Brassica oxyrrhina
Brassica tournefortii
Bromopsis inermis
Bromus hordeaceus
Bromus intermedius Bromus japonicus
Bromus lanceolatus
Bromus lepidus
Bromus scoparius
Bromus squarrosus
 Bryonia alba
 Bryonia dioica
 Buglossoides arvensis
 Buglossoides incrassata
 Bunias erucago
 Bunias orientalis
 Bunium bulbocastanum
 Bunium ferulaceum
 Bunium pachypodium
 Bupleurum lancifolium
 Bupleurum subovatum
 Calamagrostis epigejos
 Calendula arvensis
 Calendula officinalis
 Calendula tripterocarpa
 Calepina irregularis
 Callistephus chinensis
 Calystegia pulchra
Calystegia silvatica
Campanula ramosissima
Cannabis sativa
Capsella bursa-pastoris
Capsella grandiflora
Capsella rubella
Cardamine hirsuta
Cardiospermum grandiflorum
Carduus acanthoides
Carduus argyrea
Carduus asturicus
Carduus bourgeanus Carduus candicans
Carduus carpetanus

Carduus crispus
Carduus hamulosus
Carduus litigiosus
Carduus meonanthus
Carduus nigrescens
Carduus nutans
Carduus pycnocephalus
Carduus tenuiflorus
Carlina lanata
Carpesium abrotanoides
Carpesium cernuum
Carrichtera annua
Carthamus caeruleus
Carthamus lanatus
Carthamus tinctorius
Catananche lutea
Catapodium rigidum
Centaurea aspera
Centaurea benedicta
Centaurea calcitrapa
Centaurea collina
Centaurea diffusa
Centaurea iberica
Centaurea lagascana
Centaurea melitensis Centaurea pullata
Centaurea salonitana
Centaurea solstitialis
Centranthus calcitrapae
 Centranthus macrosiphon Cephalaria transsylvanica
 Cerastium dichotomum
 Cerastium glomeratum
 Cerastium gracile
 Cerastium nemorale
 Cerastium perfoliatum
 Ceratocapnos claviculata
 Ceratocapnos heterocarpa
 Ceratocephala falcata
Cerinthe glabra
Cerinthe gymnandra
Cerinthe major
Cerinthe minor
Cerinthe retorta
Chaerophyllum aromaticum
Chaerophyllum aureum
Chaerophyllum nodosum
Chaerophyllum temulum
Chaiturus marrubiastrum
Chamaemelum fuscatum
Chelidonium majus
Chenopodiastrium hybridum
Chenopodiastrium murale

Chenopodium album
Chenopodium giganteum
Chenopodium opulifolium
Chenopodium probstii
Chenopodium strictum
Chenopodium suecicum
Chenopodium vulvaria
Chondrilla juncea
Cichorium intybus
Cichorium pumilum Cirsium arvense
Cirsium boujartii
Cirsium decussatum Cirsium echinatum
Cirsium eriophorum
Cirsium ferox
Cirsium furiens
Cirsium italicum
Cirsium morisianum
Cirsium odontolepis
Cirsium richterianum
 Cirsium scabrum
 Cirsium spathulatum
 Cirsium vallis-demonis
 Cirsium vulgare
 Cladanthus mixtus
 Claytonia perfoliata
 Clematis tangutica Cleome
 dodecandra
 Cleome hassleriana
 Cleome violacea
 Clinopodium graveolens
 Coincya monensis
 Coincya transtagana
 Coleostephus myconis
 Collomia grandiflora
 Collomia linearis
 Commelina communis
 Conium maculatum
Consolida regalis
Convolvulus arvensis
Convolvulus meonanthus
Convolvulus tricolor
Coronilla scorpioides
Corydalis capnoides
Cota altissima
Cota tinctoria
Crepis bursifolia
Crepis foetida
Crepis pulchra
Crepis sancta
Crepis setosa
Crepis tectorum

Crepis vesicaria
Crepis zacintha
Cruciata laevipes
Cryptotaenia thomasi
Cuscuta europaea
Cuscuta gronovii
Cuscuta scandens
Cyclanthera pedata
Cynanchum acutum
Cynara algarbiensis
Cynara baetica
Cynara cardunculus
Cynara humilis
Cynoglossum cheirifolium
Cynoglossum columnae
Cynoglossum creticum
Cynoglossum dioscoridis
Cynoglossum nebrodense
Cynoglossum officinale
Cyperus esculentus
Cyperus rotundus
Dasypyrum villosum
Datura metel
Datura stramonium
 Daucus carota
 Daucus guttatus
 Daucus muricatus
 Delphinium pentagynum
 Descurainia sophia
 Diplotaxis harra
 Diplotaxis siifolia
 Diplotaxis viminea
 Diplotaxis virgata
 Dipsacus fullonum
 Dipsacus laciniatus
 Dipsacus pilosus
 Dittrichia graveolens
 Dittrichia viscosa
 Drabella muralis
Dracocephalum thymiflorum
Ecballium elaterium Echinaria capitata
Echinops bannaticus
Echinops exaltatus
Echinops sphaerocephalus
Echinops strigosus
Echium asperrimum
Echium boissieri
Echium italicum
Echium plantagineum
Echium rosulatum
Echium salmanticum

Echium tuberculatum
Echium vulgare
Elytrigia intermedia
Elytrigia obtusiflora
Elytrigia repens
Emex spinosa
Epilobium brachycarpum
Epilobium ciliatum
Epilobium hirsutum
Epilobium parviflorum
Epilobium tetragonum
Equisetum arvense
Erechtites hieraciifolius Erigeron acris
Erigeron annuus
Erigeron bonariensis
Erigeron canadensis
Erigeron primulifolius Erigeron sumatrensis
Erodium chium
Erodium ciconium
Erodium cicutarium
 Erodium malacoides
 Erodium moschatum
 Erodium neuradifolium
 Eruca vesicaria
 Erucastrum gallicum
 Erucastrum nasturtiifolium
 Eryngium creticum
 Erysimum cheiranthoides
 Erysimum graecum
 Erysimum hieracifolium
 Erysimum repandum
 Eschscholzia californica
 Euphorbia esula
 Euphorbia illirica
 Euphorbia peplus
 Euphorbia serrata
 Euphorbia stricta
 Euthamia graminifolia
Falcaria vulgaris
Fallopia baldschuanica
Fallopia dumetorum Fedia
cornucopiae
 Fedia graciliflora
 Fedia scorpioides Filago arvensis
 Filago pyramidata
 Foeniculum vulgare
 Fumaria barnolae
 Fumaria bastardii
 Fumaria bicolor
 Fumaria capreolata
 Fumaria densiflora Fumaria faurei

Fumaria flabellata
Fumaria gaillardotii
Fumaria kralikii
Fumaria macrocarpa
Fumaria macrosepala
Fumaria mirabilis
Fumaria muralis
Fumaria officinalis
Fumaria parviflora Fumaria petteri
Fumaria rostellata
Fumaria schleicheri
Fumaria sepium
Fumaria vaillantii
Galactites duriae
Galactites tomentosus
Galeopsis bifida
Galeopsis pubescens
Galeopsis speciosa
Galeopsis tetrahit
 Galium aparine
 Galium lucidum
 Galium minutulum
 Galium murale
 Galium parisiense
 Galium spurium
 Galium tricornutum
 Galium verrucosum
 Galium verticillatum Gastridium phleoides
 Gastridium ventricosum

 Geranium bohemicum
 Geranium columbinum
 Geranium dissectum
 Geranium lucidum
 Geranium molle
 Geranium purpureum
Geranium pusillum
Geranium pyrenaicum
Geranium robertianum
Geranium rotundifolium
Geranium sibiricum
Geranium tuberosum Geranium yeoi
Geropogon hybridus
Geum aleppicum
Geum urbanum
Gladiolus italicus
Glebionis coronaria
Glebionis segetum
Glossopappus macrotus
Guiraoa arvensis
Hackelia deflexa

Halogeton sativus
Hedypnois rhagadioloides
Helianthus decapetalus
Helianthus giganteus
Helianthus pauciflorus
Helianthus tuberosus
Helminthotheca echioides
Heracleum mantegazzianum
Heracleum sphondylium
Herniaria lusitanica Hesperis matronalis
Hordeum jubatum
Hordeum murinum
Humulus japonicus
Hyoscyamus albus
Hyoscyamus niger
Hypecoum imberbe
Hypecoum pendulum
Hypecoum procumbens Hypericum
 triquetrefolium
 Iberis amara
 Iberis pinnata
 Iberis umbellata
 Impatiens balfourii
 Impatiens glandulifera
 Impatiens parviflora
 Inula helenium
 Inula helvetica
 Ipomoea sagittata
 Isatis praecox
 Isatis tinctoria
 Iva xanthiifolia
 Jacobaea erucifolia
 Kickxia lanigera
 Kickxia spuria
 Knautia integrifolia
 Kundmannia sicula
Lactuca macrophylla
Lactuca muralis
Lactuca saligna
Lactuca sativa
Lactuca serriola
Lactuca tatarica
Lactuca virosa
Lagurus ovatus
Lamium album
Lamium purpureum
Lamyropsis cynaroides
Lappula heteracantha
Lappula squarrosa
Lapsana communis
Lathyrus angulatus

Lathyrus annuus
Lathyrus aphaca
Lathyrus cicera
Lathyrus clymenum
Lathyrus hirsutus
Lathyrus inconspicuus
Lathyrus nissolia
Lathyrus ochrus
Lathyrus odoratus
Lathyrus sativus
Lathyrus setifolius
Lathyrus sphaericus
Launaea nudicaulis
Legousia hybrida Legousia scabra
Legousia speculum-veneris Leontice
leontopetalum Leontodon maroccanus
Leonurus cardiaca
Lepidium campestre Lepidium densiflorum
 Lepidium draba
 Lepidium hirtum
 Lepidium ruderales
 Lepidium virginicum Linaria amethystea
 Linaria chalepensis
 Linaria hirta
 Linaria latifolia
 Linaria micrantha
 Linaria nivea
 Linaria orbensis
 Linaria peloponnesiaca
 Linaria ricardoi
 Linaria triphylla
 Linaria viscosa
 Linaria vulgaris
 Lobularia libyca
Lolium subulatum
Lotus edulis
Lotus ornithopodioides
Lotus tetragonolobus
Lunaria annua
Magydaris panacifolia
Malope malacoides
Malope trifida
Malva aegyptia
Malva alcea
Malva cretica
Malva durieui
Malva empedoclis Malva
hispanica
 Malva lusitanica Malva moschata
 Malva multiflora Malva neglecta
 Malva nicaeensis

Malva parviflora
Malva pusilla
Malva setigera
Malva sylvestris
Malva thuringiaca
Malva trimestris
Malva verticillata
Mandragora officinarum
Mantisalca salmantica
Marrubium incanum
Marrubium peregrinum
Marrubium vulgare
Matricaria chamomilla
Matthiola lunata
Matthiola parviflora
Mauranthemum paludosum
 Medicago arabica
 Medicago intertexta
 Medicago lupulina
 Medicago monspeliaca Medicago murex
 Medicago orbicularis
 Medicago polyceratia
 Medicago polymorpha
 Medicago rigidula
 Medicago sativa
 Medicago scutellata Medicago tornata
 Medicago truncatula
 Melica transsilvanica
 Melilotus albus
 Melilotus altissima
 Melilotus elegans
 Melilotus indicus
Melilotus infestus
Melilotus italicus
Melilotus neapolitanus
Melilotus officinalis
Melilotus segetalis Melilotus sulcatus
Melissa officinalis
Mentha spicata
Mercurialis elliptica
Mercurialis reverchonii
Microrrhinum minus
Misopates calycinum
Misopates orontium
Mollugo cerviana
Moricandia arvensis
Moricandia moricandioides
Muhlenbergia schreberi
Muscari armeniacum
Muscari commutatum
Myosotis decumbens

Myosotis persoonii
Myosotis speluncicola
Nepeta apuleii
Nepeta cataria
Nepeta latifolia
Nicandra physalodes
Nigella arvensis
Nigella damascena
Nigella hispanica
Nigella orientalis Nigella papillosa
Noccaea perfoliata Nonea erecta
Nonea lutea
Nonea vesicaria
 Notobasis syriaca
 Odontites vulgaris aggr.
 Oenothera ammophila
 Oenothera angustissima
 Oenothera biennis
 Oenothera canovirens
 Oenothera deflexa
 Oenothera depressa
 Oenothera fallax
 Oenothera glazioviana
 Oenothera issleri
 Oenothera oakesiana
 Oenothera oehlkersii
 Oenothera parviflora
 Oenothera perangusta
 Oenothera pycnocarpa
 Oenothera rosea
 Oenothera rubricaulis
Oenothera silesiaca
Oenothera suaveolens
Oenothera subterminalis
Oenothera victorini
Oenothera villosa
Omphalodes kuzinskyanae
Ononis alopecuroides
Ononis pinnata
Onopordum acanthium
Onopordum acaulon
Onopordum carduelium
Onopordum corymbosum
Onopordum dissectum Onopordum
horridum
 Onopordum illyricum
 Onopordum macracanthum
 Onopordum nervosum
 Onopordum tauricum
Opopanax chironium
Orlaya daucoides

Ornithogalum arabicum
Ornithogalum divergens
Ornithogalum nutans
Ornithogalum pyramidale
Orobanche artemisiae-campestris
Orobanche crenata
Otospermum glabrum
Oxalis articulata
Oxalis pes-caprae
Oxalis stricta
Oxybasis urbica
Papaver apulum
Papaver pinnatifidum
Papaver setigerum
Parentucellia viscosa Parietaria debilis
Parietaria judaica Parietaria lusitanica
 Parietaria mauritanica
 Parietaria officinalis
 Parvotrisetum myrianthum
 Patellifolia procumbens
 Peltaria alliacea
 Pentaglottis sempervirens
 Persicaria wallichii
 Petagnaea gussonei
 Petasites pyrenaicus
 Phacelia tanacetifolia
 Phalaris brachystachys
 Phalaris canariensis
 Phalaris minor
 Phalaris paradoxa
 Phelipanche mutellii
Phelipanche ramosa
Phleum paniculatum
Phygелиus capensis
Physalis alkekengi
Phyteuma persicifolium
Phytolacca acinosa
Phytolacca americana
Picnemon acarna
Picris hieracioides
Pimpinella anisum
Pimpinella bicknellii
Piptatherum miliaceum
Plantago afra
Plantago lagopus
Plantago ovata
Platycapnos spicata
Poa compressa
Potentilla argentea
Potentilla multifida
Pulicaria arabica

Pulicaria dysenterica
Ranunculus chius
Ranunculus muricatus
Ranunculus parviflorus
Ranunculus trilobus
Raphanus raphanistrum
Rapistrum perenne
Rapistrum rugosum
Reichardia gaditana
Reichardia intermedia
Reichardia picroides
Reichardia tingitana
Reseda alba
Reseda barrelieri
Reseda lanceolata
 Reseda lutea
 Reseda luteola
 Reseda phyteuma
 Reseda stricta
 Reseda suffruticosa
 Reseda undata
 Reynoutria japonica
 Reynoutria sachalinensis
 Rhagadiolus stellatus *Rodgersia podophylla*
 Rostraria cristata
 Rostraria salzmannii
 Rubia tinctorium
 Rudbeckia hirta
 Rudbeckia laciniata
 Rumex alpinus
 Rumex aquitanicus
 Rumex intermedius *Rumex*
kernerii
 Rumex longifolius
 Rumex nepalensis
 Rumex obtusifolius
 Rumex patientia
 Rumex pulcher
 Salpichroa origanifolia *Salsola kali* aggr.
 Salvia argentea
 Salvia nemorosa
 Salvia sclarea
 Salvia verbenaca
 Salvia viridis
 Saponaria glutinosa
 Saponaria officinalis
 Scandix australis
 Scandix pecten-veneris
 Scandix stellata
 Scolymus grandiflorus
 Scolymus hispanicus

Scolymus maculatus
Scorpiurus muricatus
Scorpiurus vermiculatus
Scorzoneroideus salzmannii
Scrophularia auriculata
Scrophularia grandiflora
Scrophularia herminii
Scrophularia peregrina
Securigera cretica
Senecio gallicus
Senecio inaequidens
Senecio lividus
Senecio sylvaticus
Senecio vulgaris
Sida spinosa Silene apetala
 Silene baccifera
 Silene chalcedonica
 Silene conoidea
 Silene dichotoma
 Silene disticha
 Silene exaltata
 Silene fuscata
 Silene gallica
 Silene gracilis
Silene latifolia
Silene longipetala
Silene muscipula
Silene noctiflora
Silene nocturna
Silene pendula
Silene rubella
Silene scabriflora
Silene sennenii
Silene stricta
Silene tridentata
Silene vulgaris
Silybum eburneum
Silybum marianum Sinapis alba
Sinapis arvensis
Sinapis flexuosa
Sinapis pubescens
Sison amomum
Sisymbrium altissimum
Sisymbrium austriacum
Sisymbrium crassifolium
Sisymbrium erysimoides
Sisymbrium fugax
Sisymbrium irio
Sisymbrium loeselii
Sisymbrium macroloma
Sisymbrium officinale

Sisymbrium orientale
Sisymbrium polyceratum
Sisymbrium runcinatum
Sisymbrium strictissimum
Sisymbrium volgense
Sisylx atropurpurea Smyrniolus
Solanum alatum
Solanum americanum
Solanum carolinense
Solanum chenopodioides
Solanum decipiens
Solanum mauritianum
Solanum nigrum
Solanum physalifolium
 Solanum rostratum
 Solanum sarrachoides
 Solanum villosum
Solenanthus apenninus
Solidago canadensis
Solidago gigantea
Sonchus arvensis
Sonchus asper
Sonchus oleraceus
Sonchus tenerrimus
Spergularia bocconeii
Spergularia nicaeensis
Spergularia purpurea
Spergularia segetalis
Stachys byzantina
Stachys circinata
Stachys cretica
Stachys ocymastrum
Staphisagria macrosperma
Staphisagria picta Stellaria media
Stellaria neglecta
Stellaria pallida
Strigosella africana
Succowia balearica
Sulla capitata
Sulla coronaria
Symphyotrichum ciliatum
Symphyotrichum novae-angliae
Symphyotrichum novi-belgii aggr.
Symphyotrichum pilosum
Symphyotrichum squamatum
Symphytum asperum
Symphytum officinale
Taeniatherum caput-medusae
Tanacetum balsamita
Tanacetum parthenium
Tanacetum vulgare

Teesdalia coronopifolia
Tellima grandiflora
Tetragonia tetragonoides
Teucrium spinosum
Theligonum cynocrambe
Thladiantha dubia
Thlaspi alliaceum
Thymelaea passerina
Tordylium apulum
Tordylium maximum
Torilis africana
Torilis arvensis
Torilis elongata
Torilis japonica
Torilis leptophylla
 Torilis nodosa
 Tradescantia virginiana
 Tragopogon dubius
 Trifolium affine
 Trifolium angustifolium
 Trifolium argutum
 Trifolium cherleri
 Trifolium clusii
 Trifolium clypeatum
 Trifolium constantinopolitanum
 Trifolium dasyurum
 Trifolium diffusum
 Trifolium dubium
 Trifolium echinatum
 Trifolium glomeratum
 Trifolium grandiflorum
 Trifolium hirtum
 Trifolium hybridum
Trifolium michelianum
Trifolium mutabile
Trifolium neglectum
Trifolium nigrescens
Trifolium patens
Trifolium pauciflorum
Trifolium pilulare
Trifolium spumosum
Trifolium tomentosum
Trifolium uniflorum
Trifolium vesiculosum
Trigonella caerulea
Trigonella esculenta
Trigonella foenum-graecum
Triguera osbeckii
Tripleurospermum maritimum aggr.
Trisetaria ovata
Trisetaria panicea

Tropaeolum majus
Tulipa agenensis
Tulipa clusiana
Tulipa orphanidea
Tulipa sylvestris
Tulipa undulatifolia
Turgenia latifolia
Tussilago farfara
Tyrinnus leucographus
Urospermum dalechampii
Urospermum picroides
Urtica dioica
Urtica membranacea Urtica pilulifera
Urtica stachyoides Urtica urens
Vaccaria hispanica
 Valantia muralis
 Valerianella carinata
 Valerianella coronata
 Valerianella discoidea
 Valerianella echinata Valerianella locusta
 Valerianella martinii
 Valerianella microcarpa
 Valerianella rimosa
 Verbascum alpinum
 Verbascum blattaria
 Verbascum boerhavii
 Verbascum densiflorum
 Verbascum giganteum
 Verbascum litigiosum Verbascum macrurum
 Verbascum phlomoides
 Verbascum pulverulentum
Verbascum rotundifolium
Verbascum sinuatum
Verbascum speciosum
Verbascum thapsus
Verbascum virgatum
Verbena bonariensis
Verbena officinalis
Veronica cymbalaria
Veronica glauca
Vicia articulata
Vicia benghalensis
Vicia bithynica
Vicia ervilia
Vicia hybrida
Vicia lutea
Vicia microphylla
Vicia monantha
Vicia parviflora
Vicia peregrina
Vicia sativa

Vicia serratifolia
Vicia sibthorpii
Vicia sicula
Vicia villosa Vinca major
Viola odorata
Vogtia annua
Vogtia microphylla
Volutaria lippii
Vulpia alopecuros Vulpia ciliata
Vulpia geniculata
Vulpiella stipoides Xanthium spinosum
Xanthium strumarium

##D +05 Acidophilous-forest-species

Avenella flexuosa
Blechnum spicant
Calamagrostis arundinacea
Calamagrostis villosa
Calluna vulgaris
Carex pilulifera
Ceratocarpus claviculata Convallaria majalis
Dicranum majus
Dicranum scoparium
Drymochloa drymeja
Frangula alnus
Galium saxatile
Hieracium lachenalii
Hieracium murorum
Holcus mollis
Huperzia selago
Hypericum pulchrum
Ilex aquifolium
Lembotropis nigricans
Leucobryum glaucum
Lonicera periclymenum
Luzula luzuloides
Luzula nivea
Luzula pilosa
Luzula sylvatica
Lycopodium clavatum
Maianthemum bifolium
Melampyrum pratense
Melampyrum sylvaticum
Mnium hornum
Orthilia secunda
Poa chaixii
Pteridium aquilinum Pyrola minor
Teucrium scorodonia
Trientalis europaea
Vaccinium myrtillus
Vaccinium vitis-idaea

Veronica officinalis

##D +05 Alder-carr-species

Calamagrostis canescens

Calla palustris

Caltha palustris

Carex acutiformis

Carex elata

Carex elongata

Carex paniculata

Carex pseudocyperus

Dryopteris carthusiana

Dryopteris carthusiana aggr.

Frangula alnus

Galium palustre aggr.

Glyceria maxima *Lysimachia vulgaris*

Molinia caerulea aggr.

Peucedanum palustre

Phalaris arundinacea

Scirpus sylvaticus

Sphagnum palustre

Sphagnum squarrosum

Thelypteris palustris

##D +05 Eutrophic-deciduous-forest-species

Aconitum lycoctonum *Actaea spicata*

Adoxa moschatellina

Aegopodium podagraria

Alliaria petiolata

Allium cyrilli

Allium ursinum

Anemone apennina

Anemone nemorosa

Anemone ranunculoides

Anemone trifolia

Anthriscus nitida

Aposeris foetida

Aquilegia vulgaris

Arabis sagittata

Aremonia agrimonoides

Arum cylindraceum

Arum elongatum

Arum maculatum

Arum orientale

Aruncus dioicus

Asarum europaeum

Asparagus tenuifolius

Asperula cymulosa

Asperula involucrata *Asperula taurina*

Astrantia carniolica

Astrantia major *Brachypodium sylvaticum*

Bromopsis ramosa aggr.

Calamintha grandiflora

Campanula rapunculoides

Campanula trachelium

Cardamine bulbifera

Cardamine enneaphyllos

Cardamine flexuosa

Cardamine glanduligera

Cardamine heptaphylla

Cardamine impatiens *Cardamine kitaibelii*

Cardamine pentaphyllos

Cardamine polyphylla

Cardamine quinquefolia

Cardamine trifolia

Cardamine waldsteinii

Carex alba

Carex depauperata

Carex digitata

Carex halleriana

Carex pilosa

Carpesium cernuum

Cephalanthera damasonium

Cephalanthera longifolia

Cephalanthera rubra

Clinopodium umbrosum

Corallorrhiza trifida

Corydalis cava

Corydalis fabacea

Corydalis intermedia

Corydalis paczoskii

Corydalis pumila

Corydalis solida

Cruciata glabra

Cyclamen coum

Cyclamen purpurascens

Daphne mezereum

Digitalis schischkinii

Drymochloa drymeja

Drymochloa sylvatica

Dryopteris filix-mas

Epimedium alpinum

Epimedium pinnatum

Epimedium pubigerum

Epipactis helleborine

Erythronium dens-canis

Euonymus europaeus

Euonymus latifolius

Euonymus verrucosus

Euphorbia amygdaloides

Euphorbia carniolica

Euphorbia dulcis
Euphorbia squamosa
Fragaria moschata
Gagea lutea
Gagea minima
Galium aristatum
Galium intermedium
Galium odoratum
Galium paschale
Galium pseudaristatum
Galium sylvaticum
Geranium gracile
 Geranium macrorrhizum
 Geranium phaeum
 Geranium robertianum
 Geranium versicolor
 Geum urbanum
 Glechoma hirsuta
 Hacquetia epipactis
 Hedera colchica
 Hedera helix
 Hedera pastuchowii
 Helleborus dumetorum
 Helleborus foetidus
 Helleborus niger
 Helleborus odorus
 Helleborus orientalis
 Helleborus purpurascens
 Hepatica nobilis
Hepatica transsilvanica
Heracleum sphondylium
Hesperis matronalis
Hesperis sylvestris
Hordelymus europaeus
Hyacinthoides non-scripta
Hypericum androsaemum
Hypericum calycinum
Hypericum hirsutum
Hypericum xylosteifolium
Isopyrum thalictroides
Knautia drymeia
Lamium galeobdolon
Lamium maculatum
Lamium orvala
Lathraea squamaria
Lathyrus aureus
Lathyrus laxiflorus
Lathyrus niger
Lathyrus roseus
Lathyrus venetus
Lathyrus vernus

Lilium martagon
Lonicera alpigena
Lonicera nigra
Lonicera xylosteum
Lunaria rediviva
Luzula pilosa Lysimachia nemorum
Melampyrum nemorosum aggr.
Melica nutans
Melica uniflora
Melittis melissophyllum Mercurialis
perennis Milium effusum
Moehringia trinervia
 Neottia nidus-avis
 Omphalodes cappadocica
 Omphalodes nitida
 Omphalodes scorpioides
 Omphalodes verna
 Orobanche hederæ
 Orobanche salviæ Paeonia daurica
 Paris quadrifolia
 Physospermum verticillatum
 Phyteuma spicatum
 Pimpinella tripartita
 Polygonatum hirtum
 Polygonatum multiflorum
 Polygonatum orientale
 Potentilla sterilis
 Prenanthes purpurea
 Primula acaulis
Primula elatior
Primula megaseifolia
Pseudostellaria europaea
Pseudoturritis turrita
Pulmonaria affinis
Pulmonaria apennina
Pulmonaria dacica
Pulmonaria longifolia
Pulmonaria montana
Pulmonaria obscura
Pulmonaria officinalis
Pulmonaria rubra
Pulmonaria stiriaca
Ranunculus lanuginosus
Ranunculus villosus
Ribes alpinum
Ribes uva-crispa Rosa arvensis
Ruscus colchicus
Ruscus hypoglossum
Ruscus hypophyllum
Salvia glutinosa
Sanicula europaea

Saxifraga hirsuta
Saxifraga rotundifolia
Scilla bifolia
Scilla sibirica
Scopolia carniolica
Scrophularia vernalis
Silene dioica
Smilax excelsa
Stellaria holostea
Symphytum cordatum
Symphytum grandiflorum
Symphytum tauricum
 Symphytum tuberosum aggr.
 Teucrium siculum
 Trachystemon orientalis
 Veronica montana
 Veronica peduncularis
 Veronica urticifolia
 Vicia oroboides
 Vicia sepium
 Vinca minor
 Viola alba
 Viola collina
 Viola mirabilis
 Viola reichenbachiana
 Viola riviniana
 Viola sieheana
 Waldsteinia geoides
 Waldsteinia ternata

##D +05 Temperate-riparian-forest-species

Aegopodium podagraria
Ajuga reptans
Anemone nemorosa
Angelica sylvestris
Anthriscus nitida
Brachypodium sylvaticum
Caltha palustris
Calystegia sepium
Carex acutiformis
Carex brizoides
Carex remota
Carex riparia
Carex sylvatica
Chaerophyllum hirsutum
Chrysosplenium alternifolium
Circaea lutetiana
Crepis paludosa
Deschampsia cespitosa
Eupatorium cannabinum
Ficaria verna

Filipendula ulmaria
Frangula alnus
Gagea lutea
Galanthus nivalis
Galium aparine
Galium palustre aggr.
Geum rivale
Geum urbanum
Hedera helix
Humulus lupulus
Impatiens noli-tangere Iris pseudacorus
Juncus effusus
Lamium galeobdolon
 Lamium maculatum
 Leucjum vernum
 Lycopus europaeus
 Lysimachia nummularia
 Lysimachia vulgaris
 Matteucia struthiopteris
 Oenanthe aquatica
 Oenanthe banatica
 Petasites albus
 Phalaroides arundinacea
 Poa trivialis
 Prunus padus
 Pulmonaria officinalis
 Ranunculus lanuginosus
 Ranunculus repens
 Ribes rubrum aggr.
 Rubus caesius
 Rumex sanguineus
Sambucus nigra
Sambucus racemosa
Schedonorus giganteus
Scirpus sylvaticus
Silene dioica
Stachys sylvatica
Stellaria nemorum
Symphytum officinale
Telekia speciosa
Thalictrum aquilegiifolium
Urtica dioica

##D +05 Thermophilous-oak-forest-species

Achillea distans
Aegonychon purpurocaeruleum
Alliaria petiolata
Anemone apennina
Anemone ranunculoides
Anemone sylvestris
Anthericum ramosum

Asparagus officinalis
Asparagus tenuifolius
Brachypodium pinnatum
Brachypodium rupestre
Brachypodium sylvaticum
Buxus sempervirens
Calamintha grandiflora Campanula bononiensis
Campanula persicifolia
Campanula rapunculoides
Caragana arborescens
Caragana frutex
Carex depauperata
Carex fritschii
Carex halleriana
 Carex humilis
 Carex michelii
 Carex montana
 Chaerophyllum nodosum
 Clematis recta
 Clinopodium vulgare
 Colutea arborescens
 Convallaria majalis
 Cornus mas
 Cotinus coggygria
 Cotoneaster integerrimus
 Cotoneaster niger
 Cotoneaster tomentosus
 Cytisus ruthenicus
 Dictamnus albus
 Digitalis lanata
 Digitalis ferruginea
 Erysimum odoratum
Euonymus verrucosus
Euphorbia cyparissias
Euphorbia epithymoides
Euphorbia semivillosa Festuca heterophylla
Fritillaria ruthenica
Galium boreale
Geranium sanguineum
Geum urbanum
Helleborus odoratus
Hypericum montanum
Inula hirta
Iris graminea
Iris variegata
Jasminum fruticans
Laser trilobum
Laserpitium latifolium
Lathyrus niger
Lathyrus venetus
Lonicera caprifolium

Lonicera etrusca
Luzula forsteri
Melittis melissophyllum
Mercurialis ovata
Orchis purpurea
Origanum vulgare
Paeonia peregrina
Peucedanum cervaria
Peucedanum oreoselinum
Piptatherum holciforme
Piptatherum virescens Poa pratensis

aggr.

Potentilla alba
Potentilla micrantha
Primula veris Prunus mahaleb
 Pulmonaria angustifolia
 Pulmonaria mollis
 Pyrus communis
 Pyrus nivalis
 Pyrus spinosa
 Ruscus aculeatus
 Scorzonera humilis
 Scutellaria altissima Securigera varia
 Sedum cepaea
 Serratula tinctoria
 Silene coronaria
 Silene viridiflora
 Stachys officinalis
 Syringa vulgaris
 Tanacetum corymbosum
 Teucrium chamaedrys
Thalictrum minus
Trifolium alpestre
Trifolium medium
Verbascum chaixii
Veronica teucrium
Viburnum lantana
Vicia cassubica
Vinca herbacea
Vincetoxicum hirundinaria
Viola alba
Viola collina
Viola hirta

##D +40 Extremely-rich-moss-sedge-fen-species

Agrostis canina
Andromeda polifolia
Aneura pinguis
Aulacomnium palustre
Bryum pseudotriquetrum
Calliergon giganteum

Calliergon richardsonii
Campylium stellatum
Carex appropinquata
Carex capitata
Carex davalliana
Carex demissa
Carex diandra
Carex dioica
Carex echinata
Carex flava
Carex lapponica
Carex lasiocarpa
Carex nigra
Carex panicea
Carex parallela
 Carex rariflora Carex rostrata
 Carex saxatilis
 Carex tenuiflora
 Carex vaginata
 Cinclidium stygium
 Cinclidium subrotundum
 Comarum palustre
 Dactylorhiza majalis
 Dicranum bonjeanii
 Drosera rotundifolia Epilobium palustre
 Equisetum fluviatile
 Equisetum palustre
 Eriophorum angustifolium
 Eriophorum latifolium
 Fissidens adianthoides
 Fissidens osmundoides
Gymnocolea borealis
Hamatocaulis lapponicus
Hamatocaulis vernicosus
Helodium blandowii
Juncus alpinoarticulatus
Juncus bulbosus
Loeskyopnum badium
Meesia hexasticha
Meesia longiseta
Meesia triquetra
Meesia uliginosa
Menyanthes trifoliata
Paludella squarrosa
Parnassia palustris
Pedicularis palustris
Philonotis fontana
Pseudobryum cinclidioides
Rhynchospora alba
Scorpidium revolvens aggr.
Selaginella selaginoides

Sphagnum contortum
Sphagnum subfulvum
Sphagnum subnitens
Sphagnum teres
Sphagnum warnstorffii
Succisa pratensis
Tomentypnum nitens
Trichophorum alpinum
Trichophorum cespitosum Triglochin palustris
Tritomaria polita
Utricularia minor
Vaccinium oxycoccos
Valeriana dioica
Viola palustris
Warnstorffia tundrae

##D +40 Intermediate-fen-and-soft-water-spring-mire

Agrostis canina
Allium schoenoprasum
Anagallis tenella
Andromeda polifolia
Aneura pinguis
Aulacomnium palustre
Betula nana
Bryum pseudotriquetrum
Calamagrostis neglecta
Calliergon cordifolium
Carex canescens
Carex demissa
Carex diandra
Carex dioica
Carex echinata
Carex lachenalii
Carex lasiocarpa
Carex limosa
Carex magellanica
Carex nigra
Carex panicea
Carex rariflora Carex rostrata
Carex rotundata
Carex saxatilis
Carum verticillatum
Cinclidium subrotundum
Comarum palustre
Dactylorhiza maculata aggr.
Dactylorhiza majalis
Dactylorhiza traunsteineri
Drosera intermedia
Drosera longifolia
Drosera rotundifolia
Eleocharis multicaulis

Epilobium palustre
Equisetum fluviatile
Equisetum palustre
Eriophorum angustifolium
Eriophorum gracile
Eriophorum scheuchzeri Galium palustre

aggr.

Hamatocaulis vernicosus
Hydrocotyle vulgaris
Hypericum elodes
Juncus articulatus
Juncus bulbosus
Juncus filiformis
Menyanthes trifoliata
Montia fontana
 Parnassia palustris
 Pedicularis palustris
 Pedicularis sylvatica
 Peucedanum palustre
 Philonotis fontana
 Philonotis seriata
 Potamogeton polygonifolius
 Potentilla erecta
 Pseudobryum cinclidioides Ranunculus flammula
 Ranunculus reptans Rhynchospora alba
 Rhynchospora fusca
 Sedum villosum
 Sphagnum auriculatum+inundatum
 Sphagnum obtusum
 Sphagnum platyphyllum
 Sphagnum subsecundum
Sphagnum teres
Straminergon stramineum
Succisa pratensis
Swertia perennis
Trichophorum cespitosum
Vaccinium oxycoccos Valeriana dioica
Veronica scutellata
Viola palustris
Wahlenbergia hederacea
Warnstorfia exannulata
Warnstorfia sarmentosa
Willemetia stipitata

##D +40 Calcareous-quaking-mire

Calliergon giganteum
Carex buxbaumii
Carex diandra
Carex flava
Carex chordorrhiza
Carex lasiocarpa

Carex limosa
Carex livida
Carex rariflora Carex rostrata
Carex rotundata
Carex saxatilis
Cinclidium stygium
Comarum palustre
Drosera intermedia
Drosera longifolia
Drosera rotundifolia
Equisetum fluviatile
Eriophorum angustifolium
Eriophorum gracile Hamatocaulis lapponicus
 Hamatocaulis vernicosus
 Juncus stygius
 Meesia triquetra
 Menyanthes trifoliata
 Parnassia palustris
 Pedicularis palustris
 Pseudocalliergon trifarium
 Rhizomnium pseudopunctatum Rhynchospora alba Rhynchospora fusca
 Scorpidium revolvens aggr.
 Scorpidium scorpioides
 Sphagnum contortum
 Sphagnum platyphyllum
 Trichophorum alpinum
 Trichophorum cespitosum
 Utricularia bremii
Utricularia intermedia
Utricularia minor
Utricularia ochroleuca
Warnstorfia tundrae

##D +10 Aquatic-species

Aldrovanda vesiculosa
Alisma gramineum
Althenia filiformis
Althenia orientalis
Aneura pinguis
Antinoria agrostidea
Aristavena setacea
Azolla caroliniana
Azolla cristata
Azolla filiculoides
Azolla species
Baldellia alpestris
Baldellia ranunculoides
Botrydium granulatum
Callitriche brutia
Callitriche cophocarpa
Callitriche cribosa

Callitriche hamulata
Callitriche hermaphroditica
Callitriche lenisulca
Callitriche lusitanica
Callitriche obtusangula
Callitriche palustris
Callitriche platycarpa
Callitriche pulchra
Callitriche regis-jubae Callitriche stagnalis
Callitriche truncata
Ceramium arachnoideum
 Ceramium rubrum
 Ceratophyllum demersum
 Ceratophyllum species
 Ceratophyllum submersum
 Chaetophora incrassata
 Chara aculeolata
 Chara aspera
 Chara baltica
 Chara braunii
 Chara canescens
 Chara connivens
 Chara contraria
 Chara delicatula
 Chara filiformis
 Chara foetida
 Chara fragifera
 Chara galioides
 Chara globularis
Chara gymnophylla
Chara hispida
Chara horrida
Chara intermedia
Chara jubata
Chara muscosa
Chara pedunculata
Chara rudis
Chara species
Chara tenuispina
Chara tomentosa
Chara virgata
Chara vulgaris
Characeae species
Chiloscyphus polyanthos
Cladophora fracta
Cladophora glomerata
Cladophora rivularis
Cladophora species
Cladopodiella fluitans
Drepanocladus aduncus
Egeria densa

Eichhornia crassipes
Elodea callitrichoides
Elodea canadensis
Elodea nuttallii
Elodea species
Enterographa species
Enteromorpha intestinalis Enteromorpha prolifera
Eriocaulon aquaticum
Fontinalis dalecarlica Fontinalis hypnoides
Fontinalis species
Fontinalis squamosa
 Fucus serratus
 Fucus vesiculosus
 Groenlandia densa
 Heteranthera reniformis
 Hottonia palustris
 Hydrocharis morsus-ranae
 Hydrocotyle ranunculoides
 Hydrocotyle vulgaris
 Hydrodictyon reticulatum Hygroamblystegium fluviatile
 Hygroamblystegium tenax
 Hygrohypnum luridum
 Hygrohypnum ochraceum
 Hygrohypnum smithii Isoetes boryana
 Isoetes echinospora
 Isoetes lacustris
 Isoetes longissima
Isoetes malinverniana
Isoetes setacea
Isoetes velata
Isolepis fluitans
Juncus bulbosus
Juncus emmanuelis
Juncus heterophyllus
Lagarosiphon major
Landoltia punctata
Lemna aequinoctialis
Lemna gibba
Lemna minor
Lemna minuta
Lemna perpusilla
Lemna species
Lemna trisulca
Lemna turionifera Lemna valdiviana
Limnophila indica
Lobelia dortmanna
Ludwigia grandiflora
Ludwigia repens
Luronium natans
Lycopodiella inundata
Marsilea quadrifolia

Marsilea species
Marsilea strigosa
Myriophyllum alterniflorum
Myriophyllum aquaticum
Myriophyllum heterophyllum
Myriophyllum species
Myriophyllum spicatum
Myriophyllum verticillatum
Najas flexilis
Najas gracillima Najas marina
Najas minor
Nelumbo nucifera Nitella capillaris
 Nitella flexilis
 Nitella gracilis
 Nitella hyalina
 Nitella mucronata
 Nitella opaca
 Nitella species
 Nitella syncarpa
 Nitella translucens
 Nitellopsis obtusa
 Nuphar lutea
 Nuphar pumila
 Nuphar species
 Nuphar x spenneriana
 Nymphaea alba
Nymphaea candida
Nymphaea lotus
Nymphaea species
Nymphaea tetragona
Nymphoides peltata
Oenanthe fluviatilis
Palmogloea protuberans
Pilularia globulifera
Pilularia minuta
Pistia stratiotes
Plantago uniflora
Potamogeton Xzizii
Potamogeton acutifolius
Potamogeton alpinus
Potamogeton antaicus
Potamogeton berchtoldii
Potamogeton coloratus
Potamogeton compressus
Potamogeton crispus
Potamogeton epihydrus Potamogeton friesii
Potamogeton gramineus
Potamogeton lucens
Potamogeton lucens x perfoliatus
Potamogeton natans
Potamogeton nodosus

Potamogeton obtusifolius
Potamogeton perfoliatus
Potamogeton polygonifolius Potamogeton praelongus
Potamogeton pusillus
Potamogeton pusillus aggr. Potamogeton rutilus
Potamogeton schweinfurthii
Potamogeton species Potamogeton trichoides
 Potamogeton x fluitans
 Potamogeton x nitens
 Potamogeton x sparganifolius
 Potamogeton x variifolius
 Potamogeton x zizii
Ranunculus aquatilis
Ranunculus circinatus
Ranunculus flammula
Ranunculus fluitans
Ranunculus hederaceus
Ranunculus oleraceus
Ranunculus omiophyllus
Ranunculus peltatus
Ranunculus peltatus subsp. baudotii
Ranunculus penicillatus
Ranunculus polyphyllus
Ranunculus reptans
Ranunculus rionii
Ranunculus trichophyllus
Ranunculus tripartitus
Rhynchospora riparioides
Riccia fluitans
Riccia rhenana
Ricciocarpos natans
Rivularia atra
Ruppia cirrhosa
Ruppia maritima
Ruppia species
Salvinia auriculata
Salvinia molesta
Salvinia natans
Samolus valerandi
Sparganium angustifolium
Sparganium natans
Spirodela polyrrhiza
Spirodela species
Spirogyra maxima
Stratiotes aloides
Stuckenia filiformis
Stuckenia pectinata
Stuckenia vaginata
Subularia aquatica
Tolypella glomerata
Tolypella intricata Tolypella nidifica

Tolypella prolifera Tolypella species

Trapa natans

Ulothrix zonata

Ulva lactuca

Utricularia australis

Utricularia bremii

Utricularia gibba

Utricularia intermedia

Utricularia minor

Utricularia ochroleuca

Utricularia vulgaris

Vallisneria spiralis

Vaucheria dichotoma

Vaucheria geminata

Vaucheria species

Wolffia arrhiza

Zannichellia contorta

Zannichellia obtusifolia Zannichellia palustris

Zannichellia pedicellata

Zannichellia pedunculata

Zannichellia peltata

Zostera marina

Zostera noltii

Zygogonium ericetorum

##D +10 Grassland-species

Abietinella abietina

Aconitum anthora

Aconitum burnatii Aconitum

lycoctonum

Aconitum napellus aggr.

Aconogonon alpinum Achillea ageratum

Achillea clavennae Achillea clusiana

Achillea coarctata

Achillea holosericea

Achillea micrantha

Achillea millefolium aggr.

Achillea pseudopectinata

Achillea ptarmica

Adenostyles alliariae

Adenostyles alpina

Adonis vernalis

Aegilops geniculata

Aegonychon purpureocaeruleum

Aegopodium podagraria

Aeluropus lagopoides

Aeluropus littoralis

Aethionema saxatile

Agrimonia eupatoria

Agropyron cristatum

Agropyron dasyanthum

Agrostis capillaris

Agrostis castellana *Agrostis vinealis*

Agrostis tileni

Agrostis stolonifera

Agrostis rupestris

Agrostis nevadensis

Agrostis gracililaxa

Agrostis congestiflora

Aira caryophyllea

Aira cupaniana

Aira elegantissima

Aira praecox

Aira tenorii

Aiopsis tenella

Aizoanthes hispanica

Ajuga reptans

Alchemilla catalaunica

Alchemilla fissa

Alchemilla glomerulans

Alchemilla pentaphylla

Alkanna tinctoria

Alliaria petiolata

Allium angulosum

Allium baeticum

Allium ericetorum

Allium flavum

Allium guttatum

Allium chamaemoly

Allium lusitanicum

Allium melananthum

Allium moly

Allium moschatum

Allium pallens

Allium pentadactyli

Allium schoenoprasum

Allium sphaerocephalon

Allium sphaeropodium *Allium*

subvillosum

Alopecurus bulbosus

Alopecurus geniculatus

Alopecurus gerardi

Alopecurus pratensis *Alopecurus rendlei*

Alopecurus riloensis

Althaea officinalis

Alyssoides utriculata

Alyssum alyssoides

Alyssum diffusum

Alyssum granatense

Alyssum montanum

Alyssum simplex

Alyssum turkestanicum

Ammi huntii
Ammi trifoliatum
Ammoides pusilla
Ampelodesmos mauritanicus
Anabasis aphylla
 Anabasis salsa Anacamptis
 coriophora
 Anacamptis palustris aggr.
 Anacamptis papilionacea
 Anacamptis pyramidalis
 Andropogon distachyos
 Androsace carnea
 Androsace elongata
 Androsace chamaejasme
 Androsace rioxana
 Androsace septentrionalis
 Androsace villosa
 Androsace vitaliana
 Andryala glandulosa
 Andryala integrifolia
 Andryala laxiflora
 Anemone sylvestris
 Angelica archangelica
Angelica heterocarpa
Angelica lignescens
Angelica sylvestris
Anchusa ochroleuca
Anisantha fasciculata
Antennaria dioica
Anthemis arvensis
Anthericum ramosum
Anthoxanthum aristatum
Anthoxanthum maderense
Anthoxanthum odoratum aggr.
Anthoxanthum ovatum
Anthriscus sylvestris
Anthyllis aurea
Anthyllis cornicina
Anthyllis cytisoides
Anthyllis lemanniana
Anthyllis lotoides
Anthyllis montana
Anthyllis vulneraria
Apera interrupta
Aphanes cornucopioides
Aphanes microcarpa
Aquilegia bernardii
Aquilegia cazorlensis
Aquilegia vulgaris
Arabidopsis arenosa
Arabidopsis halleri

Arabidopsis thaliana Arabis auriculata
Arabis caerulea Arabis hirsuta
Arabis nova
Arenaria aggregata
Arenaria armerina
 Arenaria arundana
 Arenaria capillipes
 Arenaria conimbricensis
 Arenaria aggregata
 Arenaria leptoclados
 Arenaria modesta
 Arenaria obtusiflora
 Arenaria pomelii
 Arenaria retusa
 Arenaria serpyllifolia
 Arenaria valentina
 Arenaria x decipiens
 Argentina anserina
 Argyranthemum pinnatifidum subsp. montanum
 Aristida adscensionis
 Aristolochia clematitis
 Armeria arenaria
 Armeria caballeroi
Armeria caespitosa
Armeria canescens
Armeria castroviejoi
Armeria ciliata
Armeria denticulata
Armeria duriaei
Armeria eriophylla
Armeria langei
Armeria maderensis
Armeria maritima
Armeria merinoi
Armeria multiceps
Armeria rumelica
Armeria sardoa
Armeria splendens
Armeria trachyphylla
Armeria transmontana
Arnica montana
Arrhenatherum album
Arrhenatherum elatius
Artemisia alba
Artemisia austriaca
Artemisia campestris
Artemisia granatensis
Artemisia hololeuca
Artemisia lerchiana
Artemisia nutans
Artemisia pedemontana

Artemisia pontica
Artemisia rupestris
Artemisia salsoloides Artemisia santonicum
Artemisia vulgaris
Arthrocnemum macrostachyum
Aruncus dioicus Asparagus asparagoides
 Asparagus horridus
 Asperula aristata
 Asperula cynanchica
 Asperula graveolens
 Asperula purpurea
 Asperula pyrenaica
 Asperula tenella
 Asperula tephrocarpa
 Asphodeline lutea
 Asphodelus albus
 Asphodelus ayardii
 Asphodelus cerasiferus
 Asphodelus macrocarpus
 Asphodelus ramosus
 Asplenium fissum
 Aster alpinus
 Asteriscus aquaticus
Asterolinon linum-stellatum
Astragalus albicaulis
Astragalus alpinus
Astragalus arenarius
Astragalus cavanillesii
Astragalus cymbicarpos
Astragalus echinatus
Astragalus exscapus
Astragalus frigidus
Astragalus glycyphyllos
Astragalus incanus
Astragalus macropus
Astragalus macrorhizus
Astragalus mayeri
Astragalus onobrychis
Astragalus pelecinus
Astragalus penduliflorus
Astragalus scorpioides
Astragalus sesameus
Astragalus stella
Astragalus tremolsianus
Astragalus varius
Astrantia major
Asyneuma limonifolium
Athalamia hyalina
Athyrium distentifolium Atractylis cancellata
Atractylis humilis
Atriplex aucheri

Atriplex cana
Atriplex prostrata
Atriplex sagittata
Atriplex sphaeromorpha
Atropa baetica
Aurinia saxatilis Avena barbata
 Avenula pubescens
 Barbarea bracteosa
 Barbula convoluta
 Bassia hirsuta
 Bassia hyssopifolia
 Bassia laniflora
 Bassia prostrata
 Bassia sedoides
 Bellardiochloa variegata
 Bellevia romana
 Bellidiastrum michelii
 Bellis annua
 Bellis perennis
 Bellis sylvestris
 Bellium bellidioides
 Beta nana
 Biarum dispar
Bidens pilosa
Bienertia cycloptera Biscutella baetica
Biscutella laevigata
Biscutella lyrata
Bistorta officinalis
Bistorta vivipara
Bituminaria bituminosa
Blackstonia perfoliata
Blysmopsis rufa
Blysmus compressus
Bolboschoenus maritimus
Bolboschoenus planiculmis
Bombycilaena erecta
Bothriochloa ischaemum
Botrychium matricariifolium
Botrychium simplex
Brachypodium boissieri
Brachypodium gaditanum
Brachypodium genuense
Brachypodium phoenicoides
Brachypodium pinnatum Brachypodium retusum
Brachypodium rupestre
Brassica elongata
Brassica elongata subsp. pinnatifida
Brimeura amethystina
Briza media
Briza minor
Bromopsis erecta

Bromopsis inermis
Bromopsis pannonica
Bromopsis riparia
Bromus hordeaceus
Bromus racemosus
Bryum
 caespiticiu
 Bryum elegans
 Bufonia macropetala
 Buglossoides incrassata
 Bupleurum baldense
 Bupleurum falcatum
 Bupleurum gerardi
 Bupleurum gracile
 Bupleurum semicompositum
 Bupleurum tenuissimum
 Calamagrostis varia
 Callipeltis cucullaria
 Caltha palustris
 Calystegia sepium
 Calystegia silvatica
 Campanula alpina
 Campanula baumgartenii
 Campanula bononiensis
Campanula dichotoma
Campanula erinus
Campanula glomerata
Campanula herminii
Campanula lusitanica
Campanula patula
Campanula serrata
Campanula scheuchzeri
Campanula sibirica
Campanula thyrsoides
Camphorosma annua
Camphorosma monspeliaca
Carnylopus introflexus
Cardamine acris
Cardamine alpina
Cardamine matthioli
Cardamine parviflora
Cardamine pratensis
Cardamine rivularis
Cardiospermum grandiflorum
Carduus personata
Carex arenaria
Carex atrata
Carex australpina
Carex baldensis
Carex bigelowii
Carex brunnescens
Carex caryophyllaea

Carex colchica
Carex cuprina
Carex curvula
Carex distans
Carex divisa
Carex ericetorum
Carex ferruginea
 Carex firma
 Carex flacca
 Carex flava
 Carex foetida
 Carex furva
 Carex hirta
 Carex hochstetteriana
 Carex humilis
 Carex kitaibeliana
 Carex lachenalii
 Carex lainzii
 Carex leporina
 Carex macrolepis
 Carex macrostyla
 Carex mairei
 Carex melanostachya
 Carex michelii
 Carex montana
Carex mucronata
Carex nigra
Carex norvegica
Carex ornithopoda
Carex pallescens
Carex panicea
Carex peregrina
Carex pilulifera
Carex pyrenaica
Carex sempervirens
Carex stenophylla
Carex supina
Carex vulcani
Carex vulpina
Carlina acanthifolia
Carlina acaulis
Carlina biebersteinii
Carlina corymbosa
Carlina graeca
Carlina vulgaris
Carum carvi
Carum verticillatum
Cassiope hypnoides
Cassiope tetragona Catananche lutea
Catapodium rigidum
Celtica gigantea

Cenchrus setaceus
Centaurea ambigua Centaurea apolepa
Centaurea arenaria aggr.
Centaurea borjæ
Centaurea grisebachii
Centaurea jacea
Centaurea kosaninii
Centaurea nemoralis
Centaurea nigrescens
Centaurea phrygia
Centaurea podospermifolia Centaurea pulvinata
Centaurea rupestris aggr.
Centaurea scabiosa
Centaurea stoebe
Centaurea toletana Centaurium pulchellum
 Centaurium scilloides
 Cephalaria leucantha
 Cephalaria uralensis
 Cerastium alpinum
 Cerastium arvense
 Cerastium brachypetalum
 Cerastium cerastoides
 Cerastium dubium
Cerastium fontanum subsp. vulgare
Cerastium gracile
Cerastium pumilum
Cerastium semidecandrum
Cerastium soleirolii
Ceratodon purpureus
Cetraria aculeata
Chaenorhinum grandiflorum
Chaenorhinum macropodium
Chaenorhinum rubrifolium
Chaerophyllum aromaticum
Chaerophyllum azoricum
Chaerophyllum hirsutum
Chaerophyllum villarsii
Chamaemelum fuscatum
Chamaemelum nobile
Chrysopogon gryllus
Cichorium intybus
Circaea lutetiana
Cirsium acaulon
Cirsium appendiculatum
Cirsium brachycephalum
Cirsium canum
Cirsium dissectum
Cirsium erisithales
Cirsium esculentum
Cirsium heterophyllum
Cirsium monspessulanum

Cirsium oleraceum
Cirsium palustre
Cirsium pannonicum
Cirsium pyrenaicum
Cirsium rivulare
Cirsium rosulatum
Cirsium tuberosum
 Cirsium tymphaeum
 Cistus clusii
 Cladonia cervicornis
 Cladonia foliacea
 Cladonia symphy carpia
 Cladonia zopfii
 Cleistogenes serotina
 Clematis integrifolia
 Clematis recta
 Climacoptera aralensis
 Climacoptera brachiata
 Climacoptera crassa
 Climacoptera lanata
 Climacoptera transoxana
 Climacoptera turcomanica
 Clinopodium acinos
 Clinopodium alpinum
 Clinopodium nepeta
Clinopodium suaveolens
Clinopodium vulgare
Clypeola jonthlaspi
Cochlearia glastifolia
Cochlearia megalosperma
Colchicum alpinum
Colchicum arenarium
Colchicum autumnale
Colchicum filifolium
Colchicum lusitanum
Colchicum montanum
Colchicum triphyllum
Convolvulus althaeoides
Convolvulus lineatus
Conyza primulifolia
Corispermum aralocaspicum
Corispermum filifolium
Corispermum nitidum
Corispermum orientale
Corispermum uralense
Coronilla dura
Coronilla minima
Coronilla scorpioides
Corydalis blanda
Corydalis densiflora
Corynephorus canescens

Corynephorus divaricatus
Crambe tataria
Crassula tillaea Crepis albida
Crepis aurea
Crepis biennis
Crepis capillaris
Crepis chondrilloides
Crepis foliosa
 Crepis lacera
 Crepis mollis
 Crepis neglecta
 Crepis paludosa
 Crepis praemorsa aggr.
 Crepis setosa
 Crepis vesicaria subsp. andryaloides
 Crepis zacintha
Crocus veluchensis
Crocus vernus
Crucianella angustifolia
Cruciata glabra
Crypsis schoenoides
Ctenopsis delicatula
Ctenopsis gypsophila
Cuscuta europaea
Cyanus triumfettii
Cynanchum acutum
Cynosurus cristatus
Cyperus eragrostis
Cyperus longus
Cytisus arduinii
Cytisus austriacus
Cytisus spinescens
Dactylis glomerata Dactylorhiza foliosa
Dactylorhiza maculata aggr.
Dactylorhiza majalis
Dactylorhiza viridis
Danthonia alpina
Danthonia decumbens
Daucus carota
Daucus crinitus
Daucus durieua
Daucus muricatus
Daucus setifolius
Delphinium elatum
Deschampsia cespitosa
Deschampsia foliosa
Deschampsia maderensis
Deschampsia media
Dianthus arenarius
Dianthus armeria
Dianthus borbasii

Dianthus carthusianorum
Dianthus ciliatus
Dianthus deltoides
Dianthus diutinus
Dianthus garganicus Dianthus giganteus
Dianthus humilis
Dianthus integer
Dianthus langedanus Dianthus laricifolius
 Dianthus legionensis
 Dianthus microlepis
 Dianthus platyodon
 Dianthus plumarius
 Dianthus pontederæ
 Dianthus præcox
 Dianthus serotinus
 Dianthus superbus
 Dianthus sylvestris
 Dichoropetalum schottii
 Dictamnus albus
 Didymodon fallax
 Didymodon ferrugineus Didymodon rigidulus
 Digitalis grandiflora
 Dipsacis serotinum
 Dipsacis cretacea Dipsacus fullonum
Dipsacus laciniatus
Distichium capillaceum
Distichoselinum tenuifolium
Dittrichia viscosa
Dodartia orientalis
Doronicum corsicum
Doronicum grandiflorum
Dorycnium hirsutum
Dorycnium rectum
Draba aizoides
Draba crassifolia
Draba hispanica Draba
lasiocarpa
 Draba verna aggr.
 Dracocephalum austriacum
 Drimys maritima
 Drimys undata
 Drymocalis rupestris
 Echinaria capitata
 Echinops ritro
 Echium rubrum
 Edraianthus graminifolius
 Eleocharis uniglumis
 Elytrigia curvifolia
 Elytrigia intermedia
 Elytrigia repens
 Encalypta raptocarpa

Encalypta streptocarpa Encalypta vulgaris
Entodon concinnus
Ephedra distachya
Epilobium anagallidifolium
Epilobium hirsutum
Epilobium lactiflorum
 Epilobium montanum
 Epipactis palustris
 Equisetum palustre
 Equisetum ramosissimum
 Equisetum telmateia
 Eremogone koriniana
 Erigeron epiroticus
 Erigeron frigidus Erigeron uniflorus
 Erodium botrys

 Erodium carvifolium
 Erodium cazorlanum
 Erodium cicutarium
 Erodium daucoides
 Erodium foetidum
 Erodium glandulosum
 Erodium laciniatum
 Erodium recoderi
Eryngium amethystinum
Eryngium bourgatii
Eryngium campestre
Eryngium dichotomum
Eryngium dilatatum
Eryngium glaciale
Eryngium grosii
Eryngium planum
Eryngium tenue
Eryngium triquetrum
Erysimum canum
Erysimum diffusum
Erysimum humile
Erysimum incanum
Erysimum linariifolium
Erysimum montanum
Erysimum nevadense aggr. Erysimum odoratum
Erysimum pseudorhaeticum
Erysimum seipkae
Erysimum witmannii
Eupatorium cannabinum
Euphorbia azorica
Euphorbia cyparissias
Euphorbia duvalii Euphorbia exigua
Euphorbia falcata
Euphorbia glabriflora
Euphorbia hirsuta
Euphorbia lucida

Euphorbia montenegrina
Euphorbia nicaeensis
Euphorbia petrophila
Euphorbia seguieriana
Euphorbia spinosa
 Euphorbia sulcata
 Euphrasia azorica
 Euphrasia grandiflora
 Euphrasia illyrica
 Euphrasia nemorosa
 Euphrasia rostkoviana
 Fallopia dumetorum
 Ferula caspica
 Ferula loscosii
 Ferula tatarica
 Ferulago campestris
 Ferulago granatensis
 Festuca airoides
 Festuca altopyrenaica
 Festuca ampla
 Festuca auquieri
 Festuca beckeri
 Festuca brigantina
Festuca burnatii
Festuca caerulea
Festuca capillifolia
Festuca circummediterranea
Festuca clementei
Festuca csikhegyensis
Festuca elegans
Festuca eskia
Festuca filiformis
Festuca francoi
Festuca gredensis
Festuca henriquesii
Festuca hystrix
Festuca iberica
Festuca indigesta
Festuca inops
Festuca jubata
Festuca liviensis
Festuca longiauriculata
Festuca marginata subsp. *andres-molinae*
Festuca marginata subsp. *gallica*
Festuca microphylla
Festuca morisiana
Festuca nevadensis
Festuca ochroleuca
Festuca oelandica
Festuca pallens
Festuca petraea

Festuca picturata
Festuca polesica
Festuca psammophila
Festuca pseudeskia
Festuca rivas-martinezii
Festuca robustifolia
Festuca rothmaleri
 Festuca rubra aggr.
 Festuca scariosa
 Festuca stricta subsp. stricta
 Festuca stricta subsp. sulcata
 Festuca stricta subsp. trachyphylla
 Festuca summilusitana
 Festuca trichophylla
 Festuca vaginata Festuca valesiaca
 aggr.
 Festuca versicolor
 Festuca wagneri
 Filago arvensis
 Filago carpetana
 Filago eriocephala
 Filago gallica
 Filago lutescens
 Filago minima
 Filago pygmaea
Filago pyramidata
Filipendula ulmaria
Filipendula vulgaris
Fragaria vesca
Fragaria viridis
Frankenia corymbosa
Frankenia hirsuta
Frankenia pulverulenta Fritillaria meleagris
Fritillaria orientalis
Fritillaria pyrenaica
Fumana bonapartei Fumana
ericoides
 Fumana procumbens
 Fumana thymifolia
 Gagea bohemica
 Galatella sedifolia
 Galatella tatarica Galatella villosa
 Galeopsis speciosa
 Galium anisophyllum
 Galium aparine
 Galium austriacum
 Galium boreale
 Galium debile
 Galium divaricatum
 Galium mollugo aggr.
 Galium murale

Galium octonarium Galium
odoratum
Galium oelandicum
Galium oreophilum
Galium parisiense Galium pumilum
Galium ruthenicum
Galium saxatile
Galium sternerii
Galium uliginosum
Galium verum
Gastridium ventricosum
Gaudinia coarctata
Gaudinia fragilis
Genista januensis
Genista lobelii
Genista pilosa
Genista pulchella Genista sericea
Genista tinctoria
Gentiana alpina Gentiana boryi
Gentiana clusii
Gentiana cruciata
Gentiana pannonica
Gentiana pneumonanthe
Gentiana verna
Gentianella amarella
Gentianella ciliata
Gentianella germanica
Geranium asphodeloides
Geranium palmatum
Geranium palustre Geranium phaeum
Geranium pratense
Geranium reuteri
Geranium robertianum
Geranium sanguineum Geranium
subcaulescens
Geranium sylvaticum aggr.
Geum coccineum
Geum montanum
Geum rivale
Geum urbanum
Girgensohnia oppositifolia
Gladiolus imbricatus
Gladiolus italicus
Glaux maritima
Glechoma hederacea
Globularia bisnagarica
Globularia cordifolia
Globularia meridionalis
Glycyrrhiza echinata
Glycyrrhiza glabra
Gnaphalium hoppeanum

Gnaphalium supinum
 Gnaphalium sylvaticum Gnaphalium teydeum
 Goniolimon besseranum
 Goniolimon collinum Goniolimon tataricum
 Gratiola officinalis
 Gymnadenia conopsea
 Gymnadenia nigra aggr.
 Gypsophila altissima
 Gypsophila fastigiata
 Gypsophila paniculata
 Gypsophila spergulifolia
 Gypsophila tomentosa
 Halacsya sendtneri
 Halimione pedunculata
 Halimione verrucifera
 Halimocnemis sclerosperma
 Halocnemum strobilaceum
 Halogeton glomeratus
 Halopeplis amplexicaulis
 Halostachys belangeriana
 Haplophyllum boissierianum
 Hedypnois cretica
 Hedysarum humile
 Hedysarum spinosissimum
 Helianthemum aegypticum
 Helianthemum alpestre
 Helianthemum angustatum
 Helianthemum apenninum
 Helianthemum canum
 Helianthemum cinereum
 Helianthemum masguindalii Helianthemum
 nummularium
 Helianthemum polygonoides
 Helianthemum salicifolium
 Helianthemum sanguineum
 Helichrysum arenarium
 Helictochloa bromoides
 Helictochloa gervaisii
 Helictochloa pratensis
 Helictochloa versicolor
 Helictotrichon decorum
 Helictotrichon desertorum
 Helictotrichon filifolium
 Helictotrichon sedenense
 Helictotrichon sempervirens
 Heracleum elegans
 Heracleum sphondylium
 Heracleum transsilvanicum
 Herniaria boissieri
 Herniaria glabra
 Herniaria parnassica

Herniaria scabrida
 Hesperis sylvestris
 Heteropogon contortus
 Hieracium bupleuroides
 Hieracium cerinthoides
 Hieracium lachenalii
 Hieracium laevigatum
 Hieracium pannosum
 Hieracium villosum
 Hippocrepis biflora
 Hippocrepis ciliata
 Hippocrepis comosa
 Hippocrepis glauca
 Hispidella hispanica
 Holcus annuus
 Holcus gayanus
 Holcus lanatus Holcus mollis
 Holcus rigidus
 Holosteum umbellatum
 Homalothecium lutescens Homalothecium
 sericeum
 Homogyne alpina
 Homogyne discolor
 Hordeum bulbosum
 Hordeum geniculatum
 Hordeum marinum
 Hordeum murinum
 Hordeum secalinum
 Hormathophylla purpurea
 Hornungia alpina
 Hornungia petraea
 Hornungia procumbens
 Humulus lupulus
 Hyparrhenia hirta
 Hyparrhenia sinaica
 Hypericum caprifolium
 Hypericum elegans
 Hypericum hircinum
 Hypericum maculatum
 Hypericum perforatum Hypericum pubescens
 Hyssopus officinalis
 Hypochaeris robertia
 Hypochaeris radicata
 Hypochaeris maculata
 Hypochaeris glabra
 Hypochaeris cretensis
 Hypochaeris achyrophorus
 Hypericum tomentosum
 Hypericum tetrapterum
 Hypericum pulchrum
 Iberis fontqueri

Iberis saxatilis
Iberis sempervirens
Impatiens balfourii
Impatiens glandulifera
Impatiens noli-tangere
 Imperata cylindrica
 Inula britannica
 Inula conyzae
 Inula ensifolia
 Inula germanica
 Inula helenium
 Inula hirta
 Inula montana
 Inula oculus-christi
 Inula salicina
 Ipomoea indica
 Ipomoea sagittata Iris latifolia
 Iris pseudopumila
 Iris pumila
 Iris sibirica
 Iris spuria
Iris variegata
Jacobaea abrotanifolia
Jacobaea adonidifolia
Jacobaea alpina
Jacobaea aquatica
Jacobaea auricula
Jacobaea borysthénica
Jacobaea erucifolia
Jacobaea incana
Jacobaea minuta
Jacobaea subalpina
Jacobaea vulgaris
Jasione crispa
Jasione heldreichii
Jasione laevis
Jasione montana
Jasione penicillata
Jasonia tuberosa
Jovibarba globifera
Juncus acutus
Juncus articulatus
Juncus biglumis
Juncus bufonius aggr.
Juncus compressus
Juncus conglomeratus
Juncus effusus
Juncus gerardi
Juncus inflexus
Juncus littoralis Juncus maritimus
Juncus squarrosus

Juncus striatus
Juncus subulatus
Juncus trifidus
Jurinea arachnoidea
Jurinea cyanoides
 Jurinea mollis
 Jurinea multiflora
 Jurinea stoechadifolia
 Kalidium caspicum
 Kalidium foliatum Karelinia caspia
 Kernera saxatilis
 Knautia arvensis
 Knautia fleischmannii Knautia illyrica
 Knautia nevadensis
 Knautia purpurea
 Kobresia myosuroides
 Koeleria brevis
 Koeleria glauca
 Koeleria lobata
 Koeleria macrantha
 Koeleria pyramidata
Koeleria splendens
Koeleria talievii
Koeleria vallesiana
Lactuca alpina
Lactuca muralis
Lactuca pancicii
Lactuca plumieri
Lactuca quercina
Lactuca viminea
Lactuca watsoniana
Lagurus ovatus
Lamium album
Lamium maculatum
Lapiedra martinezii
Lapsana communis
Laserpitium latifolium
Laserpitium longiradium
Laserpitium nestleri
Laserpitium siler
Lathyrus angulatus
Lathyrus clymenum
Lathyrus heterophyllus
Lathyrus inconspicuus
Lathyrus latifolius
Lathyrus linifolius
Lathyrus nissolia
Lathyrus palustris
Lathyrus pannonicus Lathyrus pratensis
Lathyrus sphaericus
Lathyrus sylvestris

Lavandula multifida
Leersia oryzoides
Lembotropis nigricans
Leontodon crispus
 Leontodon filii
 Leontodon hirtus
 Leontodon hispidus
 Leontodon incanus
 Leontodon rigens
 Leontodon saxatilis
 Leontodon tuberosus
 Leontopodium nivale
 Leonurus cardiaca
 Lepidium cartilagineum
 Leptogium schraderi
 Leucanthemopsis alpina
 Leucanthemopsis flaveola
 Leucanthemopsis pallida
 Leucanthemopsis pulverulenta
 Leucanthemum aligulatum
 Leucanthemum burnatii
Leucanthemum graminifolium
 Leucanthemum rotundifolium Leucanthemum
 vulgare aggr.
Leucojum aestivum
Leucojum valentinum
Leymus ramosus
Ligusticum corsicum
Ligusticum mutellina
Limonium angustebracteatum
Limonium aragonense
Limonium bellidifolium
Limonium caesium
Limonium carpetanicum
Limonium catalaunicum
Limonium cofrentanum
Limonium cordovillense
Limonium cossonianum
Limonium costae
Limonium danubiale
Limonium delicatulum
Limonium dichotomum
Limonium echioides
Limonium erectum
Limonium furfuraceum
Limonium gmelinii
Limonium insigne
Limonium lobetanicum
Limonium majus
Limonium minus
Limonium pinillense

Limonium quesadense
Limonium reniforme
Limonium ruizii
Limonium santapolense
Limonium scoparium
Limonium soboliferum Limonium
squarrosum
Limonium stenophyllum
Limonium sucronicum
Limonium suffruticosum
Limonium supinum Limonium toletanum
 Limonium tournefortii
 Limonium viciosoi
 Linaria aeruginea
 Linaria elegans
 Linaria genistifolia
 Linaria huteri
 Linaria intricata
 Linaria micrantha
 Linaria oblongifolia
 Linaria pelisseriana
 Linaria platycalyx
 Linaria salzmännii
Linaria saturejoides
Linaria saxatilis
Linaria simplex
Linaria sparteae
Linum alpinum
Linum austriacum
Linum capitatum
Linum catharticum
Linum hirsutum
Linum milletii
Linum narbonense Linum strictum
aggr.
 Linum suffruticosum aggr.
 Linum tenue
 Linum tenuifolium
 Linum tommasinii
 Linum trigynum
 Linum ucranicum
 Linum viscosum
Lithospermum officinale
Lobularia maritima
Lolium perenne
Lomelosia graminifolia
Lomelosia stellata
Lonicera periclymenum
Lotus alpinus
Lotus angustissimus
Lotus conimbricensis

Lotus corniculatus
Lotus glacialis
Lotus glareosus
Lotus maritimus
Lotus ornithopodioides
Lotus pedunculatus
Lotus tenuis Lunaria rediviva
 Lupinus micranthus
 Luzula alpinopilosa
 Luzula caespitosa
 Luzula campestris aggr.
 Luzula confusa
 Luzula desvauxii Luzula nivalis
 Luzula pediformis
 Luzula pindica
 Luzula purpureosplendens
 Luzula spicata
 Lycopus europaeus
 Lygeum spartum
 Lysimachia azorica
 Lysimachia ephemerum
 Lysimachia nummularia
 Lysimachia vulgaris
Lythrum salicaria
Lythrum virgatum
Macrochloa tenacissima
Malva tournefortiana
Medicago arabica
Medicago caerulea
Medicago intertexta
Medicago littoralis
Medicago minima
Medicago monspeliaca
Medicago polymorpha
Medicago prostrata
Medicago rigidula Melampyrum cristatum
Melampyrum nemorosum aggr.
Melampyrum pratense
Melampyrum sylvaticum
Melampyrum velebiticum
Melica ciliata
Melica transsilvanica
Melilotus dentatus
Melilotus indica
Melilotus neapolitana
Melittis melissophyllum
Meniocus linifolius
Mentha longifolia Mentha pulegium
Mentha suaveolens
Mesembryanthemum crystallinum
Mesembryanthemum nodiflorum

Meum athamanticum
Microcnemum coralloides Micromeria graeca
Micromeria varia
Micromeria varia subsp. thymoides
Micropus supinus
Micropyrum patens
Micropyrum tenellum
Microrrhinum minus
 Minuartia glaucina
 Minuartia greuteriana
 Minuartia hamata
 Minuartia hybrida aggr.
 Minuartia langii
 Minuartia laricifolia
 Minuartia laricifolia subsp. ophiolitica
 Minuartia mediterranea
 Minuartia mesogitana
 Minuartia montana
 Minuartia recurva
 Minuartia setacea
 Minuartia verna
 Minuartia villarii
Moenchia erecta
Moenchia mantica
Molineriella australis
Molineriella laevis
Molineriella minuta
Molinia caerulea aggr.
Molopospermum peloponnesiacum
Moraea sisyrinchium
Moricandia arvensis
Mycobilimbia lurida
Myosotis azorica
Myosotis incrassata
Myosotis latifolia Myosotis ramosissima
Myosotis scorpioides aggr.
Myosotis soleirolii
Myosotis stricta
Myosoton aquaticum
Nanophyton erinaceum
Narcissus assoanus
Narcissus bulbocodium
Narcissus dubius
Narcissus poeticus
Nardus stricta
Nasturtium microphyllum
Neatostema apulum
Neotinea ustulata
Nepeta hispanica
Nepeta ucranica
Noaea mucronata

Noccaea kovatsii
Noccaea ochroleuca
Noccaea perfoliata
Noccaea praecox
Nonea pulla Odontarrhena bertolonii
 Odontarrhena borzaeana
 Odontarrhena heldreichii
 Odontarrhena markgrafii
 Odontarrhena tortuosa
 Odontites holliana
 Odontites longiflora Odontites purpurea
 Odontites tenuifolius
 Odontites viscosus
 Oenanthe fistulosa
 Oenanthe lachenalii
 Oenanthe peucedanifolia
 Oenanthe pimpinelloides
 Oenanthe silaifolia
 Ofaiston monandrum
 Omphalodes commutata
 Omphalodes linifolia
Onobrychis arenaria
Onobrychis caput-galli
Onobrychis montana
Onobrychis pyrenaica
Onobrychis viciifolia
Ononis cintrana
Ononis cristata
Ononis ornithopodioides
Ononis pendula
Ononis pubescens
Ononis pusilla
Ononis reclinata
Ononis spinosa
Ononis striata
Ononis viscosa
Onosma arenaria
Onosma fastigiata
Onosma simplicissima
Ophioglossum azoricum
Ophioglossum vulgatum
Ophrys apifera
Ophrys bombyliflora
Ophrys holosericea
Ophrys insectifera
Ophrys lutea
Ophrys omegaifera
Ophrys speculum
Ophrys sphegodes
Ophrys tenthredinifera
Oreochloa disticha

Orchis anthropophora Orchis mascula
Orchis mascula subsp. scopulorum
Orchis militaris Orchis purpurea
Origanum vulgare
 Orlaya grandiflora
 Ornithogalum collinum
 Ornithogalum concinnum
 Ornithogalum narbonense
 Ornithopus compressus
 Ornithopus perpusillus
 Ornithopus pinnatus
 Orobanche teucrii
 Ortegia hispanica
 Otospermum glabrum
 Oxytropis campestris
 Oxytropis carpatica
 Oxytropis halleri
 Oxytropis neglecta Oxytropis pilosa
 Oxytropis purpurea
 Paeonia mascula
Paeonia officinalis
Paeonia tenuifolia Pallenis spinosa
Parafestuca albida
Paragymnopteris marantae
Parapholis strigosa
Parentucellia latifolia
Paronychia argentea
Paronychia cephalotes Paronychia cymosa
Paronychia echinulata
Pastinaca sativa
Pedicularis comosa
Pedicularis foliosa
Pedicularis rostratocapitata
Pedicularis sylvatica
Pedicularis verticillata Periballia involucrata
Pericallis appendiculata
Pericallis aurita
Pericallis cruenta
Pericallis echinata
Pericallis malvifolia
Pericallis tussilaginis
Petasites albus
Petasites hybridus
Petrorhagia prolifera
Petrorhagia saxifraga
Petrosimonia brachiata
Petrosimonia brachyphylla
Petrosimonia glaucescens Petrosimonia litwinowii
Petrosimonia monandra
Petrosimonia oppositifolia
Petrosimonia triandra

Peucedanum alsaticum
Peucedanum arenarium Peucedanum
cervaria
Peucedanum coriaceum
Peucedanum gallicum
Peucedanum hispanicum
Peucedanum officinale
Peucedanum oreoselinum
Peucedanum ostruthium
Phagnalon rupestre
Phagnalon saxatile
Phalacrocarpum oppositifolium
Phalacrocarpum sericeum
Phalaris aquatica
Phalaris coerulescens
Phalaroides arundinacea
Phelipanche arenaria
Phelipanche purpurea
Phippsia algida
Phleum alpinum aggr.
Phleum ambiguum
Phleum bertolonii
Phleum pratense
Phlomis herba-venti
Phlomis lychnitis
Phlomis tuberosa
Pholiurus pannonicus
Physalis alkekengi
Phyteuma hemisphaericum
Phyteuma orbiculare
Phyteuma sieberi
Phyteuma spicatum
Pilosella aurantiaca
Pilosella castellana Pilosella echioides
Pilosella lactucella
Pilosella officinarum
Pilosella soleiroliana
Pilosella vahlII
Pimpinella dendrotragium
Pimpinella major
Pimpinella nigra
Pimpinella saxifraga
Pimpinella serbica
Pimpinella tragium
Pistorinia breviflora
Pistorinia hispanica Plantago albicans
Plantago alpina
Plantago altissima
Plantago amplexicaulis
Plantago arborescens
Plantago argentea Plantago atrata

Plantago bellardi
Plantago bellardii
Plantago cornuti
Plantago coronopus aggr.
Plantago holosteum
Plantago lagopus
Plantago lanceolata
Plantago loeflingii
Plantago major
Plantago maritima
Plantago media
Plantago monosperma
Plantago nivalis
Plantago serraria
Plantago subulata
Plantago tenuiflora
Platanthera bifolia
Platycapnos tenuiloba
Poa alpina Poa arctica
Poa badensis aggr.
Poa balbisii
Poa bulbosa
Poa compressa
Poa dolosa
Poa glauca
Poa granitica
Poa chaixii
Poa legionensis
Poa perconcinna
Poa pratensis aggr.
Poa pumila
Poa trivialis
Podospermum canum
Polygala alpestris
Polygala amara
Polygala amarella Polygala comosa
Polygala cretacea
Polygala edmundii
Polygala major
Polygala monspeliaca
Polygala serpyllifolia
Polygala vulgaris
Polygonatum odoratum
Polygonum albanicum
Polygonum arenarium
Polytrichum piliferum Pontechium maculatum
Potentilla anglica
Potentilla argentea
Potentilla astracanica Potentilla asturica
Potentilla aurea
Potentilla brauneana

Potentilla calabra
Potentilla crantzii Potentilla erecta
 Potentilla heptaphylla
 Potentilla hirta
 Potentilla hyparctica Potentilla incana
 Potentilla nevadensis
 Potentilla reptans
 Potentilla reuteri
 Potentilla rigoana
 Potentilla tabernaemontani
 Potentilla visianii
 Primula clusiana
 Primula elatior
Primula integrifolia
Primula minima
Primula veris
Prunella grandiflora
Prunella hyssopifolia
Prunella laciniata
Prunella vulgaris
Psathyrostachys juncea
Pseudoturritis turrita
Psilurus incurvus
Psora decipiens
Pterocephalidium diandrum
Ptilostemon stellatus
Puccinellia caespitosa
Puccinellia distans
Puccinellia dolicholepis
Puccinellia fasciculata
Puccinellia festuciformis
Puccinellia hispanica
Pulicaria dysenterica Pulicaria vulgaris
Pulmonaria longifolia
Pulsatilla alpina
Pulsatilla halleri
Racomitrium canescens
Racomitrium elongatum
Ranunculus abnormis
Ranunculus acetosellifolius
Ranunculus aconitifolius
Ranunculus acris
Ranunculus alpestris
Ranunculus breynius
Ranunculus bulbosus
Ranunculus bullatus
Ranunculus cortusifolius
 Ranunculus crenatus
 Ranunculus demissus
 Ranunculus glacialis
 Ranunculus gramineus

Ranunculus granatensis
Ranunculus hybridus
Ranunculus illyricus
Ranunculus macrophyllus
Ranunculus marginatus
Ranunculus montanus
Ranunculus neapolitanus
Ranunculus nivalis
Ranunculus ophioglossifolius
Ranunculus paludosus
Ranunculus pedatus
Ranunculus platanifolius
Ranunculus pollinensis
Ranunculus polyanthemus
Ranunculus pseudomillefoliatus
Ranunculus pseudomontanus
Ranunculus pygmaeus
Ranunculus pyrenaeus
Ranunculus repens
Ranunculus sardous
Ranunculus sartorianus
Ranunculus sulphureus
Ranunculus thora
Ranunculus velutinus
Reichardia picroides
Reseda phyteuma
Reseda virgata
Rhaponticoides ruthenica
Rhaponticum coniferum Rhaponticum repens
Rhaponticum scariosum
Rhinanthus alectorolophus
Rhinanthus angustifolius
Rhinanthus gracilis
Rhinanthus mediterraneus
Rhinanthus minor
Rhodiola rosea
Romulea bulbocodium
Romulea columnae
Romulea linaresii
Romulea ramiflora
Rorippa sylvestris
Rorippa thracica
Rostraria azorica
Rubus caesius
Rubus ulmifolius
Rumex acetosa
Rumex alpinus
Rumex arifolius Rumex
 bucephalophorus
 Rumex bucephalophorus subsp. canariensis
 Rumex conglomeratus

Rumex crispus
Rumex maderensis
Rumex thyrsiflorus
Ruta angustifolia
Ruta graveolens
Sagina maritima
Sagina merinoi
Sagina pilifera Sagina saginoides
Salicornia europaea aggr.
Salix herbacea
Salix polaris
Salsola acutifolia
Salsola dendroides Salsola foliosa
Salsola kali aggr.
Salsola laricina
Salsola nitraria
Salsola orientale
Salsola soda
Salvia aethiopis
Salvia austriaca
Salvia nemorosa
Salvia nutans
Salvia officinalis
Salvia pratensis
Salvia verbenaca
Salvia verticillata
Sanguisorba lateriflora Sanguisorba minor
Sanguisorba officinalis
Saponaria caespitosa
Satureja montana Satureja subspicata
Saussurea alpina aggr.
Saussurea pygmaea
Saxifraga androsacea
Saxifraga bulbifera
Saxifraga caesia
Saxifraga cernua
Saxifraga conifera
Saxifraga maderensis
Saxifraga nivalis
Saxifraga oppositifolia Saxifraga paniculata
Saxifraga rivularis
Saxifraga rotundifolia Saxifraga stellaris
Saxifraga tenuis
Saxifraga tridactylites
Saxifraga wahlenbergii
Scabiosa canescens
Scabiosa columbaria
Scabiosa leucophylla
Scabiosa nitens
Scabiosa triandra
Scabiosa ucrainica

Scilla litardierei
Scirpoides holoschoenus Scirpus sylvaticus
Scleranthus delortii
Scleranthus perennis
Scleranthus perennis subsp. burnatii
Scorpiurus muricatus
Scorpiurus vermiculatus
Scorzonera austriaca
Scorzonera cretica
Scorzonera ensifolia
Scorzonera humilis
Scorzonera parviflora
Scorzonera villosa
Scorzoneroides autumnalis
Scorzoneroides cantabrica
Scorzoneroides carpetana
Scorzoneroides cichoriacea
Scorzoneroides helvetica
Scorzoneroides microcephala
Scorzoneroides pyrenaica
Scrophularia auriculata
Scrophularia canina
Scrophularia cretacea
Scrophularia scopolii
Scrophularia smithii
Scrophularia umbrosa
Scutellaria hastifolia
Schedonorus arundinaceus
Schedonorus giganteus
Schedonorus pratensis
Schoenoplectus lacustris subsp. glaucus
Schoenus nigricans
Secale sylvestre
Securigera varia
Sedum acre
Sedum album
Sedum alpestre
Sedum andegavense
Sedum anglicum
Sedum annuum
Sedum arenarium
Sedum brevifolium
Sedum caespitosum
Sedum candolleanum
Sedum forsterianum
Sedum hispanicum
Sedum melanantherum
Sedum ochroleucum
Sedum pedicellatum
Sedum rupestre
Sedum sediforme

Sedum serpentini
Sedum sexangulare
Sedum urvillei
Selinum carvifolia
Selinum dubium
Sempervivum arachnoideum
Sempervivum calcareum
Sempervivum montanum
Senecio carpetanus
Senecio doria aggr.
Senecio doronicum
Senecio lagascanus
Senecio procerus Senecio provincialis
Serapias vomeracea aggr.
Serratula tinctoria
Sesamoides purpurascens
Seseli annuum
Seseli leucospermum
Seseli libanotis
Seseli montanum
Seseli osseum
Seseli tortuosum
Sesleria caerulea
Sesleria coerulans
Sherardia arvensis
Sesleria rigida
Sesleria nitida
Sesleria latifolia
Sesleria juncifolia
Sibbaldia procumbens
Sideritis glacialis
Sideritis hyssopifolia
Sideritis raeseri
Sideritis romana
Silaum silaus
Silene almolae
Silene armeria
Silene baccifera
Silene bupleuroides subsp. staticifolia
Silene ciliata
Silene conica
Silene coronaria Silene cretacea
Silene dioica
Silene flos-cuculi
Silene germana Silene chlorantha
 Silene inaperta
 Silene italica
 Silene legionensis
 Silene mariana
 Silene otites aggr.
 Silene portensis

Silene psammitis
Silene rupestris
Silene scabriflora
Silene supina
Silene uniflora
Sinapidendron frutescens
Sisymbrium supinum
Smyrnum perfoliatum Soldanella alpina
Soldanella carpatia
Soldanella minima
Solidago gigantea
Solidago virgaurea
Sonchus crassifolius
Sonchus maritimus
Spergula morisonii
Spergularia diandra
Spergularia marina
Spergularia media
Sphenopus divaricatus
Stachys alopecuros
Stachys officinalis
Stachys palustris
Stachys recta
Stachys scardica
Stachys serotina
Stereocaulon condensatum
Stipa anomala
Stipa apertifolia
Stipa austroitalica
Stipa barbata
Stipa borysthenica aggr.
Stipa capensis
Stipa capillata
Stipa cazorlensis
Stipa clausa
Stipa dasyphylla
Stipa dasyvaginata
Stipa eriocaulis
Stipa etrusca
Stipa iberica
Stipa juncea
Stipa korshinskyi Stipa lagascae
Stipa lessingiana
Stipa offneri Stipa parviflora
 Stipa pennata
 Stipa pulcherrima
 Stipa tirsia
 Stipa ucrainica
 Stipa zalesskii
Suaeda acuminata
Suaeda braun-blanquetii

Suaeda corniculata
Suaeda dendroides
Suaeda maritima aggr.
Suaeda physophora
Suaeda splendens
Suaeda vera
Succisa pratensis Succisella andreae-
molinae
Symphyotrichum novi-belgii aggr.
Symphytum officinale
Syntrichia ruralis aggr.
Tanacetum achilleifolium
Tanacetum corymbosum
Tanacetum vulgare
Taraxacum apenninum
Taraxacum aragonicum
Taraxacum besarabicum
Taraxacum bithynicum
Taraxacum croceum
Taraxacum obovatum
Taraxacum sect. Erythrosperma
Taraxacum sect. Taraxacum
Taraxacum serotinum
Teesdalia conferta
Teesdalia coronopifolia
Teesdalia nudicaulis
Telekia speciosa
Tephroseris elodes
Tephroseris longifolia
Teucrium botrys
Teucrium francoi
Teucrium chamaedrys
Teucrium luteum Teucrium
montanum
Teucrium polium aggr.
Teucrium pseudochamaepitys
Teucrium scordium
Teucrium scorodonia
Thalictrum alpinum
Thalictrum aquilegifolium
Thalictrum flavum
Thalictrum lucidum Thalictrum minus
Thalictrum simplex
Thalictrum speciosissimum
Thapsia garganica
Thapsia villosa
Thelypteris limbosperma
Thesium alpinum
Thesium cataaunicum
Thesium divaricatum
Thesium linophyllum Thesium parnassi

Thuidium philiberti
Thymelaea passerina
Thymelaea tinctoria Thymus
bracteatus
Thymus caespititius
Thymus calcareus
Thymus ciliatopubescens
Thymus comosus
Thymus godayanus
Thymus izcoi
Thymus longicaulis
Thymus mastigophorus
Thymus nervosus
Thymus orospedanus
Thymus pallasianus
Thymus pannonicus aggr.
Thymus praecox
Thymus pulegioides
Thymus pulcherrimus
Thymus serpyllum
Thymus spinulosus
Thymus striatus
Thymus vulgaris
Thymus willkommii
Thymus zygis
Tolpis azorica
Tolpis barbata
Tolpis umbellata
Tortella inclinata
Tortella rigens
Tortella tortuosa
Tragopogon floccosus
Tragopogon pratensis
Tragopogon tommasinii
Trachynia distachya
Trifolium alpestre
Trifolium alpinum
Trifolium angulatum
Trifolium arvense Trifolium badium
Trifolium bivonae
Trifolium bocconeii
Trifolium campestre
Trifolium cernuum
Trifolium cinctum Trifolium dalmaticum
Trifolium dubium
Trifolium fragiferum Trifolium gemellum
Trifolium glomeratum
Trifolium heldreichianum
Trifolium cherleri
Trifolium incarnatum
Trifolium lappaceum

Trifolium medium
Trifolium micranthum
Trifolium michelianum
Trifolium montanum
Trifolium nigrescens
Trifolium noricum
Trifolium ochroleucon
Trifolium pallescens
Trifolium pallidum
Trifolium parnassii
Trifolium patens
Trifolium phleoides
Trifolium pratense
Trifolium repens
Trifolium resupinatum
Trifolium retusum Trifolium rubens
Trifolium scabrum
Trifolium stellatum
Trifolium striatum
Trifolium strictum
Trifolium subterraneum
Trifolium suffocatum
Trifolium sylvaticum Trifolium thalii
Trifolium tomentosum Triglochin maritima
Triglochin palustris
Trigonella gladiata
Trinia dalechampii Trinia glauca
Trinia guicciardii
Tripolium pannonicum
Trisetaria loeflingiana
Trisetaria ovata
Trisetaria scabriuscula
Trisetum conradiae
Trisetum flavescens
Trisetum glaciale
Trisetum spicatum
Trisetum velutinum
Trollius europaeus
Tropaeolum majus
Tuberaria guttata
 Tulipa biebersteiniana
 Urospermum picroides
 Urtica dioica
 Vahlodea atropurpurea Valeriana excelsa
 Valeriana officinalis Valeriana pyrenaica
 Valeriana stolonifera
 Valeriana tuberosa Valerianella eriocarpa
 Valerianella multidentata
 Valerianella rimosa Velezia rigida
 Vella pseudocytisus Veratrum album
 Verbascum glabratum

Verbascum chaixii
Verbascum phoeniceum
Veronica alpina
Veronica aphylla
Veronica austriaca
Veronica barrelieri
Veronica dabneyi
Veronica dillenii
Veronica fruticans
Veronica chamaedrys
Veronica longifolia
Veronica officinalis
Veronica praecox
Veronica prostrata
Veronica repens
Veronica serpyllifolia
Veronica tenuifolia
Veronica verna
Vicia capreolata
Vicia cassubica Vicia cracca
Vicia dumetorum
Vicia lathyroides
Vicia lutea
Vicia orobus
Vicia pisiformis
Vicia sylvatica
Vincetoxicum hirundinaria Viola canina
Viola cornuta
Viola elatior Viola hirta
Viola odorata
Viola paradoxa Viola parvula
Viola pumila
Viola stagnina
 Viola tricolor aggr.
 Vulpia bromoides
 Vulpia ciliata
 Vulpia ligustica
 Vulpia muralis
 Vulpia myuros
 Vulpia sicula
 Vulpia unilateralis
 Wangenheimia lima
 Xeranthemum annuum

##D +10 Inland-sparsely-vegetated-habitat-species

Acantholimon ulicinum
Achillea abrotanoides
Achillea ageratifolia
Achillea ambrosiaca
Achillea atrata
Achillea barrelieri

Achillea chamaemelifolia

Achillea clusiana

Achillea cretica

Achillea erba-rotta

Achillea nana

Achillea oxyloba

Achillea pindicola

Achnatherum calamagrostis

Aconogonon alpinum

Adenostyles alpina

Adiantum capillus-veneris

Adiantum reniforme

Adonis distorta

Aeonium aureum

Aeonium balsamiferum

Aeonium canariense

Aeonium castello-paivae

Aeonium cuneatum

Aeonium decorum

Aeonium diplocyclum

Aeonium glandulosum

Aeonium glutinosum

Aeonium gomerense *Aeonium*

goochiae

Aeonium haworthii

Aeonium hierrense

Aeonium holochrysum

Aeonium lancerottense

Aeonium manriqueorum *Aeonium*

mascaense

Aeonium nobile

Aeonium palmense

Aeonium percarneum

Aeonium rubrolineatum

Aeonium saundersii

Aeonium sedifolium

Aeonium simsii

Aeonium smithii

Aeonium spathulatum

Aeonium subplanum

Aeonium tabulaeforme

Aeonium undulatum

Aeonium urbicum

Aeonium valverdense

Aeonium vestitum

Aeonium virgineum

Aeonium viscatum

Aeonium x burchardii

Aeonium x meyerheimii

Aethionema cordatum *Aethionema lycium*

Aethionema saxatile

Aethionema schistosum
Aethionema speciosum
Aethionema spicatum
Aethionema stylosum
Agrostis castellana
Agrostis rupestris
Agrostis schraderiana
Aichryson bethencourtianum
Aichryson bituminosum
Aichryson bollei
Aichryson brevipetalum
Aichryson divaricatum
Aichryson dumosum
Aichryson laxum
Aichryson pachycaulon
Aichryson parlatorei
Aichryson punctatum
Aichryson tortuosum
Aichryson villosum
Ajuga chamaepitys
Alchemilla alpina
Alchemilla crenulata
Alchemilla decumbens
Alchemilla ellenbergiana
Alchemilla glabra
Alchemilla saxatilis
Alchemilla serratisaxatilis Allagopappus canariensis
Allium antonii-bolosii
Allium grosii
Allium palentinum
Allium tauricola
Allosorus acrosticus Allosorus fragilis
Allosorus guanchicus
Allosorus hispanicus
 Allosorus persicus
 Allosorus pteridioides
 Allosorus tinaei
Alopecurus magellanicus
Alopecurus textilis
Alyssoides cretica
Alyssum argyrophyllum
Alyssum chondrogynum
Alyssum cuneifolium
Alyssum fastigiatum
Alyssum handelii
Alyssum repens
Alyssum scardicum
Alyssum sphacioticum
Alyssum troodi
Alyssum wulfenianum
Amelanchier parviflora

Anarrhinum bellidifolium
Androsace alpina
Androsace ciliata
Androsace cylindrica
Androsace hausmannii
Androsace hedraeantha
Androsace helvetica
Androsace lactea
Androsace multiscapa
Androsace vandellii
Androsace villosa
Androsace wulfeniana
Andryala crithmifolia
Andryala glandulosa
Andryala ragusina
Anogramma leptophylla
Anthemis aetnensis
Anthemis pindicola Anthemis plutonia
Anthericum ramosum
Anthriscus kotschy
Anthriscus sylvestris
Antirrhinum grosii
Antirrhinum hispanicum
Antirrhinum majus
Antirrhinum microphyllum
Antirrhinum pertegasii
Antirrhinum pulverulentum
Antirrhinum subbaeticum
Antirrhinum valentinum
Aquilegia bernardii
Aquilegia cazorlensis
Aquilegia discolor
Aquilegia pyrenaica
Arabidopsis arenosa
Arabidopsis neglecta Arabidopsis petraea
 Arabidopsis thaliana
 Arabis alpina
 Arabis bryoides
 Arabis caerulea
 Arabis ferdinandi-coburgii
 Arabis glabra
 Arabis pumila
 Arabis stellulata
 Arenaria balansae
 Arenaria balearica
 Arenaria bertolonii
 Arenaria ciliata
 Arenaria conferta
 Arenaria cretica
 Arenaria deflexa
 Arenaria humifusa

Arenaria kotschyana *Arenaria*

norvegica

Arenaria pamphylica

Arenaria pseudofrigida

Arenaria tmolea

Arenaria uninervia

Argyranthemum tenerifae

Armeria alpina

Armeria leucocephala

Armeria maritima

Arrhenatherum album

Artemisia chamaemelifolia

Artemisia genipi

Artemisia glacialis

Artemisia norvegica

Artemisia umbelliformis

Asarina procumbens

Asperula arcadiensis

Asperula boissieri

Asperula boryana

Asperula hirta

Asperula idaea

Asperula muscosa

Asperula paui *Asperula pubescens*

Asperula serotina

Asperula stricta

Asperula tournefortii

Asplenium adiantum-nigrum

Asplenium adiantum-nigrum subsp. *serpentini*

Asplenium adiantum-nigrum x *alternifolium*

Asplenium adulterinum *Asplenium aegaeum*

Asplenium aethiopicum

Asplenium alternifolium

Asplenium aureum

Asplenium balearicum

Asplenium ceterach

Asplenium creticum

Asplenium fissum

Asplenium fontanum

Asplenium foreziense

Asplenium hemionitis

Asplenium lepidum

Asplenium lolegnamense

Asplenium marinum

Asplenium monanthes

Asplenium obovatum

Asplenium petrarchae

Asplenium ruta-muraria

Asplenium sagittatum

Asplenium scolopendrium

Asplenium seelosii

Asplenium septentrionale
Asplenium tadei
Asplenium trichomanes
Asplenium trichomanes subsp. maderense
Asplenium trichomanes x alternifolium
Asplenium viride
Astragalus alpinus
Astragalus haussknechtii
Astragalus oxytropifolius
Astragalus pelliger
Asyneuma compactum
Asyneuma limonifolium
Asyneuma linifolium
Asyneuma lycium
Athamanta cervariifolia
Athamanta cretensis
Athamanta vayredana
Athyrium distentifolium
Aubrieta canescens
Aubrieta deltoidea
Aubrieta thessala
Aurinia corymbosa
Aurinia saxatilis
Babcockia platylepis
Ballota frutescens
Bellardiochloa variegata
Bellium bellidioides
Bethencourtia palmensis
Biscutella frutescens
Biscutella neustriaca
Biscutella valentina
Blackstonia perfoliata Borago pygmaea
Bornmuellera baldaccii
Brachypodium pinnatum
Brachypodium rupestre
Brachypodium sylvaticum
 Brassica balearica
 Brassica cretica
 Braya linearis
 Braya purpurascens
 Bubon albanicum
 Bubon macedonicum
 Bufonia calyculata
 Bufonia macropetala
 Bunium alpinum
 Bunium macuca
 Bunium microcarpum
 Bupleurum barceloi
 Bupleurum kakiskalae
 Bupleurum ranunculoides
 Bupleurum stellatum

Calamagrostis varia
Campanula affinis
Campanula aizoon
Campanula arvensis
Campanula celsii
Campanula cespitosa
Campanula cochleariifolia
Campanula cretica
Campanula cymbalaria
Campanula hawkinsiana
Campanula isaurica
Campanula jaubertiana
Campanula laciniata
Campanula mollis
Campanula oreadum
Campanula pelviformis
Campanula pulla
Campanula rotundifolia
Campanula rupestris
Campanula rupicola
Campanula samothracica
Campanula tubulosa
Campanula versicolor
Campanula wanneri
Capparis orientalis
Cardamine carnososa
Cardamine glauca
Cardamine plumierii
Cardamine resedifolia Carduus
carlinoides Carex bigelowii
Carex brachystachys Carex
capillaris Carex distans
Carex fuliginosa
Carex glacialis
Carex ornithopoda
Carex rostrata
Carex rupestris
Carum meoides
Castrovieja frigidula
Centaurea argentea
Centaurea avillae
Centaurea boissieri
Centaurea cariensis
Centaurea clementi
Centaurea cypriensis
Centaurea deluciae
Centaurea deustiformis
Centaurea drabifolia Centaurea idaea
Centaurea lancifolia
Centaurea maritima
Centaurea ossaea

Centaurea parlatoris
Centaurea pectinata
Centaurea poculatoris
Centaurea prolongoi
Centaurea redempta
Centaurea resupinata
Centaurea rouyi
Centaurea rupestris s.l.
Centaurea saxicola
Centaurea segariensis
Centranthus calcitrapae
Centranthus lecoqii
Centranthus nevadensis Centranthus ruber
Cephalaria squamiflora
Cerastium alpinum
Cerastium carinthiacum
Cerastium cerastoides
Cerastium gnaphalodes
Cerastium nigrescens
Cerastium pedunculatum
Cerastium pyrenaicum Cerastium regelii
Cerastium soleirolii
Cerastium thomasii
Cerastium tomentosum
Cerastium transsilvanicum
Cerastium uniflorum
Chaenorhinum organifolium
Chaenorhinum tenellum
Chiliadenus glutinosus
Cicer incisum
Clinopodium rouyanum
Clinopodium serpyllifolium
Clinopodium troodi
Cochlearia aragonensis
Cochlearia tatrae
 Coincya monensis
 Conopodium bunioides
 Conopodium thalictrifolium
 Corydalis blandaa
 Corydalis rutifolia
 Corydalis uniflora
 Cosentinia vellea Crambe arborea
 Crambe filiformis
 Crambe laevigata
 Crambe scaberrima
 Crepis auriculifolia
 Crepis frigida
 Crepis granatensis
 Crepis oporinoides
 Crepis pygmaea
 Crepis sibthorpiana

Crepis triasii
Crepis vesicaria subsp. andryaloides
Crepis willdenowii
Cresis vesicaria
Crocus cambessedesii
Cryptogramma crispa
Cyanus bourgaei
Cyclotrichium organifolium
Cymbalaria muralis
Cynoglossum troodii
Cyrtomium falcatum
Cystopteris fragilis
Cystopteris montana
Danthoniastrum compactum
Davallia canariensis
Degenia velebitica
Delphinium oxysepalum
Dendriopoterium menendezii
Dianthus elegans
Dianthus fruticosus
Dianthus graniticus
Dianthus henteri
Dianthus juniperinus
Dianthus nitidus
Dianthus petraeus
Dianthus pyrenaicus
Dianthus rupicola
Dianthus sphacioticus
Dianthus strictus
Dianthus sylvestris
Dianthus tristis
Dianthus xylorrhizus
Digitalis dubia
Digitalis purpurea
Digitalis thapsi
Dioscorea pyrenaica
Dittrichia viscosa
Doronicum cacaliifolium
Doronicum carpaticum
Doronicum clusii
Doronicum grandiflorum
Dorystaechas hastata
Draba acaulis
Draba aizoides
Draba corymbosa
Draba cretica
Draba daurica
Draba dubia
Draba fladnizensis
Draba incana
Draba kotschyi

Festuca picturata
Festuca pseudosupina
Festuca pyrenaica
Festuca sardoa
Festuca stenantha
Festuca vivipara
Festuca xanthina
Ficus carica
Fritillaria crassifolia
Fumana paphlagonica
Galatella cretica
Galeopsis angustifolia
Galeopsis ladanum
Galeopsis pyrenaica
Galeopsis segetum
Galeopsis tetrahit
Galium baldense
Galium canum
Galium cespitosum
Galium cilicicum
Galium cometerhizon
Galium corrudifolium
Galium corsicum
Galium crespianum
Galium degenii
Galium erythrorrhizon
Galium fleurotii
Galium fruticosum
Galium graecum
Galium incanum
Galium megalospermum
Galium noricum
Galium normanii
Galium productum
Galium pyrenaicum Galium rosellum
Galium stojanovii
Galium verum
Gentiana frigida
Gentiana nivalis
Geocaryum cynapioides Geranium
glaberrimum
Geranium macrorrhizum
Geranium purpureum
Geranium robertianum
Geranium subcaulescens
Geum reptans
Globularia majoricensis Gnaphalium hoppeanum
Gnaphalium leucopilinum
Gnaphalium pichleri
Gouffeia arenarioides Grafia golaka
Greenovia dodrentalis

Gymnocarpium robertianum
Gypsophila montserratii
Gypsophila petraea
Gypsophila repens
Habenaria tridactylites
Halacsya sendtneri
Hedysarum cyprium
Hedysarum erythroleucum
Heldreichia bourgaei
Heldreichia bupleurifolia
Heldreichia rotundifolia
Helianthemum hymettium
Helichrysum crassifolium
Helichrysum heldreichii
Helichrysum melitense
Helichrysum orientale
Helictochloa crassifolia
Heracleum humile
Hieracium alpinum
Hieracium amplexicaule
Hieracium aragonense
Hieracium bifidum
Hieracium bourgaei
Hieracium bupleuroides
Hieracium candidum
Hieracium carpetanum
Hieracium elisaeae
Hieracium humile
Hieracium laniferum
Hieracium lawsonii
Hieracium loscosianum
Hieracium mixtum
Hieracium pannosum
Hieracium sartorianum
Hieracium scapigerum
Hieracium schmidtii
Hieracium texedense
Hippocrepis balearica
Hippocrepis valentina
Hirtellina fruticosa
Hirtinella lobelii
Holcus annuus
Hormathophylla cadevalliana
Hormathophylla cochleata
Hormathophylla purpurea Hormathophylla reverchonii
Hornungia alpina
Huperzia selago
Hyacinthella millingenii
Hylotelephium anacampseros
Hylotelephium maximum
Hylotelephium telephium

Hyoscyamus albus
Hypericum aciferum
Hypericum amblycalyx Hypericum confertum
Hypericum crenulatum
Hypericum cuisinii
Hypericum grandifolium
Hypericum hircinum
Hypericum jovis
Hypericum nummularium
Hypericum organifolium
Hypericum reflexum
Hypericum taygeteum
Hypochaeris oligocephala
Hypochaeris robertia
Iberis carnosa
Iberis ciliata
Iberis gibraltarica
Iberis simplex
Iberis spathulata
Iberis violetii
Inula candida
Inula heterolepis
Inula methanaea
Inula oxylepis
Inula parnassica
Inula pseudolimonella
Inula verbascifolia
Jacobaea gnaphalioides
Jacobaea carniolica
Jacobaea leucophylla Jankaea heldreichii
Jasione crispa
Jasione foliosa
Jovibarba heuffelii
Juncus trifidus
Jurinea fontqueri Jurinea moschus
Kernera saxatilis
Kobresia simpliciuscula
Lactuca acanthifolia
Lactuca glareosa
Lactuca intricata
Lactuca muralis Lactuca singularis
Lactuca tenerrima
Lactuca viminea
Lafuentea rotundifolia
Lamium eriocephalum
Lamium garganicum
Laserpitium gallicum
Laserpitium petrophilum
Leontodon hyoseroides
Lepidium villarsii
Leucanthemum atratum aggr.

Leucanthemum coronopifolium
Leucanthemum corsicum
Leucanthemum laciniatum
Leucanthemum monspeliense
Leucopoa dimorpha
Leucopoa pulchella
Leucopoa spectabilis
Ligusticum ferulaceum
Linaria aeruginea Linaria alpina
Linaria anticaria
Linaria badalii
Linaria capraria
Linaria cavanillesii
Linaria corifolia
Linaria filicaulis
Linaria glacialis
Linaria microsepala
Linaria propinqua
Linaria purpurea
Linaria repens
Linaria saxatilis
Linaria supina
Linaria verticillata
Lindbergella sintenisii
Linum arboreum
Lomelosia albocincta
Lomelosia crenata
Lomelosia cretica
Lomelosia hymettia
Lomelosia minoana
Lomelosia sphaciotica Lomelosia variifolia
Luzula alpinopilosa
Luzula arcuata
 Luzula confusa
 Luzula spicata
 Macrotomia densiflora
 Malcolmia orsiniana
 Matthiola maderensis
 Mattiastrum lithospermifolium
 Melica ciliata
 Melica rectiflora
 Michauxia tchihatcheffii Micromeria filiformis
 Micromeria myrtifolia
 Micromeria teneriffae
 Micromeria varia
 Micromeria varia subsp. thymoides
 Microrrhinum minus
 Minuartia attica
 Minuartia biflora
 Minuartia cerastiifolia
Minuartia cherlerioides Minuartia hybrida aggr.

Minuartia juniperina
Minuartia pichleri
Minuartia platyphylla
Minuartia recurva
Minuartia rimarum
Minuartia rubella
Minuartia rupestris
Minuartia sedoides
Minuartia stricta Minuartia verna
Minuartia viscosa
Moehringia ciliata
Moehringia intricata Moehringia muscosa
Moehringia trinervia
Monanthes adenoscepes
Monanthes anagensis
Monanthes brachycaulon
Monanthes icterica
Monanthes laxiflora
Monanthes lowei
Monanthes muralis
Monanthes pallens
Monanthes polyphylla
Monizia edulis
Murbeckiella boryi
Musschia aurea
Myosotis alpestris
Myosotis speluncicola
Myosotis suaveolens
Narcissus calcicola
Narcissus rupicola
Naufraga balearica
 Nepeta amethystina
 Nepeta cilicica
 Nepeta concolor
 Nepeta nepetella
 Nepeta phyllochlamys
 Nepeta sphaciotica
 Noccaea bellidifolia
 Noccaea oppositifolia
 Noccaea praecox
 Noccaea rotundifolia
 Noccaea sintenisii
 Noccaea stilosa
 Noccaea stylosa
 Noccaea zaffranii
 Odontarrhena akamasica
 Odontarrhena bertolonii
 Odontarrhena cyprica
 Odontarrhena fragillima
Odontarrhena muralis
Odontites linkii

Omphalodes luciliae
Onobrychis sphaciotica
Onosma echioides
Onosma graeca
Onosma troodi
Oreochloa disticha
Origanum dictamnus
Origanum vulgare
Oxyria digyna
Oxytropis lapponica
Papaver alpinum
Papaver ernesti-mayeri Papaver laestadianum
Papaver lapeyrousianum
Papaver pyrenaicum Papaver radicum
Papaver rupifragum
Papaver suaveolens
Paragymnopteris marantae
Parietaria filamentosa
Parietaria judaica
Parietaria officinalis
Pedicularis verticillata
Pellaea calomelanos
Peltaria alliacea
Pericallis lanata
Petasites paradoxus
Petrocallis pyrenaica
Petromarula pinnata
Petrorhagia dianthoides
Peucedanum alpinum
Phagnalon pygmaeum
Phagnalon rupestre
 Phagnalon sordidum
 Phegopteris connectilis
 Phippsia algida
 Phyllis viscosa
 Phyllolepidum cyclocarpum
 Phyteuma charmelii
 Phyteuma cordatum
 Phyteuma hemisphaericum
 Phyteuma humile
 Phyteuma scheuchzeri
 Phyteuma serratum Pimpinella major
 Pinguicula alpina
 Pinguicula grandiflora
 Pinguicula hirtiflora
 Plantago leiopetala
 Plantago monosperma
 Platycapnos saxicola
Poa alpina
Poa arctica
Poa balbisii

Poa cenisia
Poa dolosa
Poa glauca
Poa laxa
Poa minor
Poa nemoralis
Podospermum radicosum
Polycarpaea carnosa
Polygonatum odoratum Polygonum icaricum
Polypodium cambricum
Polypodium cambricum subsp. azoricum
Polypodium cambricum subsp. macaronesicum
Polypodium interjectum Polypodium vulgare
Polypodium x fontqueri
Polystichum lonchitis
Potentilla alchimilloides
Potentilla argentea
Potentilla caulescens
Potentilla crantzii
Potentilla crassinervia
Potentilla deorum
Potentilla doerfleri
Potentilla haynaldiana
Potentilla hyparctica
Potentilla kotschyana
Potentilla nivalis
Potentilla nivea
Potentilla pulvinaris
Potentilla saxifraga
Potentilla speciosa
 Primula allionii
 Primula hirsuta
 Primula marginata
 Primula minima
 Pseudofumaria alba
 Pseudoscabiosa grosii
 Pseudoscabiosa saxatilis
 Ptilostemon afer
 Ptilostemon chamaepeuce
 Ptilostemon niveus
 Ptychotis saxifraga
 Ramonda myconi
 Ranunculus alpestris
 Ranunculus brevifolius
 Ranunculus breyninus
 Ranunculus cadmicus
 Ranunculus carinthiacus
 Ranunculus creticus
Ranunculus glacialis
Ranunculus parnassifolius
Ranunculus radinotrichus

Ranunculus sabinii
Ranunculus sulphureus
Ranunculus weyeri
Reseda glauca
Reseda gredensis
Reseda valentina
Rhamnus alpina
Rhamnus integrifolia
Rhamnus libanotica
Rhamnus pumila
Rhamnus sibthorpiana
Rhodiola rosea
Ricotia cretica
Ricotia davisiana
Ricotia varians
Rosa villosa
Rosularia libanotica
Rosularia serpentinica
Rosularia serrata
Rubia angustifolia
Rubus saxatilis
Rumex acetosella
Rumex aetnensis
Rumex scutatus
Rumex suffruticosus
Rupicapnos africana Salix breviserrata
Salix herbacea
Salix reticulata
Salix retusa
Salix starkeana
Salvia broussonetii Salvia veneris
Sanguisorba ancistroides
Sanguisorba cretica
Santolina oblongifolia
Saponaria sicula
Sarcocapnos baetica Sarcocapnos crassifolia
 Sarcocapnos enneaphylla
 Sarcocapnos pulcherrima Satureja parnassica
 Saxifraga adscendens Saxifraga aizoides
 Saxifraga androsacea
 Saxifraga aretioides
 Saxifraga aspera
 Saxifraga biternata
 Saxifraga bourgaeana
 Saxifraga bryoides Saxifraga callosa
Saxifraga camposii
Saxifraga carpatica Saxifraga cernua
Saxifraga cespitosa Saxifraga corsica
Saxifraga cotyledon
Saxifraga cuneata
Saxifraga exarata

Saxifraga federici-augusti
Saxifraga florulenta
Saxifraga fragilis
Saxifraga genesiana
Saxifraga glabella
Saxifraga granatensis
Saxifraga hyperborea
Saxifraga hypnoides
Saxifraga juniperifolia Saxifraga kotschy
Saxifraga latepetiolata
Saxifraga longifolia
Saxifraga losae
Saxifraga luteoviridis
Saxifraga maderensis
Saxifraga marginata
Saxifraga media
Saxifraga moncayensis
Saxifraga moschata
Saxifraga muscoides
Saxifraga mutata
Saxifraga nevadensis
Saxifraga nivalis
Saxifraga oppositifolia
Saxifraga paniculata
Saxifraga paradoxa
Saxifraga pedemontana
Saxifraga pentadactylis
 Saxifraga porophylla
 Saxifraga portosanctana
 Saxifraga praetermissa
 Saxifraga reuteriana
 Saxifraga rigoi
 Saxifraga rivularis
 Saxifraga rosacea
 Saxifraga scardica
 Saxifraga sedoides
Saxifraga sempervivum
Saxifraga sibirica
Saxifraga sibthorpii
Saxifraga spruneri
Saxifraga taygetea
Saxifraga vayredana
Saxifraga wahlenbergii
Scabiosa corsica
Scleranthus perennis subsp. vulcanicus
Scorzonera cretica
Scrophularia canina
Scrophularia depauperata
Scrophularia heterophylla
Scrophularia kotschyana
Scrophularia libanotica

Scrophularia myriophylla
Scrophularia oxyrhyncha
Scrophularia rimarum
Scrophularia sciophila
Scrophularia scorodonia
Scrophularia sublyrata Scutellaria hirta
Scutellaria orientalis
Secale strictum
Securigera globosa
Sedum annuum
Sedum atratum
Sedum brevifolium
Sedum brissemoretii
Sedum dasyphyllum
Sedum farinosum
Sedum fusiforme
Sedum hirsutum
Sedum hispanicum
Sedum magellense
Sedum monregalense
Sedum nudum
Sedum stefco
Selaginella denticulata
Selaginella kraussiana
Sempervivum arachnoideum
Sempervivum calcareum Sempervivum grandiflorum
 Sempervivum marmoreum
 Sempervivum minutum
 Sempervivum montanum
 Sempervivum wulfenii
Senecio castagneanus Senecio
 doronicum
Senecio fruticosus
Senecio pyrenaicus
Senecio squalidus subsp. aethnensis
Senecio squalidus subsp. rupestris
Senecio thapsoides
Senecio viscosus
Sesamoides purpurascens
Seseli malyi
Sesleria caerulea
Sesleria doerfleri
Sesleria insularis
Sesleria phleoides
Sesleria robusta
Sibthorpia africana
Sideritis glauca
Sideritis perfoliata
Sideritis stachydioides
Silene acaulis
Silene andryalifolia Silene auriculata

Silene berthelotiana
Silene boryi
Silene caesia
Silene campanula
Silene congesta
Silene dinarica
Silene fabaria
Silene fabarioides
Silene flavescens Silene foetida
Silene gazulensis
Silene gigantea
Silene haussknechtii
Silene hifacensis
Silene inaperta
Silene italica
Silene leptoclada
Silene lerchenfeldiana
Silene mollissima
Silene multicaulis
Silene nocteolens
Silene nuncupanda
Silene odontopetala Silene parnassica
Silene pentelica
Silene pusilla Silene requienii
 Silene rupestris
 Silene saxifraga
 Silene secundiflora
 Silene suecica
 Silene supina
 Silene tomentosa Silene uniflora
 Silene variegata
 Silene viscaria
 Sinapidendron angustifolium
 Sinapidendron frutescens
 Sinapidendron gymnocalyx
 Sinapidendron rupestre
 Sisymbrium supinum
 Solenopsis balearica
 Solidago virgaurea
 Sonchus acaulis
Sonchus congestus
Sonchus gummifer
Sonchus pendulus
Sonchus radicans
Sonchus tectifolius
Sonchus tenerrimus
Sonchus tuberifer
Sonchus ustulatus
Spergula viscosa
Stachys candida
Stachys chrysantha

Stachys parolinii
Stachys spreitzenhoferi
Stachys swainsonii
Staehelina petiolata
Stellaria graminea
Symphytum creticum
Tanacetum argenteum
Tanacetum armenum
Taraxacum pyrenaicum
Taraxacum sect. Alpina
Teucrium aroanium
Teucrium botrys
Teucrium buxifolium
Teucrium cuneifolium
Teucrium fragile
Teucrium francisci-wernerii
Teucrium freynii
Teucrium halacsyanum
Teucrium hifacense
Teucrium intricatum
Teucrium montanum
Teucrium rivas-martinezii
Teucrium rivasii
Teucrium rotundifolium
 Teucrium thymifolium
 Thalictrum alpinum
 Thamnosciadium junceum
 Theligonum cynocrambe
 Thelypteris pozoi
 Thlaspi kernerii
 Thymus comosus
 Thymus integer
 Thymus leucotrichus
 Thymus pulcherrimus
 Thymus richardii
 Tofieldia pusilla
 Tolpis calderae
 Tolpis crassiuscula
 Tolpis lagopoda
 Tolpis macrorhiza
 Tolpis staticifolia
 Tolpis succulenta
Trachelium caeruleum
Trisetum bertolonii
Trisetum distichophyllum
Trisetum hispidum
Trisetum spicatum
Trisetum velutinum
Umbilicus horizontalis
Umbilicus luteus
Umbilicus rupestris

Valantia aprica
Valeriana apula
Valeriana asarifolia
Valeriana bertiscea
Valeriana elongata
Valeriana longiflora
Valeriana officinalis
Valeriana saxatilis
Valeriana sisymbriifolia
Valeriana speluncaria
Valeriana tripteris
Vavilovia formosa
Verbascum arcturus
Verbascum conocarpum
Verbascum nigrum
Verbascum pestalozzae
Verbascum thapsus
Veronica alpina
Veronica aragonensis
Veronica bachofenii
Veronica baumgartenii
Veronica bellidioides
Veronica caespitosa
Veronica cuneifolia Veronica fruticans
Veronica kotschyana Veronica mampodrensis
 Veronica nummularia
 Veronica saturejoides
 Veronica tauricola
 Veronica thessalica
 Vicia alpestris
 Vicia canescens
 Vicia glauca
 Vieraea laevigata
 Viola albanica
 Viola calcarata
 Viola cheiranthifolia
 Viola chelmea
 Viola crassifolia
 Viola crassiuscula
 Viola diversifolia
 Viola dukadjinica
 Viola fragrans
Viola grisebachiana
Viola herzogii
Viola hispida
Viola magellensis
Viola palustris
Viola parnonia
Viola perinensis
Viola poetica

Viola sandrasea Viola striis-
notata

Viola tricolor aggr.
Woodsia alpina
Woodsia ilvensis
Woodsia pulchella
Woodwardia radicans
Xatardia scabra

##D +10 Mire-species

Agrostis canina
Anacamptis palustris aggr.
Anagallis tenella
Andromeda polifolia
Aneura pinguis
Aulacomnium palustre
Bartsia alpina
Bellis bernardii Bellium nivale
Betula nana
Blysmus compressus
Bryum pseudotriquetrum
Calamagrostis neglecta
Calliergon giganteum
Campyliadelphus elodes
Campylium stellatum
Carex appropinquata
 Carex aquatilis
 Carex atrofusca
 Carex bicolor
 Carex bulgarica
 Carex buxbaumii
 Carex canescens
 Carex capillaris Carex capitata
 Carex davalliana
 Carex demissa
 Carex diandra Carex dioica
 Carex durieui
 Carex echinata
 Carex flava
 Carex frigida
 Carex heleonastes
 Carex hostiana
Carex chordorrhiza
Carex lachenalii Carex lapponica
Carex lasiocarpa
Carex laxa
Carex lepidocarpa
Carex limosa
Carex livida
Carex loliacea
Carex magellanica

Carex maritima
Carex microglochin
Carex nevadensis
Carex nigra
Carex norvegica Carex panicea
Carex parallela
Carex pauciflora
Carex pulicaris
Carex rariflora Carex rostrata
Carex rotundata
Carex saxatilis
Carex trinervis Carex vaginata
Carex vesicaria
Carex viridula
Centaurium littorale
Cinclidium arcticum
Cinclidium stygium
Cinclidium subrotundum Cirsium
heterotrichum
Cladium mariscus
Cladopodiella fluitans
Comarum palustre Dactylorhiza cordigera
 Dactylorhiza incarnata
 Dactylorhiza maculata aggr.
 Dactylorhiza majalis
 Dactylorhiza traunsteineri
 Drosera intermedia
 Drosera longifolia
 Drosera rotundifolia
 Dryopteris cristata
 Dupontia fisheri
 Eleocharis quinqueflora
 Epilobium palustre
 Epilobium palustre
 Equisetum fluviatile Equisetum palustre
 Equisetum variegatum
 Erica tetralix
 Eriophorum angustifolium
Eriophorum gracile
Eriophorum latifolium
Eriophorum russeolum
Eriophorum scheuchzeri
Eriophorum triste
Eriophorum vaginatum
Festuca frigida
Fissidens adianthoides
Fissidens osmundoides
Gymnadenia frivaldii
Gymnocolea inflata
Hamatocaulis lapponicus
Hamatocaulis vernicosus

Hammarbya paludosa
Hypericum elodes
Chamaedaphne calyculata
Juncus alpinoarticulatus
Juncus arcticus
Juncus articulatus
Juncus biglumis
Juncus bulbosus
Juncus castaneus
Juncus filiformis
Juncus requienii
Juncus stygius
Juncus subnodulosus
Juncus thomasii
Juncus triglumis
Kobresia simpliciuscula Leontodon
croceus Liparis loeselii
Loeskyphnum badium
Meesia triquetra
Menyanthes trifoliata
Myrica gale
Narthecium ossifragum
Narthecium scardicum
Paludella squarrosa
Parnassia palustris
Pedicularis mixta
Pedicularis palustris
Pedicularis sceptrum-carolinum
Pedicularis sylvatica Pedicularis verticillata
 Peucedanum palustre
 Philonotis calcarea
 Philonotis fontana
 Pinguicula balcanica
 Pinguicula corsica
 Pinguicula grandiflora
 Pinguicula lusitanica
 Pinguicula nevadensis
 Pinguicula villosa
Pinguicula vulgaris
Pinus mugo subsp. rotundata
Plantago gentianoides
Polygala amarella
Polygala serpyllifolia
Polytrichum commune
Potamogeton polygonifolius
Potentilla anglica
Primula deorum
Primula farinosa
Primula nutans
Primula scandinavica
Primula stricta

Pseudocalliergon lycopodioides
 Pseudocalliergon trifarium
 Ranunculus cordiger
 Ranunculus hyperboreus
 Ranunculus pyrenaeus
 Rhododendron tomentosum
 Rhynchospora alba
 Rhynchospora fusca
 Rubus chamaemorus
 Sagina nodosa
 Salix lapponum
 Salix myrsinites
 Salix myrtilloides
 Salix repens
 Salix reticulata
 Salix rosmarinifolia
 Saussurea alpina aggr.
 Saxifraga foliolosa
 Saxifraga hirculus
 Scorpidium revolvens aggr.
 Scorpidium scorpioides
 Scorzoneroide microcephala
 Scheuchzeria palustris
 Schoenus ferrugineus
 Schoenus nigricans
 Sedum villosum
 Silene asterias
 Soldanella pindicola
 Sphagnum affine
 Sphagnum angermanicum
 Sphagnum annulatum
 Sphagnum aongstroemii
 Sphagnum auriculatum+inundatum
 Sphagnum austinii
 Sphagnum balticum
 Sphagnum contortum
 Sphagnum cuspidatum
 Sphagnum fuscum
 Sphagnum jensenii
 Sphagnum lenense Sphagnum
 lindbergii
 Sphagnum magellanicum aggr.
 Sphagnum majus
 Sphagnum molle Sphagnum
 obtusum
 Sphagnum palustre aggr.
 Sphagnum papillosum
 Sphagnum platyphyllum
 Sphagnum pulchrum
 Sphagnum recurvum aggr.
 Sphagnum rubellum

Sphagnum subfulvum
Sphagnum subnitens
Sphagnum subsecundum
Sphagnum tenellum
Sphagnum teres
Sphagnum tundrae
Sphagnum warnstorffii
Spiranthes aestivalis
Stellaria palustris
Straminergon stramineum
Succisa pratensis
Tofieldia calyculata
Tofieldia pusilla
Tomentypnum nitens
Trientalis europaea
Triglochin maritima
Triglochin palustris
Trichophorum alpinum
Trichophorum cespitosum
Trichophorum pumilum Typha
lugdunensis
Typha minima
Typha shuttleworthii
Utricularia intermedia
 Utricularia minor
 Vaccinium microcarpum
 Vaccinium oxycoccus
 Vaccinium uliginosum
 Valeriana dioica
 Veronica nevadensis
 Veronica scutellata
 Viola epipsila
 Viola palustris
 Warnstorfia exannulata
 Warnstorfia fluitans
 Warnstorfia sarmentosa
 Willemetia stipitata

##D +10 Synanthropic-species

Abutilon theophrasti
Acalypha virginica
Acanthus mollis
Achillea filipendulina
Achillea santolinoides
Adonis aestivalis
Adonis annua
Adonis flammea
Adonis microcarpa
Aegilops cylindrica
Aegilops geniculata
Aegilops neglecta

Aegilops triuncialis
Aegilops ventricosa
Aegopodium podagraria
Aethusa cynapium
Ageratina adenophora
Agrostemma githago
Aizoanthes hispanica
Aizoon canariense
Ajuga chamaepitys
Ajuga reptans
Alcea biennis
Alcea rosea
Alchemilla glabra
Allium cepa
Allium neapolitanum
Allium nigrum
Allium paradoxum
Allium polyanthum
Allium sativum
Allium scaberrimum
Allium scorodoprasum
Allium trifoliatum Allium triquetrum
Allium vineale
Alopecurus myosuroides
Alternanthera caracasana
 Alternanthera pungens
 Althaea longiflora
 Alyssum granatense
 Alyssum simplex
 Amaranthus bouchonii
 Amaranthus caudatus
 Amaranthus hybridus
 Amaranthus hypochondriacus
 Amaranthus palmeri
 Amaranthus powellii
 Amaranthus powellii
 Amaranthus retroflexus
 Amaranthus standleyanus
 Ambrosia artemisiifolia
 Ambrosia psilostachya
 Ambrosia trifida
 Ammannia auriculata
 Ammannia baccifera
Ammannia coccinea
Ammannia robusta
Ammannia verticillata
Ammi majus
Ammi visnaga
Anacyclus clavatus
Anacyclus radiatus
Anacyclus valentinus

Anagallis arvensis
Anagallis foemina
Anaphalis margaritacea
Anchusa azurea
Anchusa ochroleuca
Anchusa officinalis
Androsace maxima
Andryala arenaria
Anethum graveolens
Anisantha diandra
Anisantha fasciculata
Anisantha madritensis
Anisantha rigida
Anisantha rubens
Anisantha sterilis
Anisantha tectorum
Anredera cordifolia
Anthemis arvensis
Anthemis cotula
Anthemis ruthenica
Anthoxanthum amarum
Anthoxanthum aristatum
Anthoxanthum ovatum
Anthriscus caucalis
Anthriscus cerefolium
Anthriscus sylvestris
Apera spica-venti Aphanes arvensis
 Aphanes australis
 Arabidopsis thaliana
 Arctium lappa
 Arctium minus
 Arctotheca calendula
 Arenaria cerastioides
 Arenaria hispanica
 Armoracia rusticana
 Arnoseris minima
 Artemisia abrotanum
 Artemisia absinthium
 Artemisia annua
 Artemisia biennis
 Artemisia dracunculus Artemisia scoparia
 Artemisia verlotiorum
 Artemisia vulgaris
Arum italicum
Asparagus asparagoides
Asperugo procumbens
Asperula arvensis
Asphodelus albus
Asphodelus fistulosus
Asphodelus lusitanicus
Asphodelus macrocarpus

Astragalus hamosus
Astragalus longidentatus
Atriplex hortensis
Atriplex micrantha
Atriplex oblongifolia
Atriplex patula
Atriplex rosea
Atriplex sagittata
Atriplex tatarica
Avena barbata
Avena fatua
Avena longiglumis
Avena nuda
Avena sativa
Avena sterilis
Avena strigosa
Axyris amaranthoides
Ballota nigra
Barbarea bracteosa
Barbarea stricta
Barbula convoluta
Barbula unguiculata
Bassia hyssopifolia Bellardia trixago
Bergia capensis
Berteroa incana
Beta vulgaris subsp. vulgaris
 Bidens bipinnatus
 Bidens subalternans
 Bifora radians
 Bifora testiculata
 Biscutella auriculata
 Blitum bonus-henricus
 Blitum capitatum
 Blitum petiolare
 Blitum virgatum
 Bonannia graeca
 Bongardia chrysogonum
 Borago officinalis
 Bowlesia glandulosa
 Brassica barrelieri
 Brassica elongata
 Brassica fruticulosa
 Brassica geniculata
 Brassica napus
Brassica nigra
Brassica oleracea
Brassica oxyrrhina
Brassica rapa
Brassica tournefortii
Bromopsis inermis
Bromus arvensis

Bromus diandrus
Bromus grossus
Bromus hordeaceus
Bromus intermedius Bromus japonicus
Bromus lanceolatus
Bromus lepidus
Anisantha madritensis
Bromus rigidus
Bromus rubens
Bromus scoparius
Bromus secalinus
Bromus squarrosus
Bryonia alba
Bryonia dioica
Bryum argenteum
Bryum dichotomum
Bryum funckii
Bryum gemmilucens
Bryum ruderales
Bryum versicolor
Buglossoides arvensis
Buglossoides incrassata
Bunias erucago
Bunias orientalis
Bunium bulbocastanum
Bunium ferulaceum
Bunium pachypodium Bupleurum lancifolium
 Bupleurum rotundifolium
 Bupleurum subovatum
 Calamagrostis epigejos
 Calendula arvensis
 Calendula officinalis
 Calendula tripterocarpa
 Calepina irregularis
 Callistephus chinensis Calystegia pulchra
 Calystegia silvatica
 Camelina alyssum
 Camelina microcarpa
 Camelina rumelica
 Camelina sativa
 Campanula ramosissima
 Cannabis sativa
 Capsella bursa-pastoris
Capsella grandiflora
Capsella rubella
Capsicum annuum
Cardamine hirsuta
Cardiospermum grandiflorum
Carduus acanthoides
Carduus argyrea
Carduus asturicus

Carduus bourgeanus Carduus candicans
Carduus carpetanus
Carduus crispus
Carduus hamulosus
Carduus litigiosus
Carduus meonanthus
Carduus nigrescens
Carduus nutans
Carduus pycnocephalus
Carduus tenuiflorus
Carlina corymbosa
Carlina lanata
Carpesium abrotanoides
Carpesium cernuum
Carrichtera annua
Carthamus caeruleus
Carthamus lanatus
Carthamus tinctorius
Catananche lutea
Catapodium rigidum
Caucalis platycarpus
Centaurea aspera
Centaurea benedicta
Centaurea calcitrapa
Centaurea collina
Centaurea diffusa
 Centaurea iberica
 Centaurea lagascana
 Centaurea melitensis Centaurea pullata
 Centaurea salonitana
 Centaurea solstitialis
 Centranthus calcitrapae
 Centranthus macrosiphon
 Cephalaria transsylvanica Cerastium dichotomum
 Cerastium glomeratum
 Cerastium gracile
 Cerastium nemorale
 Cerastium perfoliatum
 Ceratocapnos claviculata
 Ceratocapnos heterocarpa
 Ceratocephala falcata
 Ceratodon purpureus
Cerinthe glabra
Cerinthe gymnandra
Cerinthe major
Cerinthe minor
Cerinthe retorta
Chaerophyllum aromaticum
Chaerophyllum aureum
Chaerophyllum nodosum
Chaerophyllum temulum

Chaiturus marrubiastrum
Chamaemelum fuscatum
Chelidonium majus
Chenopodiastrum hybridum
Chenopodiastrum murale
Chenopodium album
Chenopodium giganteum
Chenopodium opulifolium
Chenopodium probstii
Chenopodium strictum
Chenopodium suecicum
Chenopodium vulvaria
Chondrilla juncea
Chrozophora plicata
Chrozophora tinctoria
Cicer arietinum
Cichorium intybus
Cichorium pumilum Cirsium arvense
Cirsium boujartii
Cirsium decussatum Cirsium echinatum
Cirsium eriophorum
Cirsium ferox
Cirsium furiens
Cirsium italicum Cirsium morisianum
 Cirsium odontolepis
 Cirsium richterianum
 Cirsium scabrum
 Cirsium spathulatum
 Cirsium vallis-demonis
 Cirsium vulgare
Citrullus lanatus
Cladanthus mixtus
Claytonia perfoliata
Clematis tangutica Cleome
 dodecandra
 Cleome hassleriana
 Cleome violacea
Clinopodium graveolens
Coincya monensis
Coincya transtagana
 Coleostephus myconis
Collomia grandiflora
Collomia linearis
Commelina communis
Conium maculatum
Conringia orientalis
Consolida ajacis
Consolida hispanica
Consolida mauritanica
Consolida orientalis
Consolida pubescens

Consolida regalis
Convolvulus arvensis
Convolvulus meonanthus
Convolvulus tricolor
Coriandrum sativum
Coronilla scorpioides
Corydalis capnoides
Cota altissima
Cota austriaca
Cota segetalis
Cota tinctoria
Cotula australis
Crassula peduncularis
Crepis bursifolia
Crepis foetida
Crepis pulchra
Crepis pusilla
Crepis sancta
Crepis setosa
Crepis tectorum
Crepis vesicaria
Crepis zacintha
Cruciata laevipes
Cryptotaenia thomasi
Cucumis melo Cucumis sativus
 Cucurbita maxima
 Cucurbita pepo
 Cullen americanum
 Cuscuta campestris
 Cuscuta epilinum
 Cuscuta europaea
 Cuscuta gronovii
 Cuscuta scandens
 Cyanus segetum
 Cyclanthera pedata
 Cynanchum acutum
 Cynara algarbiensis
 Cynara baetica
 Cynara cardunculus
 Cynara humilis
 Cynara scolymus
 Cynodon dactylon
Cynoglossum cheirifolium
Cynoglossum columnae
Cynoglossum creticum
Cynoglossum dioscoridis
Cynoglossum nebrodense
Cynoglossum officinale
Cyperus difformis
Cyperus esculentus
Cyperus iria

Cyperus rotundus
Cyperus serotinus
Dasypyrum villosum
Datura metel
Datura stramonium
Daucus carota
Daucus guttatus
Daucus muricatus
Delphinium pentagynum
Descurainia sophia
Dichondra micrantha
Digitaria ischaemum
Digitaria sanguinalis
Diploaxis catholica
Diploaxis erucoides
Diploaxis harra
Diploaxis muralis
Diploaxis siifolia
Diploaxis tenuifolia
Diploaxis viminea
Diploaxis virgata
Dipsacus fullonum
Dipsacus laciniatus
Dipsacus pilosus
Dittrichia graveolens
Dittrichia viscosa
 Drabella muralis
 Dracocephalum thymiflorum
 Dysphania pumilio
 Ecballium elaterium Echinaria capitata
 Echinochloa colonum
 Echinochloa crus-galli
 Echinochloa oryzicola
 Echinochloa oryzoides
 Echinops bannaticus
 Echinops exaltatus
 Echinops sphaerocephalus
 Echinops strigosus
 Echium asperrimum
 Echium boissieri
Echium italicum
Echium plantagineum
Echium rosulatum
Echium salmanticum
Echium tuberculatum
Echium vulgare
Eleusine indica
Eleusine tristachya
Elytrigia intermedia
Elytrigia obtusiflora
Elytrigia repens

Emex spinosa
Epilobium brachycarpum
Epilobium ciliatum
Epilobium hirsutum
Epilobium parviflorum
Epilobium tetragonum
Equisetum arvense
Eragrostis barrelieri
Eragrostis cilianensis
Eragrostis frankii
Eragrostis minor
Eragrostis multicaulis
Eragrostis papposa
Eragrostis pectinacea
Eragrostis pilosa
Eragrostis virescens
Erechtites hieraciifolius
Erigeron acris
Erigeron annuus
Erigeron bonariensis
Erigeron canadensis
Erigeron primulifolius
Erigeron sumatrensis
Erodium chium
Erodium ciconium
Erodium cicutarium
Erodium malacoides
 Erodium moschatum
 Erodium neuradifolium
 Eruca vesicaria
 Erucastrum gallicum
 Erucastrum nasturtiifolium
 Eryngium creticum
 Erysimum cheiranthoides
 Erysimum graecum
 Erysimum hieracifolium
 Erysimum repandum
 Eschscholzia californica
 Euclidium syriacum
 Euphorbia chamaesyce
 Euphorbia esula
 Euphorbia exigua
 Euphorbia falcata
 Euphorbia helioscopia
 Euphorbia humifusa
Euphorbia humistrata
Euphorbia illirica
Euphorbia lagascae
Euphorbia lathyris
Euphorbia maculata
Euphorbia nutans

Euphorbia peplus
Euphorbia platyphyllos
Euphorbia prostrata
Euphorbia segetalis
Euphorbia serpens
Euphorbia serrata
Euphorbia stricta
Euphorbia taurinensis
Euthamia graminifolia
Fagopyrum esculentum
Fagopyrum tataricum
Falcaria vulgaris
Fallopia baldschuanica
Fallopia convolvulus
Fallopia dumetorum Fedia

cornucopiae

Fedia graciliflora
Fedia scorpioides
Filago arvensis
Filago congesta
Filago desertorum
Filago petro-ianii
Filago pyramidata
Fimbristylis bisumbellata
Foeniculum vulgare
Fumaria agraria
Fumaria barnolae
Fumaria bastardii
Fumaria bicolor Fumaria capreolata
 Fumaria densiflora
 Fumaria faurei
 Fumaria flabellata
 Fumaria gaillardotii
 Fumaria kralikii
 Fumaria macrocarpa
 Fumaria macrosepala
 Fumaria mirabilis
 Fumaria muralis
 Fumaria officinalis
 Fumaria parviflora Fumaria petteri
 Fumaria rostellata
 Fumaria schleicheri
 Fumaria sepium
 Fumaria vaillantii Gagea villosa

Galactites duriaei
Galactites tomentosus
Galeopsis bifida
Galeopsis pubescens
Galeopsis segetum
Galeopsis speciosa
Galeopsis tetrahit

Galinsoga parviflora
Galinsoga quadriradiata
Galium aparine
Galium lucidum
Galium minutulum
Galium murale
Galium parisiense
Galium spurium
Galium tricornutum
Galium verrucosum
Galium verticillatum
Gastridium phleoides
Gastridium ventricosum
Geranium bohemicum
Geranium columbinum
Geranium dissectum
Geranium lucidum
Geranium molle
Geranium purpureum
Geranium pusillum
Geranium pyrenaicum
Geranium robertianum
Geranium rotundifolium
Geranium sibiricum
Geranium tuberosum Geranium yeoi
Geropogon hybridus
Geum aleppicum
 Geum urbanum
 Gladiolus italicus
 Glebionis coronaria
 Glebionis segetum
 Glossopappus macrotus
 Glycine max
 Gossypium hirsutum
 Guiraoa arvensis
 Guizotia abyssinica
 Hackelia deflexa
 Halogeton sativus
 Hedypnois cretica
 Hedypnois rhagadioloides
 Helianthus annuus
 Helianthus decapetalus Helianthus giganteus
 Helianthus pauciflorus
 Helianthus tuberosus
Heliotropium curassavicum
Heliotropium europaeum
Helminthotheca echinoides
Heracleum mantegazzianum
Heracleum sphondylium
Herniaria glabra
Herniaria hirsuta

Herniaria lusitanica
Hesperis matronalis
Heteranthera reniformis
Hordeum jubatum
Hordeum murinum
Hordeum vulgare
Humulus japonicus
Humulus lupulus
Hyoscyamus albus
Hyoscyamus niger
Hypecoum imberbe
Hypecoum pendulum
Hypecoum procumbens
Hypericum triquetrifolium
Iberis amara
Iberis pinnata
Iberis umbellata
Impatiens balfourii
Impatiens glandulifera Impatiens parviflora
Inula helenium
Inula helvetica
Ipomoea sagittata
Isatis praecox
Isatis tinctoria
Iva xanthiifolia
Jacobaea erucifolia
Kickxia elatine Kickxia lanigera
 Kickxia spuria
 Knautia integrifolia
 Kundmannia sicula
 Lactuca macrophylla
 Lactuca muralis
 Lactuca saligna
 Lactuca sativa
 Lactuca serriola
 Lactuca tatarica
 Lactuca virosa
 Lagurus ovatus
 Lamium album
 Lamium amplexicaule
 Lamium purpureum
 Lamyropsis cynaroides
 Lappula heteracantha
 Lappula squarrosa
Lapsana communis
Lathyrus angulatus
Lathyrus annuus
Lathyrus aphaca
Lathyrus cicera
Lathyrus clymenum
Lathyrus hirsutus

Lathyrus inconspicuus
Lathyrus nissolia Lathyrus ochrus
Lathyrus odoratus
Lathyrus sativus
Lathyrus setifolius
Lathyrus sphaericus
Lathyrus tuberosus
Launaea nudicaulis
Legousia hybrida
Legousia scabra
Legousia speculum-veneris
Lens culinaris
Leontice leontopetalum
Leontodon maroccanus
Leontodon salzmännii
Leonurus cardiaca
Lepidium campestre
Lepidium densiflorum Lepidium didymum
Lepidium draba
Lepidium hirtum
Lepidium perfoliatum
Lepidium ruderaie
Lepidium squamatum
Lepidium virginicum
Linaria amethystea
Linaria arvensis
Linaria chalapensis
Linaria hirta
Linaria latifolia
Linaria micrantha
 Linaria nivea
 Linaria orbensis
 Linaria peloponnesiaca
 Linaria ricardoi
 Linaria triphylla
 Linaria viscosa
 Linaria vulgaris
 Lindernia dubia
 Linum usitatissimum Linum
 usitatissimum
 Lipandra polysperma
 Lobularia libyca
 Lolium remotum
 Lolium rigidum
Lolium subulatum
Lolium temulentum
Lotus edulis
Lotus ornithopodioides
Lotus tetragonolobus
Lunaria annua
Lunularia cruciata

Lupinus angustifolius
Lupinus luteus
Lycopsis arvensis
Magydaris panacifolia
Malope malacoides
Malope trifida
Malva aegyptia
Malva alcea
Malva cretica
Malva durieui
Malva empedoclis Malva
hispanica
Malva lusitanica Malva moschata
Malva multiflora
Malva neglecta
Malva nicaeensis
Malva parviflora
Malva pusilla
Malva setigera
Malva sylvestris
Malva thuringiaca
Malva trimestris
Malva verticillata
Mandragora officinarum
Mantisalca salmantica
Marchantia polymorpha
Marrubium incanum
Marrubium peregrinum
Marrubium vulgare
Matricaria aurea
Matricaria chamomilla
Matricaria discoidea
Matthiola lunata
Matthiola parviflora Mauranthemum paludosum
Medicago arabica
Medicago intertexta
Medicago lupulina
Medicago monspeliaca Medicago murex
Medicago orbicularis
Medicago polyceratia
Medicago polymorpha
Medicago rigidula
Medicago sativa
Medicago scutellata
Medicago tornata
Medicago truncatula Melampyrum arvense
Melampyrum barbatum
Melica transsilvanica
Melilotus albus
Melilotus altissima
Melilotus elegans

Melilotus indicus
Melilotus infestus
Melilotus italicus
Melilotus neapolitanus
Melilotus officinalis
Melilotus segetalis
Melilotus spicatus
Melilotus sulcatus
Melissa officinalis
Mentha arvensis
Mentha spicata
Mercurialis annua
Mercurialis elliptica
Mercurialis reverchonii
Mibora minima
Microrrhinum minus
Misopates calycinum Misopates orontium
Mollugo cerviana
Monochoria korsakowii
Moricandia arvensis
Moricandia moricandioides Muhlenbergia schreberi
Muscari armeniacum
Muscari commutatum
Myagrum perfoliatum
 Myosotis arvensis
 Myosotis decumbens
 Myosotis persoonii
 Myosotis speluncicola
 Nepeta apuleii
 Nepeta cataria
 Nepeta latifolia
 Neslia paniculata
 Nicandra physalodes
 Nicotiana tabacum Nigella arvensis
 Nigella damascena
 Nigella hispanica
 Nigella orientalis Nigella papillosa
 Noccaea perfoliata
 Nonea erecta
 Nonea lutea
Nonea vesicaria
Notobasis syriaca
Ochlopoa annua Ochlopoa infirma
Odontites vulgaris aggr.
Oenothera ammophila
Oenothera angustissima
Oenothera biennis
Oenothera canovirens
Oenothera deflexa
Oenothera depressa
Oenothera fallax

Oenothera glazioviana
Oenothera issleri
Oenothera oakesiana
Oenothera oehlkersii
Oenothera parviflora
Oenothera perangusta
Oenothera pycnocarpa
Oenothera rosea
Oenothera rubricaulis
Oenothera silesiaca
Oenothera suaveolens
Oenothera subterminalis
Oenothera victorini
Oenothera villosa
Omphalodes kuzinskyanae
Ononis alopecuroides
Ononis pinnata
Onopordum acanthium
Onopordum acaulon
Onopordum carduelium
Onopordum corymbosum
Onopordum dissectum Onopordum
horridum Onopordum illyricum
 Onopordum macracanthum
 Onopordum nervosum
 Onopordum tauricum
 Opopanax chironium
 Orlaya daucoides
 Orlaya grandiflora
 Ornithogalum arabicum
 Ornithogalum divergens Ornithogalum nutans
 Ornithogalum pyramidale
 Ornithogalum umbellatum
 Ornithopus perpusillus
 Orobancha artemisiae-campestris
 Orobancha crenata
 Otospermum glabrum Oxalis
 articulata
 Oxalis corniculata
Oxalis debilis
Oxalis dillenii
Oxalis pes-caprae
Oxalis stricta
Oxybasis urbica
Papaver apulum
Papaver argemone
Papaver dubium
Papaver hybridum
Papaver pinnatifidum
Papaver rhoeas
Papaver setigerum

Papaver somniferum
Parentucellia viscosa
Parietaria debilis
Parietaria judaica
Parietaria lusitanica
Parietaria mauritanica
Parietaria officinalis
Parvotrisetum myrianthum
Patellifolia procumbens
Peltaria alliacea
Pentaglottis sempervirens
Persicaria lapathifolia
Persicaria maculosa
Persicaria orientalis
Persicaria pensylvanica
Persicaria wallichii
Petagnaea gussonei
Petasites pyrenaicus
Petroselinum crispum
Phacelia tanacetifolia
Phalaris brachystachys
Phalaris canariensis
Phalaris minor Phalaris paradoxa
 Phaseolus vulgaris
 Phelipanche mutellii
 Phelipanche ramosa
 Phleum paniculatum
 Phygellus capensis
 Physalis alkekengi
 Phyteuma persicifolium
 Phytolacca acinosa
 Phytolacca americana
 Picnemon acarna
 Picris hieracioides
 Pimpinella anisum
 Pimpinella bicknellii
 Piptatherum miliaceum
 Pisum sativum
 Plantago afra
 Plantago coronopus aggr.
Plantago lagopus
Plantago major
Plantago ovata
Platycapnos spicata
Poa compressa
Polycarpon tetraphyllum
Polygonum aviculare
Polygonum depressum
Potentilla argentea
Potentilla multifida
Potentilla norvegica

Pseudocrossidium hornschruchianum
Ptychostomum archangelicum
Ptychostomum imbricatum
Pulicaria arabica
Pulicaria dysenterica
Ranunculus arvensis
Ranunculus chius
Ranunculus muricatus
Ranunculus parviflorus
Ranunculus trilobus
Raphanus raphanistrum
Raphanus sativus
Rapistrum perenne
Rapistrum rugosum
Reichardia gaditana
Reichardia intermedia
Reichardia picroides
Reichardia tingitana
Reseda alba
Reseda barrelieri
Reseda lanceolata
Reseda lutea
Reseda luteola
Reseda phyteuma
 Reseda stricta
 Reseda suffruticosa
 Reseda undata
 Reynoutria japonica
 Reynoutria sachalinensis
 Rhapadiolus stellatus
 Ridolfia segetum
 Rodgersia podophylla
 Roemeria hybrida
 Rostraria cristata
 Rostraria salzmännii
 Rotala filiformis
 Rotala indica
 Rubia tinctorium
 Rudbeckia hirta
 Rudbeckia laciniata
 Rumex acetosella
 Rumex alpinus
Rumex aquitanicus
Rumex intermedius Rumex kernerii
Rumex longifolius
Rumex nepalensis
Rumex obtusifolius
Rumex patientia
Rumex pulcher
Sagina apetala
Sagina procumbens

Salpichroa origanifolia Salsola kali aggr.

Salvia argentea

Salvia nemorosa

Salvia sclarea

Salvia verbenaca

Salvia viridis

Saponaria glutinosa

Saponaria officinalis

Scandix australis

Scandix pecten-veneris

Scandix stellata

Schoenoplectus mucronatus

Schoenoplectus supinus

Scleranthus annuus

Sclerochloa dura

Scolymus grandiflorus

Scolymus hispanicus

Scolymus maculatus

Scorpiurus muricatus

Scorpiurus vermiculatus

Podospermum laciniatum

Scorzoneroidees salzmannii

Scrophularia auriculata

Scrophularia grandiflora

 Scrophularia herminii

 Scrophularia peregrina

 Secale cereale

 Securigera cretica

 Senecio gallicus

 Senecio inaequidens

 Senecio lividus

 Senecio sylvaticus

 Senecio vulgaris

 Sesamum indicum

 Setaria adhaerens

 Setaria verticillata

 Sherardia arvensis

 Sida spinosa

 Silene apetala

 Silene baccifera

 Silene chalconica

 Silene conoidea

Silene dichotoma

Silene disticha

Silene exaltata

Silene fuscata

Silene gallica

Silene gracilis

Silene latifolia

Silene linicola

Silene longipetala

Silene muscipula
Silene noctiflora
Silene nocturna
Silene pendula
Silene rubella
Silene scabriflora
Silene sennenii
Silene stricta
Silene tridentata
Silene vulgaris
Silybum eburneum
Silybum marianum Sinapis alba
Sinapis arvensis
Sinapis flexuosa
Sinapis pubescens
Sison amomum
Sisymbrium altissimum
Sisymbrium austriacum
Sisymbrium crassifolium Sisymbrium erysimoides
Sisymbrium fugax
Sisymbrium irio
Sisymbrium loeselii
Sisymbrium macroloma
Sisymbrium officinale
 Sisymbrium orientale
 Sisymbrium polyceratum
 Sisymbrium runcinatum
 Sisymbrium strictissimum
 Sisymbrium volgense
Sixalix atropurpurea
Smyrniolum olusatrum Solanum alatum
Solanum americanum
Solanum carolinense
Solanum chenopodioides
Solanum decipiens
Solanum lycopersicum
Solanum mauritianum
Solanum nigrum
Solanum physalifolium
Solanum rostratum
Solanum sarrachoides
Solanum tuberosum
Solanum villosum
Solenanthus apenninus
Solidago canadensis
Solidago gigantea
Solanum stolonifera
Sonchus arvensis
Sonchus asper
Sonchus oleraceus
Sonchus tenerrimus

Sorghum bicolor
Spergula arvensis
Spergularia bocconeii
Spergularia nicaeensis
Spergularia purpurea
Spergularia rubra
Spergularia segetalis
Stachys annua
Stachys arvensis
Stachys byzantina
Stachys circinata
Stachys cretica
Stachys ocymastrum
Staphisagria macrosperma
Staphisagria picta
Stellaria media
Stellaria neglecta
Stellaria pallida
Strigosella africana Succowia balearica
Sulla capitata
Sulla coronaria
Symphyotrichum ciliatum
Symphyotrichum novae-angliae
Symphyotrichum novi-belgii aggr.
 Symphyotrichum pilosum
 Symphyotrichum squamatum
 Symphytum asperum
 Symphytum officinale
 Taeniatherum caput-medusae
 Tanacetum balsamita
 Tanacetum parthenium
 Tanacetum vulgare
 Teesdalia coronopifolia
 Tellima grandiflora
 Tetragonia tetragonoides
 Teucrium spinosum
 Theligonum cynocrambe
 Thesium humile
 Thladiantha dubia
 Thlaspi alliaceum
 Thlaspi arvense
 Thymelaea passerina
Tordylium apulum
Tordylium maximum
Torilis africana
Torilis arvensis
Torilis elongata
Torilis japonica
Torilis leptophylla
Torilis nodosa
Tradescantia virginiana

Tragopogon dubius
Tribulus terrestris
Trifolium affine
Trifolium angustifolium
Trifolium argutum
Trifolium cherleri
Trifolium clusii
Trifolium clypeatum
Trifolium constantinopolitanum
Trifolium dasyurum
Trifolium diffusum
Trifolium dubium
Trifolium echinatum
Trifolium glomeratum
Trifolium grandiflorum
Trifolium hirtum
Trifolium hybridum
Trifolium michelianum
Trifolium mutabile
Trifolium neglectum
Trifolium nigrescens
Trifolium patens
Trifolium pauciflorum
Trifolium pilulare
Trifolium spumosum
Trifolium suffocatum
Trifolium tomentosum
Trifolium uniflorum
Trifolium vesiculosum
Trigonella caerulea
Trigonella esculenta
Trigonella foenum-graecum
 Trigonella monspeliaca
 Trigonella polyceratia
 Triguera osbeckii
 Tripleurospermum maritimum aggr.
 Trisetaria ovata
 Trisetaria panicea
 Trisetum paniceum
 Triticosecale rimpai
 Triticum aestivum
 Triticum monococcum
 Triticum turgidum
 Tropaeolum majus
Tulipa agenensis
Tulipa clusiana
Tulipa orphanidea
Tulipa sylvestris
Tulipa undulatifolia
Turgenia latifolia
Tussilago farfara

Tyrimnus leucographus
Urospermum dalechampii
Urospermum picroides
Urtica dioica
Urtica membranacea Urtica pilulifera
Urtica stachyoides Urtica urens
Vaccaria hispanica
Valantia muralis
Valerianella carinata
Valerianella coronata
Valerianella discoidea
Valerianella echinata Valerianella locusta
Valerianella martinii
Valerianella microcarpa
Valerianella rimosa
Ventenata dubia
Verbascum alpinum
Verbascum blattaria
Verbascum boerhavii
Verbascum densiflorum
Verbascum giganteum
Verbascum litigiosum Verbascum macrurum
Verbascum phlomoides
Verbascum pulverulentum
 Verbascum rotundifolium
 Verbascum sinuatum
 Verbascum speciosum
 Verbascum thapsus
 Verbascum virgatum
 Verbena bonariensis
 Verbena officinalis
 Veronica agrestis
 Veronica arvensis
 Veronica cymbalaria
 Veronica glauca
 Veronica hederifolia
 Veronica opaca
 Veronica persica Veronica polita
 Veronica triloba
 Veronica triphyllos
 Vicia articulata
Vicia benghalensis
Vicia bithynica
Vicia ervilia Vicia faba
Vicia hirsuta
Vicia hybrida
Vicia lutea
Vicia microphylla
Vicia monantha
Vicia pannonica
Vicia parviflora

Vicia peregrina
Vicia sativa
Vicia serratifolia
Vicia sibthorpii
Vicia sicula
Vicia tetrasperma
Vicia villosa
Vinca major
Viola arvensis
Viola odorata
Vogtia annua
Vogtia microphylla
Volutaria lippii
Vulpia alopecuros
Vulpia ciliata
Vulpia geniculata
Vulpiella stipoides
Xanthium spinosum
Xanthium strumarium
Xeranthemum annuum
Zea mays

##D +10 Wetland-species Acorus calamus

Alisma gramineum
Alisma lanceolata
Alisma plantago-aquatica
Alopecurus aequalis
Anagallis minima
Berula erecta
Bidens cernuus
 Bidens connata
 Bidens frondosus
 Bidens radiatus
 Bidens tripartitus
 Bolboschoenus glaucus
 Bolboschoenus laticarpus
 Bolboschoenus maritimus
 Bolboschoenus planiculmis
 Bolboschoenus yagara
 Butomus umbellatus
 Calamagrostis canescens
Calamagrostis neglecta
Calamagrostis pseudophragmites
Calamagrostis purpurea
Calla palustris
Calystegia sepium Carex acuta
Carex acutiformis
Carex appropinquata
Carex aquatilis Carex bohemica
Carex buxbaumii
Carex cespitosa Carex diandra

Carex distachya
Carex disticha
Carex elata
Carex extensa
Carex hispida
Carex lasiocarpa
Carex lyngbyei
Carex melanostachya
Carex nigra
Carex paniculata
Carex pseudocyperus
Carex randalpina
Carex reuteriana
Carex rhynchophysa
Carex riparia
Carex rostrata
Carex vesicaria
Carex vulpina
Centaurium pulchellum
Cerastium dubium
Chaetopogon fasciculatus
Chondrilla chondrilloides
Cicendia filiformis
Cicuta virosa
Cirsium brachycephalum
Cladium mariscus
Coleanthus subtilis
Comarum palustre
Corrigiola litoralis
Corrigiola telephiifolia
Cotoneaster cinnabarinus
Crassula aquatica
Crassula tillaea Cressa cretica
Crypsis aculeata
Crypsis alopecuroides
Crypsis schoenoides
Cyperus flavescens
Cyperus fuscus
Cyperus longus
Cyperus michelianus
Cyperus pannonicus
Damasonium alisma
Deschampsia cespitosa
Digitaria debilis
Elatine alsinastrum
Elatine hexandra
Elatine hydropiper
Elatine macropoda
Elatine triandra
Eleocharis acicularis
Eleocharis carniolica

Eleocharis mamillata
Eleocharis ovata
Eleocharis palustris
Eleocharis uniglumis
Elymus alaskanus
Elymus fibrosus
Elymus transbaicalensis
Epilobium dodonaei
Epilobium fleischeri
Epilobium latifolium
Epilobium palustre
Epilobium roseum
Equisetum fluviatile
Equisetum variegatum
Erigeron acris
Eupatorium cannabinum
Euphorbia chamaesyce
Festuca vivipara
Fimbristylis bisumbellata Fimbristylis dichotoma
Glinus lotoides
Glyceria declinata
Glyceria fluitans
 Glyceria maxima
 Glyceria nemoralis
 Glyceria notata
 Glyceria spicata
 Gnaphalium uliginosum Heliotropium supinum
 Helosciadium bermejoi
 Helosciadium nodiflorum
 Hypericum humifusum
 Hippuris vulgaris
 Illecebrum verticillatum
 Iris pseudacorus
 Isoetes duriei
 Isoetes histrix
 Isoetes velata
 Isolepis setacea
 Juncus acutus
 Juncus articulatus
Juncus biglumis
Juncus bufonius aggr.
Juncus capitatus
Juncus effusus
Juncus gerardi
Juncus inflexus
Juncus maritimus
Juncus pygmaeus
Juncus subnodulosus
Juncus subulatus Juncus tenageia
Juncus triglumis
Koenigia islandica Leersia oryzoides

Lepidium coronopus
Lepidium latifolium
Limosella aquatica
Lindernia dubia
Lindernia procumbens
Lotus tenuis
Ludwigia palustris
Lycopus europaeus
Lysimachia vulgaris
Lythrum hyssopifolia
Lythrum portula
Lythrum salicaria
Lythrum tribracteatum
Melilotus dentatus
Mentha aquatica
Mentha pulegium
Menyanthes trifoliata
Myosotis scorpioides aggr.
Myosoton aquaticum
Myosurus minimus
Nasturtium officinale Neoschischkinia pourrettii
 Oenanthe aquatica
 Oenanthe crocata
 Oxybasis glauca
 Oxybasis rubra
 Panicum debile
 Paspalum distichum Persicaria dubia
 Persicaria foliosa
 Persicaria hydropiper
 Persicaria lapathifolia
 Persicaria minor
 Petasites hybridus
 Petasites kablikianus
 Phalaroides arundinacea
 Phragmites australis
 Plantago major
 Poa palustris
Poa trivialis
Polygonum salsugineum
Polypogon maritimus
Polypogon monspeliensis
Potentilla supina
Ptychotis saxifraga
Puccinellia distans
Puccinellia peisonis
Pulicaria arabica
Pulicaria sicula
Pulicaria vulgaris
Radiola linoides
Ranunculus lateriflorus
Ranunculus muricatus

Ranunculus ophioglossifolius
Ranunculus repens
Ranunculus sardous
Ranunculus sceleratus
Rorippa amphibia
Rorippa palustris
Rumex hydrolapathum
Rumex maritimus
Rumex scutatus
Sagina apetala
Sagina nodosa
Sagittaria sagittifolia
Samolus valerandi
Saxifraga aizoides
Scolochloa festuacea
Scorzonera parviflora
Scrophularia canina
Schoenoplectus corymbosus
Sedum villosum
Schoenoplectus lacustris
Schoenoplectus lacustris subsp. glaucus
 Schoenoplectus litoralis Schoenoplectus pungens
 Schoenoplectus triqueter
 Sium latifolium
 Solanum dulcamara
 Solenopsis laurentia
 Solenopsis minuta
 Sparganium emersum Sparganium
 erectum aggr.
 Spergularia echinosperma
 Spergularia marina
 Spergularia media
 Spergularia rubra
Tephrosia palustris
Thelypteris palustris
Tolpis staticifolia
Trifolium fragiferum Trifolium saxatile
Tripolium pannonicum
Typha angustifolia
Typha domingensis
Typha latifolia
Typha laxmannii
Typha minima
Typha shuttleworthii
Verbena supina
Veronica anagallis-aquatica
Veronica anagalloides
Veronica beccabunga
Veronica catenata
Veronica scardica

Formal definitions of of the revised EUNIS habitat types, groups N and Q

6 A25a Arctic coastal salt marsh

((<#TC +01 A25a-Arctic-coastal-salt-marsh GR #T\$> AND <##Q +01 A25a-Arctic-coastal-salt-marsh>)
NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$C Coast_EEA EQ ARC_COAST>

6 A25b Baltic coastal meadow

((<#TC +01 A25b-Baltic-coastal-meadow GR #T\$> AND <##Q +01 A25b-Baltic-coastal-meadow>) NOT <#TC
Trees|#TC Shrubs GR 15>) AND <\$C Coast_EEA EQ BAL_COAST>

6 A25c Atlantic coastal salt marsh

((<#TC +01 A25c-Atlantic-coastal-salt-marsh GR #T\$> AND <##Q +01 A25c-Atlantic-coastal-salt-
marsh>) NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$C Coast_EEA EQ ATL_COAST>

6 A25d Mediterranean and Black Sea coastal salt marsh

((<#TC +02 A25d-Mediterranean-and-Black-Sea-coastal-salt-marsh GR #T\$> AND <##Q +02 A25dMediterranean-and-Black-Sea-coastal-salt-
marsh>) NOT <#TC Trees|#TC Shrubs GR
15>) AND (<\$C Coast_EEA EQ MED_COAST> OR <\$C Coast_EEA EQ BLA_COAST>)

6 N11 Atlantic, Baltic and Arctic sand beach

((<#TC +01 N11-Atlantic-Baltic-and-Arctic-sand-beach GR #T\$> AND <##Q +01 N11-Atlantic-Baltic-
and-Arctic-sand-beach>) NOT <#TC Trees|#TC Shrubs GR 15>) AND ((<\$C Coast_EEA EQ ATL_COAST> OR (<\$C
Coast_EEA EQ BAL_COAST> OR <\$C Coast_EEA EQ ARC_COAST>)) NOT ((<\$N DEG_LON GR -50> NOT <\$N
DEG_LON GR -11>) AND (<\$N DEG_LAT GR 0>
NOT <\$N DEG_LAT GR 40>)))

6 N12 Mediterranean and Black Sea sand beach

((<#TC +02 N12-Mediterranean-and-Black-Sea-sand-beach GR #T\$> AND <##Q +02 N12-Mediterranean-
and-Black-Sea-sand-beach>) NOT <#TC Trees|#TC Shrubs GR 15>) AND ((<\$C Coast_EEA EQ MED_COAST> OR <\$C
Coast_EEA EQ BLA_COAST>) OR ((<\$N DEG_LON GR -50> NOT <\$N DEG_LON GR -11>) AND (<\$N DEG_LAT GR 0>
NOT <\$N DEG_LAT GR
40>)))

6 N13 Atlantic and Baltic shifting coastal dune

((<#TC +01 N13-Atlantic-and-Baltic-shifting-coastal-dune GR #T\$> AND <##Q +01 N13-Atlantic-andBaltic-shifting-coastal-dune>) NOT <#TC
Trees|#TC Shrubs GR 15>) AND ((<\$C Coast_EEA EQ ATL_COAST> OR <\$C Coast_EEA EQ BAL_COAST>) NOT ((<\$N
DEG_LON GR -50> NOT <\$N DEG_LON GR -11>) AND (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR
40>)))

6 N14 Mediterranean, Macaronesian and Black Sea shifting coastal dune

((<#TC +02 N14-Mediterranean-Macaronesian-and-Black-Sea-shifting-coastal-dune GR #T\$> AND <##Q +02 N14-Mediterranean-
Macaronesian-and-Black-Sea-shifting-coastal-dune>) NOT <#TC Trees|#TC Shrubs GR 15>) AND ((<\$C Coast_EEA EQ
MED_COAST> OR <\$C Coast_EEA EQ BLA_COAST>) OR ((<\$N DEG_LON GR -50> NOT <\$N DEG_LON GR -11>)
AND (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 40>)))

6 N15 Atlantic and Baltic coastal dune grassland (grey dune)

((<#TC +01 N15-Atlantic-and-Baltic-coastal-dune-grassland-grey-dune GR #T\$> AND <##Q +01 N15Atlantic-and-Baltic-coastal-dune-
grassland-grey-dune>) NOT <#TC Trees|#TC Shrubs GR 15>) AND ((<\$C Coast_EEA EQ ATL_COAST> OR <\$C
Coast_EEA EQ BAL_COAST>) NOT ((<\$N DEG_LON GR -50> NOT <\$N DEG_LON GR -11>) AND (<\$N
DEG_LAT GR 0> NOT <\$N DEG_LAT GR 40>)))

- 4 N15! Atlantic and Baltic coastal dune grassland (grey dune)
<#02 N15-Atlantic-and-Baltic-coastal-dune-grassland-grey-dune-specialists> NOT <#TC Trees|#TC Shrubs GR 15>
- 2 N15!!Atlantic and Baltic coastal dune grassland (grey dune)
((<##Q +04 R1Q-Inland-sanddrift-and-dune-with-siliceous-grassland> AND <#02 +04 R1Q-Inland-sanddrift-and-dune-with-siliceous-grassland>) NOT <#TC Trees|#TC Shrubs GR 15>) AND (<\$\$C Coast_EEA EQ ATL_COAST> OR <\$\$C Coast_EEA EQ BAL_COAST>)
- 6 N16 Mediterranean and Macaronesian coastal dune grassland (grey dune)
((<#TC +02 N16-Mediterranean-and-Macaronesian-coastal-dune-grassland-grey-dune GR #T\$> AND <##Q +02 N16-Mediterranean-and-Macaronesian-coastal-dune-grassland-grey-dune>) NOT <#TC Trees|#TC Shrubs GR 15>) AND (<\$\$C Coast_EEA EQ MED_COAST> OR ((<\$\$N DEG_LON GR -50> NOT <\$\$N DEG_LON GR -11>) AND (<\$\$N DEG_LAT GR 0> NOT <\$\$N DEG_LAT GR 40>)))
- 4 N16! Mediterranean and Macaronesian coastal dune grassland (grey dune)
<#02 N16-Mediterranean-and-Macaronesian-coastal-dune-grassland-grey-dune-specialists> NOT <#TC Trees|#TC Shrubs GR 15>
- 2 N16!!Mediterranean and Macaronesian coastal dune grassland (grey dune)
(<##Q +04 N16-Mediterranean-and-Macaronesian-coastal-dune-grassland-grey-dune> NOT <#TC Trees|#TC Shrubs GR 15>) AND (<\$\$C Coast_EEA EQ MED_COAST> OR ((<\$\$N DEG_LON GR -50> NOT <\$\$N DEG_LON GR -11>) AND (<\$\$N DEG_LAT GR 0> NOT <\$\$N DEG_LAT GR 40>)))
- 6 N17 Black Sea coastal dune grassland (grey dune)
((<#TC +02 N17-Black-Sea-coastal-dune-grassland-grey-dune GR #T\$> AND <##Q +02 N17-Black-Sea-coastal-dune-grassland-grey-dune>) NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$\$C Coast_EEA EQ BLA_COAST>
- 4 N17! Black Sea coastal dune grassland (grey dune)
(<#02 N17-Black-Sea-coastal-dune-grassland-grey-dune-specialists> NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$\$C Coast_EEA EQ BLA_COAST>
- 2 N17!!Black Sea coastal dune grassland (grey dune)
(<##Q +04 N17-Black-Sea-coastal-dune-grassland-grey-dune> NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$\$C Coast_EEA EQ BLA_COAST>
- 7 N18 Atlantic and Baltic coastal Empetrum heath
((<#TC Dry-and-wet-heath-shrubs|#TC Dry-heath-shrubs GR #T\$> AND <Empetrum nigrum aggr. GR 05>) NOT (<Ulex europaeus GR 25> OR <#TC Trees GR 05>)) AND ((<\$\$C Coast_EEA EQ ATL_COAST> OR <\$\$C Coast_EEA EQ BAL_COAST>) AND (<\$\$C Dunes_Bohn EQ Y_DUNES> OR <#02 +01 N15-Atlantic-and-Baltic-coastal-dune-grassland-grey-dune>))
- 7 N19 Atlantic coastal Calluna and Ulex heath
(<#TC Dry-and-wet-heath-shrubs|#TC Dry-heath-shrubs GR #T\$> NOT (<Empetrum nigrum aggr. GR 05> OR <#TC Trees GR 05>)) AND ((<\$\$C Coast_EEA EQ ATL_COAST> AND (<\$\$C Dunes_Bohn EQ Y_DUNES> OR <#02 +01 N15-Atlantic-and-Baltic-coastal-dune-grassland-greydune>)) NOT ((<\$\$N DEG_LON GR -50> NOT <\$\$N DEG_LON GR -11>) AND (<\$\$N DEG_LAT GR 0> NOT <\$\$N DEG_LAT GR 40>)))
- 7 N1A Atlantic and Baltic coastal dune scrub

(<#TC Shrubs GR 25> NOT (<#TC Trees GR 25> OR <#TC Native-light-canopy-trees GR 15>)) AND (<\$\$C Dunes_Bohn EQ Y_DUNES> AND
(<\$\$C Coast_EEA EQ ATL_COAST> OR <\$\$C Coast_EEA EQ
BAL_COAST>))

7 N1B Mediterranean and Black Sea coastal dune scrub

(<#TC Shrubs GR 25> NOT (<#TC Trees GR 25> OR <#TC Native-light-canopy-trees GR 15>)) AND (<\$\$C Dunes_Bohn EQ Y_DUNES> AND
(<\$\$C Coast_EEA EQ MED_COAST> OR <\$\$C Coast_EEA EQ
BLA_COAST>))

7 N1C Macaronesian coastal dune scrub

<#TC Macaronesian-coastal-dune-scrub GR 15>

7 N1D Atlantic and Baltic broad-leaved coastal dune forest

(<#TC Native-broadleaf-trees GR 25> AND <#TC Native-broadleaf-trees GR #TC Trees EXCEPT #TC Native-broadleaf-trees>) AND (<\$\$C
Dunes_Bohn EQ Y_DUNES> AND (<\$\$C Coast_EEA
EQ ATL_COAST> OR <\$\$C Coast_EEA EQ BAL_COAST>))

7 N1E Black Sea broad-leaved coastal dune forest

(<#TC Native-broadleaf-trees GR 25> AND <#TC Native-broadleaf-trees GR #TC Trees EXCEPT #TC Native-broadleaf-trees>) AND (<\$\$C
Dunes_Bohn EQ Y_DUNES> AND <\$\$C Coast_EEA EQ
BLA_COAST>)

7 N1F Baltic coniferous coastal dune forest

(<#TC Native-conifer-trees GR 15> AND <#TC Native-conifer-trees GR #TC Trees EXCEPT #TC Native-
conifer-trees>) AND (<\$\$C Dunes_Bohn EQ Y_DUNES> AND <\$\$C Coast_EEA EQ BAL_COAST>)

7 N1G Mediterranean coniferous coastal dune forest

(<#TC Native-conifer-trees GR 15> AND <#TC Native-conifer-trees GR #TC Trees EXCEPT #TC Native-
conifer-trees>) AND (<\$\$C Dunes_Bohn EQ Y_DUNES> AND <\$\$C Coast_EEA EQ MED_COAST>)

6 N1H Atlantic and Baltic moist and wet dune slack

(<##Q +01 N1H-Atlantic-and-Baltic-moist-and-wet-dune-slack> NOT <#TC Trees|#TC Shrubs GR 15>) AND (<\$\$C Dunes_Bohn EQ Y_DUNES>
AND (<\$\$C Coast_EEA EQ ATL_COAST> OR <\$\$C
Coast_EEA EQ BAL_COAST>))

6 N1J Mediterranean and Black Sea moist and wet dune slack

(<##Q +02 N1J-Mediterranean-and-Black-Sea-moist-and-wet-dune-slack> NOT <#TC Trees|#TC Shrubs GR 15>) AND (<\$\$C Dunes_Bohn EQ
Y_DUNES> AND (<\$\$C Coast_EEA EQ MED_COAST> OR
<\$\$C Coast_EEA EQ BLA_COAST>))

6 N21 Atlantic, Baltic and Arctic coastal shingle beach

((<#TC +01 N21-Atlantic-Baltic-and-Arctic-coastal-shingle-beach GR #T\$> AND <##Q +01 N21Atlantic-Baltic-and-Arctic-coastal-shingle-
beach>) NOT <#TC Trees|#TC Shrubs GR
15>) AND ((<\$\$C Coast_EEA EQ ATL_COAST> OR <\$\$C Coast_EEA EQ BAL_COAST>) OR <\$\$C
Coast_EEA EQ ARC_COAST>)

6 N22 Mediterranean and Black Sea coastal shingle beach

((<#TC +02 N22-Mediterranean-and-Black-Sea-coastal-shingle-beach GR #T\$> AND (<#TC N22Mediterranean-and-Black-Sea-coastal-shingle-
beach-specialists GR 10> OR
<Crithmum maritimum GR 10>)) NOT <#TC Trees|#TC Shrubs GR 15>) AND (<\$\$C

Coast_EEA EQ MED_COAST> OR <\$\$C Coast_EEA EQ BLA_COAST>)

6 N31 Atlantic and Baltic rocky sea cliff and shore

((<#TC +01 N31-Atlantic-and-Baltic-rocky-sea-cliff-and-shore GR #T\$> AND <##Q +01 N31-Atlantic-and-Baltic-rocky-sea-cliff-and-shore>) NOT <#TC Trees|#TC Shrubs GR 15>) AND ((<\$\$C Coast_EEA EQ ATL_COAST> OR <\$\$C Coast_EEA EQ BAL_COAST>) NOT ((<\$\$N DEG_LON GR -50> NOT <\$\$N DEG_LON GR -11>) AND (<\$\$N DEG_LAT GR 0> NOT <\$\$N DEG_LAT GR 40>))))

6 N32 Mediterranean and Black Sea rocky sea cliff and shore

((<#TC +02 N32-Mediterranean-and-Black-Sea-rocky-sea-cliff-and-shore GR #T\$> AND <##Q +02 N32Mediterranean-and-Black-Sea-rocky-sea-cliff-and-shore>) NOT <#TC Trees|#TC Shrubs GR 15>) AND (<\$\$C Coast_EEA EQ MED_COAST> OR <\$\$C Coast_EEA EQ BLA_COAST>)

6 N33 Macaronesian rocky sea cliff and shore

((<#TC +02 N33-Macaronesian-rocky-sea-cliff-and-shore GR #T\$> AND <##Q +02 N33-Macaronesian-rocky-sea-cliff-and-shore>) NOT <#TC Trees|#TC Shrubs GR 15>) AND (<\$\$C Coast_EEA EQ ATL_COAST> AND (<\$\$N DEG_LON GR -50> NOT <\$\$N DEG_LON GR -12>))

6 N34 Atlantic and Baltic soft sea cliff

(((<#TC +01 N34-Atlantic-and-Baltic-soft-sea-cliff GR #T\$> AND <##Q +01 N34-Atlantic-and-Baltic-soft-sea-cliff>) AND (<#01 Atlantic-and-Baltic-soft-sea-cliff-clay-indicators> AND <#01 Atlantic-and-Baltic-soft-sea-cliff-salt-indicators>)) NOT <#TC Trees|#TC Shrubs GR 15>) AND (<\$\$C Coast_EEA EQ ATL_COAST> OR <\$\$C Coast_EEA EQ BAL_COAST>)

6 N35 Mediterranean and Black Sea soft sea cliff

((<#TC +02 N35-Mediterranean-and-Black-Sea-soft-sea-cliff GR #T\$> AND <##Q +02 N35-Mediterranean-and-Black-Sea-soft-sea-cliff>) NOT <#TC Trees|#TC Shrubs GR 15>) AND (<\$\$C Coast_EEA EQ MED_COAST> OR <\$\$C Coast_EEA EQ BLA_COAST>)

2 Q11 Raised bog

((<##Q +10 Mire-species> AND <##Q +04 Bog-species>) AND (<##Q +06 Continental-bog> AND (<##Q +08 Q11-Raised-bog> AND <#TC Raised-bog-Sphagnum GR 15>))) NOT ((<#TC Alpinesubalpine-ericoid-dwarf-shrubs GR05> OR <#02 +04 R22-Low-and-medium-altitudehay-meadow>) OR (<#TC Trees GR 25> OR <#TC Shrubs GR 15>))

2 Q12 Blanket bog

(((<##Q +10 Mire-species> AND <##Q +04 Bog-species>) AND (<##Q +06 Atlantic-bog> AND <#02 Blanket-bog-specialists>)) NOT (<#TC Trees GR 15> OR <#TC Shrubs GR 15>)) NOT <\$\$C Country EQ France>

2 Q21 Oceanic valley mire

((<##Q +10 Mire-species> AND <##Q +04 Bog-species>) AND (<##Q +06 Atlantic-bog> AND <#03 Valley-bog-specialists>)) NOT (<#02 Blanket-bog-specialists> OR (<#TC Trees GR 15> OR <#TC Shrubs GR 15>))

2 Q22 Poor fen

((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Acidophilous-fen-species> AND (<##Q +07 Poor-fen> AND <#TC +09 Acidophilous-fen-species GR 25>))) NOT (<#TC Trees GR 15> OR <#TC Shrubs GR 15>)

2 Q23 Relict mire of Mediterranean mountains

((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Non-acidophilous-fen-species> AND <#03 Mediterranean-mountain-relict-mire-species>)) NOT (<#TC Trees GR 15> OR <#TC Shrubs GR 15>)

2 Q24 Intermediate fen and soft-water spring mire

((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Non-acidophilous-fen-species> AND <##Q +40 Intermediate-fen-and-soft-water-spring-mire>)) NOT ((<#TC Fenwith-calcium-carbonate-precipitation-species GR 15> OR <#02 Mediterraneanmountain-relict-mire-species>) OR (<#TC Trees GR 15> OR <#TC Shrubs GR 15>))

2 Q25 Non-calcareous quaking mire

((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Acidophilous-fen-species> AND (<##Q +07 Non-calcareous-quaking-mire> AND <#TC Quaking-non-calcareous-fenbryophytes GR05>))) NOT (<#02 +04 R22-Low-and-medium-altitude-hay-meadow> OR (<#TC Trees GR 05> OR <#TC Shrubs GR 05>))

2 Q3132Palsa and polygon mires

((<##Q +10 Mire-species> AND (<##Q +04 Bog-species> AND <##Q +06 Continental-bog>)) AND (<##Q +08 Q31-Palsa-mire> AND <#02 Palsa-specialists>)) NOT (<#TC Dry-and-wet-heathshrubs GR00> OR (<#TC Trees GR 00> OR <#TC Shrubs GR 05>))

2 Q41 Alkaline, calcareous, carbonate-rich small-sedge spring fen

((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Non-acidophilous-fen-species> AND (<##Q +40 Calcareous-non-quaking-fen-species> AND <#TC Calcium-rich-springmires GR 00>))) NOT (((<#02 Halophytic-fen-species> AND <\$\$N DEG_LON GR 15>) OR ((<#TC Sphagnum GR 00> OR (<#TC W-basic-garrigue-shrubs GR 00> OR (<#TC +01 A25a-Arctic-coastal-salt-marsh GR 50> OR <#TC Atlantic-heath-shrubs GR 10>))) OR ((<#TC Tall-fen-sedges GR 25> OR <#02 Mediterranean-mountain-relict-mirespecies>) OR (<#TC Trees GR 15> OR <#TC Shrubs GR 15>)))) OR <\$\$C Dunes_Bohn EQ_Y_DUNES>)

2 Q42 Extremely rich moss-sedge fen

((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Non-acidophilous-fen-species> AND (<##Q +40 Extremely-rich-moss-sedge-fen-species> AND <#TC Calcium-tolerantSphagna-and-boreal-rich-fen-bryophytes GR00>))) NOT (<#02 Mediterraneanmountain-relict-mire-species> OR (<#TC Trees GR 15> OR <#TC Shrubs GR 15>))

2 Q43 Tall-sedge base-rich fen

((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Non-acidophilous-fen-species> AND (<##Q +40 Calcareous-non-quaking-fen-species> AND <#TC Tall-fen-sedges GR 25>))) NOT ((<#TC Sphagnum GR05> OR <#02 Mediterranean-mountain-relict-mirespecies>) OR (<#TC Trees GR 15> OR <#TC Shrubs GR 15>))

2 Q44 Calcareous quaking mire

((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Non-acidophilous-fen-species> AND <##Q +40 Calcareous-quaking-mire>)) NOT ((<#02 Mediterranean-mountainrelict-mire-species> OR <#TC Atlantic-heath-shrubs GR 10>) OR (<#TC Trees GR 05> OR <#TC Shrubs GR 05>))

2 Q45 Arctic-alpine rich fen

((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Non-acidophilous-fen-species> AND (<##Q +40 Arcto-alpine-rich-fen-species> AND <#02 Arcto-alpine-rich-fen-specialists>))) NOT (((<#TC Sphagnum GR 15> OR <#TC +06 Atlantic-bog GR05>) OR <#02 Mediterranean-mountain-relict-mire-species>) OR (<#TC Trees GR 15> OR <#TC Shrubs GR 15>))

2 Q46 Carpathian travertine fen with halophytes

((<##Q +10 Mire-species> AND <##Q +04 Fen-species>) AND (<##Q +09 Non-acidophilous-fen-species> AND ((<##Q +40 Calcareous-non-quaking-fen-species> AND <#TC Calcium-richspring-mires GR 00>) AND (<#02 Halophytic-fen-species> AND <\$N DEG_LON GR 15>)))) NOT ((<#TC Sphagnum GR 00> OR (<#TC W-basic-garrigue-shrubs GR 00> OR <#TC +01 A25a-Arctic-coastal-salt-marsh GR 50>)) OR (((<#TC Tall-fen-sedges GR 25> OR <#02 Mediterranean-mountain-relict-mire-species>) OR <\$N DEG_LAT GR 50>) OR (<#TC Trees GR 15> OR <#TC Shrubs GR 15>)))

2 Q51 Tall-helophyte bed

<##Q +04 Q51-Tall-helophyte-bed> NOT <#TC Trees|#TC Shrubs GR 15>

2 Q52 Small-helophyte bed

<##Q +04 Q52-Small-helophyte-bed> NOT <#TC Trees|#TC Shrubs GR 15>

2 Q53 Tall-sedge bed

<##Q +04 Q53-Tall-sedge-bed> NOT <#TC Trees|#TC Shrubs GR 15>

2 Q54 Inland saline or brackish helophyte bed

((<##Q +04 Q54-Inland-saline-or-brackish-helophyte-bed> NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$C Coast_EEA EQ N_COAST>) NOT (((<\$C Country EQ Netherlands> OR <\$C Country EQ United Kingdom>) OR (<\$C Country EQ Ireland> OR <\$C Country EQ Belgium>)) OR ((<\$C Country EQ Netherlands> OR <\$C Country EQ Denmark>) OR <\$C Country EQ Norway>))

2 R11 Pannonian and Pontic sandy steppe

(<##Q +04 R11-Pannonian-and-Pontic-sandy-steppe> AND <#03 +04 R11-Pannonian-and-Pontic-sandy-steppe>) NOT <#TC Trees|#TC Shrubs GR 15>

4 R11! Pannonian and Pontic sandy steppe

<#TC R11-Pannonian-and-Pontic-sandy-steppe-specialists GR 15> NOT <#TC Trees|#TC Shrubs GR 15>

2 R12 Cryptogam- and annual-dominated vegetation on siliceous rock outcrops

((<##Q +04 R12-Cryptogam-and-annual-dominated-vegetation-on-siliceous-rock-outcrops> AND <#03 +04 R12-Cryptogam-and-annual-dominated-vegetation-on-siliceous-rock-outcrops>) AND <#TC +04 R12-Cryptogam-and-annual-dominated-vegetation-on-siliceous-rock-outcrops GR #TC Hemicryptophytes>) NOT <#TC Trees|#TC Shrubs GR 15>

2 R13 Cryptogam- and annual-dominated vegetation on calcareous and ultramafic rock outcrops

((<##Q +04 R13-Cryptogam-and-annual-dominated-vegetation-on-calcareous-and-ultramafic-rock-outcrops> AND <#03 +04 R13-Cryptogam-and-annual-dominated-vegetation-on-calcareous-and-ultramafic-rock-outcrops>) AND <#TC +04 R13-Cryptogam-and-annual-dominated-vegetation-on-calcareous-and-ultramafic-rock-outcrops GR #TC Hemicryptophytes EXCEPT #TC +04 R13-Cryptogam-and-annual-dominated-vegetation-on-calcareous-and-ultramafic-rock-outcrops>) NOT (<#01 R11-Pannonian-and-Pontic-sandy-steppe-specialists> OR <#TC Trees|#TC Shrubs GR 15>)

2 R14 Perennial rocky grassland of the Italian Peninsula

((<##Q +04 R14-Perennial-rocky-grassland-of-the-Italian-Peninsula> AND <#03 +04 R14-Perennial-rocky-grassland-of-the-Italian-Peninsula>) NOT (<#TC Trees|#TC Shrubs GR 15> OR <#TC Garrigue-and-micro-garrigue-species GR 25>)) AND <\$C Country EQ Italy>

4 R15 Continental dry rocky steppic grassland and dwarf scrub on chalk outcrops

<#TC R15-Continental-dry-rocky-steppic-grassland-and-dwarf-scrub-on-chalk-outcrops>

specialists GR 25> OR <#02 R15-Continental-dry-rocky-steppic-grassland-anddwarf-scrub-on-chalk-outcrops-specialists>) NOT <#TC Trees|#TC Shrubs GR 15>

2 R16 Perennial rocky grassland of Central and South-Eastern Europe

((<##Q +04 R16-Perennial-rocky-grassland-of-Central-and-South-Eastern-Europe> AND <#03 +04 R16-Perennial-rocky-grassland-of-Central-and-South-Eastern-Europe>) NOT <#TC Trees|#TC Shrubs GR 15>) NOT
(((<\$N DEG_LON GR -50> NOT <\$N DEG_LON GR 5>) OR
<\$N DEG_LON GR 33>) OR <\$N DEG_LAT GR 52>)

2 R17 Heavy-metal dry grassland of the Balkans

(<##Q +04 R17-Heavy-metal-dry-grassland-of-the-Balkans> AND <#03 +04 R17-Heavy-metal-dry-grassland-of-the-Balkans>) NOT <#TC Trees|#TC Shrubs GR 15>

2 R18 Perennial rocky calcareous grassland of subatlantic-submediterranean Europe

((<##Q +04 R18-Perennial-rocky-calcareous-grassland-of-subatlantic-submediterranean-Europe> AND <#03 +04 R18-Perennial-rocky-calcareous-grassland-of-subatlantic-submediterranean-Europe>) NOT <#TC Trees|#TC Shrubs GR 15>) AND
(<\$N DEG_LON GR -10> NOT <\$N DEG_LON GR 9>)

2 R19 Dry steppic submediterranean pasture of the Amphi-Adriatic region

((<##Q +04 R19-Dry-steppic-submediterranean-pasture-of-the-Amphi-Adriatic-region> AND <#04 +04 R19-Dry-steppic-submediterranean-pasture-of-the-Amphi-Adriatic-region>) NOT <#TC Trees|#TC Shrubs GR 15>) NOT ((<\$N DEG_LON GR -50> NOT
<\$N DEG_LON GR
9>) OR <\$N DEG_LAT GR 46.5>)

2 R1A Semi-dry perennial calcareous grassland (meadow steppe)

(<##Q +04 R1A-Semi-dry-perennial-calcareous-grassland> AND <#03 +04 R1A-Semi-dry-perennial-calcareous-grassland>) NOT <#TC Trees|#TC Shrubs GR 15>

2 R1B Continental dry grassland (true steppe)

(<##Q +04 R1B-Continental-dry-grassland-true-steppe> AND (<#02 +04 R1B-Continental-dry-grassland-true-steppe> AND (<### +04 R1B-Continental-dry-grassland-true-steppe GR ### +04 R14-Perennial-rocky-grassland-of-the-Italian-Peninsula> AND (<### +04 R1B-Continental-dry-grassland-true-steppe GR ### +04 R1F-Mediterraneanannual-rich-dry-grassland> AND <### +04 R1B-Continental-dry-grassland-truesteppe GR ### +04 R1E-Mediterranean-tall-perennial-dry-grassland>)))) NOT (<#TC
Trees GR 05> OR (<#TC Shrubs GR 10> OR (<#TC Dwarf-shrubs GR 10> OR (<#TC R15Continental-dry-rocky-steppic-grassland-and-dwarf-scrub-on-chalk-outcropsspecialists GR 25> OR (<#02 R15-Continental-dry-rocky-steppic-grassland-anddwarf-scrub-on-chalk-outcrops-specialists> OR <#TC Garrigue-and-microgarrigue-species GR 05>))))

4 R1B! Continental dry grassland (true steppe)

(<#TC R1B-Continental-dry-grassland-true-steppe-specialists GR 25> AND (<#03 +04 R1BContinental-dry-grassland-true-steppe> AND (<### +04 R1B-Continental-drygrassland-true-steppe GR ### +04 R14-Perennial-rocky-grassland-of-the-ItalianPeninsula> AND (<### +04 R1B-Continental-dry-grassland-true-steppe GR ### +04 R1F-Mediterranean-annual-rich-dry-grassland> AND <### +04 R1B-Continental-drygrassland-true-steppe GR ### +04 R1E-Mediterranean-tall-perennial-drygrassland>)))) NOT <#TC Trees|#TC Shrubs GR 15>

2 R1C Desert steppe

((<##Q +04 R1C-Desert-steppe> AND <#02 +04 R1C-Desert-steppe>) NOT <#TC Trees|#TC Shrubs GR 15>)
NOT (<\$N DEG_LON GR -10> NOT <\$N DEG_LON GR 32>)

2 R1D Mediterranean closely grazed dry grassland

((<##Q +04 R1D-Mediterranean-closely-grazed-dry-grassland> AND <#02 +04 R1D-Mediterranean-closely-grazed-dry-grassland>) NOT (<#TC Trees|#TC Shrubs GR 15> OR <#TC Crops GR 05> OR <#TC R1B-Continental-dry-grassland-true-steppe-specialists GR 25>))) NOT (<\$\$N DEG_LAT GR 45.5> OR <\$\$C Coast_EEA EQ ATL_COAST>)

2 R1E Mediterranean tall perennial dry grassland

((<##Q +04 R1E-Mediterranean-tall-perennial-dry-grassland> AND <#03 +04 R1E-Mediterranean-tall-perennial-dry-grassland>) NOT (<#TC Trees|#TC Shrubs GR 15> OR <#TC Garrigueand-micro-garrigue-species GR 05>)) NOT <\$\$C Coast_EEA EQ ATL_COAST>

4 R1E! Mediterranean tall perennial dry grassland

<#TC R1E-Mediterranean-tall-perennial-dry-grassland-specialists GR 50> NOT <#TC Trees|#TC Shrubs GR 15>

2 R1F Mediterranean annual-rich dry grassland

((<##Q +04 R1F-Mediterranean-annual-rich-dry-grassland> AND <#03 +04 R1F-Mediterranean-annual-rich-dry-grassland>) NOT <#TC Trees|#TC Shrubs|#TC Dwarf-shrubs|#TC Chamaephytes|#TC Hemicryptophytes GR 15>

2 R1G Iberian oromediterranean siliceous dry grassland

((<##Q +04 R1G-Iberian-oromediterranean-siliceous-dry-grassland> AND <#02 +04 R1G-Iberian-oromediterranean-siliceous-dry-grassland>) NOT (<#02 +04 R1H-Iberianoromediterranean-basiphilous-dry-grassland> OR <#TC Trees|#TC Shrubs GR 15>)

4 R1G! Iberian oromediterranean siliceous dry grassland

<#TC R1G-Iberian-oromediterranean-siliceous-dry-grassland-specialists GR 10> NOT <#TC Trees|#TC Shrubs GR 15>

2 R1H Iberian oromediterranean basiphilous dry grassland

((<##Q +04 R1H-Iberian-oromediterranean-basiphilous-dry-grassland> AND <#01 R1H-Iberian-oromediterranean-basiphilous-dry-grassland-specialists>) NOT <#TC Trees|#TC Shrubs GR 15>

4 R1H! Iberian oromediterranean basiphilous dry grassland

<#TC R1H-Iberian-oromediterranean-basiphilous-dry-grassland-specialists GR 10> NOT <#TC Trees|#TC Shrubs GR 15>

2 R1J Cyrno-Sardean oromediterranean siliceous dry grassland

<##Q +04 R1J-Cyrno-Sardean-oromediterranean-siliceous-dry-grassland> NOT <#TC Trees|#TC Shrubs GR 15>

4 R1J! Cyrno-Sardean oromediterranean siliceous dry grassland

<#TC R1J-Cyrno-Sardean-oromediterranean-siliceous-dry-grassland-specialists GR 10> NOT <#TC Trees|#TC Shrubs GR 15>

2 R1K Balkan and Anatolian oromediterranean dry grassland

((<##Q +04 R1K-Balkan-and-Anatolian-oromediterranean-dry-grassland> AND <#01 R1K-Balkan-and-Anatolian-oromediterranean-dry-grassland-specialists>) NOT <#TC Trees|#TC Shrubs GR 15>

4 R1K! Balkan and Anatolian oromediterranean dry grassland

<#TC R1K-Balkan-and-Anatolian-oromediterranean-dry-grassland-specialists GR 10> NOT <#TC

Trees|#TC Shrubs GR 15>

2 R1L Madeiran oromediterranean siliceous dry grassland

<##Q +04 R1L-Madeiran-oromediterranean-siliceous-dry-grassland> NOT <#TC Trees|#TC Shrubs GR 15>

4 R1L! Madeiran oromediterranean siliceous dry grassland

<#TC R1L-Madeiran-oromediterranean-siliceous-dry-grassland-specialists GR 10> NOT <#TC Trees|#TC Shrubs GR 15>

2 R1M Lowland to montane, dry to mesic grassland usually dominated by *Nardus stricta* (<##Q +04 R1M-Lowland-to-submontane-dry-to-mesic-grassland-usually-Nardus> AND <#03 +04 R1M-Lowland-to-submontane-dry-to-mesic-grassland-usually-Nardus>) NOT (<#02 +04 R43-Temperate-acidophilous-alpine-grassland> OR (<#TC Trees|#TC Shrubs GR 15>

OR <#TC Dwarf-shrubs GR 15>))

2 R1N Open Iberian supramediterranean dry acid and neutral grassland

<##Q +04 R1N-Open-Iberian-supramediterranean-dry-acid-and-neutral-grassland> NOT <#TC Trees|#TC Shrubs GR 15>

4 R1N! Open Iberian supramediterranean dry acid and neutral grassland

<#TC R1N-Open-Iberian-supramediterranean-dry-acid-and-neutral-grassland-specialists GR 10> NOT <#TC Trees|#TC Shrubs GR 15>

2 R1P Oceanic to subcontinental inland sand grassland on dry acid and neutral soils

((<##Q +04 R1P-Oceanic-to-subcontinental-inland-sand-grassland-on-dry-acid-and-neutral-soils> AND <#03 +04 R1P-Oceanic-to-subcontinental-inland-sand-grassland-on-dry-acid-and-neutral-soils>) NOT (<#03 +04 R1B-Continental-dry-grassland-true-steppe> OR <#TC Trees|#TC Shrubs GR 15>)) AND <\$\$C Coast_EEA EQ N_COAST>

2 R1Q Inland sanddrift and dune with siliceous grassland

((<##Q +04 R1Q-Inland-sanddrift-and-dune-with-siliceous-grassland> AND <#03 +04 R1Q-Inland-sanddrift-and-dune-with-siliceous-grassland>) NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$\$C Coast_EEA EQ N_COAST>

4 R1Q! Inland sanddrift and dune with siliceous grassland

(<#TC R1Q-Inland-sanddrift-and-dune-with-siliceous-grassland-specialists GR 50> NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$\$C Coast_EEA EQ N_COAST>

2 R1R Mediterranean to Atlantic open, dry, acid and neutral grassland

(<##Q +04 R1R-Mediterranean-to-Atlantic-open-dry-acid-and-neutral-grassland> AND <#03 +04 R1R-Mediterranean-to-Atlantic-open-dry-acid-and-neutral-grassland>) NOT (<#TC Trees|#TC Shrubs GR 15> OR (<#TC Crops GR 05> OR (<#03 N16-Mediterranean-and-Macaronesian-coastal-dune-grassland-grey-dune-specialists> OR <#TC +04 R1F-Mediterranean-annual-rich-dry-grassland GR 25>)))

4 R1S Heavy-metal grassland in Western and Central Europe

((<#02 R1S-Heavy-metal-grassland-in-Western-and-Central-Europe-specialists> OR <#TC R1S-Heavy-metal-grassland-in-Western-and-Central-Europe-specialists GR 05>) NOT <#TC Trees|#TC Shrubs GR 15>) NOT (<\$\$C Coast_EEA EQ ATL_COAST> OR <\$\$C Coast_EEA EQ BAL_COAST>)

- 2 R1T Azorean open, dry, acid to neutral grassland
<##Q +04 R1T-Azorean-open-dry-acid-to-neutral-grassland> NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R21 Mesic permanent pasture of lowlands and mountains
(((<##Q +04 R21-Mesic-permanent-pasture-of-lowlands-and-mountains> AND <#TC +04 R21-Mesic-permanent-pasture-of-lowlands-and-mountains GR \$50>) AND <#03 +04 R21-Mesicpermanent-pasture-of-lowlands-and-mountains>) NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R22 Low and medium altitude hay meadow
(((<##Q +04 R22-Low-and-medium-altitude-hay-meadow> AND <#TC +04 R22-Low-and-medium-altitude-hay-meadow GR \$50>) AND (<#03 +04 R22-Low-and-medium-altitude-hay-meadow> AND <### +04 R22-Low-and-medium-altitude-hay-meadow GR ### +04 R1A-Semi-dryperennial-calcareous-grassland>)) NOT (<#TC +04 R1M-Lowland-to-submontane-dryto-mesic-grassland-usually-Nardus GR 25> OR <#TC Trees|#TC Shrubs GR 15>)
- 2 R23 Mountain hay meadow
(((<##Q +04 R23-Mountain-hay-meadow> AND <#TC +04 R23-Mountain-hay-meadow GR \$50>) AND <#02 R23Mountain-hay-meadow-specialists>) NOT <#TC Trees|#TC Shrubs GR 15>) NOT (<\$C Country EQ Latvia> OR <\$C Country EQ Lithuania>)
- 4 R23! Mountain hay meadow
(<#03 R23-Mountain-hay-meadow-specialists> NOT <#TC Trees|#TC Shrubs GR 15>) NOT (<\$C Country EQ Latvia> OR <\$C Country EQ Lithuania>)
- 2 R24 Iberian summer pasture (vallicar)
(<##Q +04 R24-Iberian-summer-pasture-vallicar> AND <#01 R24-Iberian-summer-pasture-vallicar-specialists>) NOT <#TC Trees|#TC Shrubs GR 15>
- 4 R24! Iberian summer pasture (vallicar)
(<#TC R24-Iberian-summer-pasture-vallicar-specialists GR 25> AND <#02 R24-Iberian-summer-pasture-vallicar-specialists>) NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R31 Mediterranean tall humid inland grassland
(((<##Q +04 R31-Mediterranean-tall-humid-inland-grassland> AND <#01 R31-Mediterranean-tall-humid-inland-grassland-specialists>) NOT <#TC Trees|#TC Shrubs GR 15>) NOT <\$C Coast_EEA EQ ATL_COAST>
- 2 R32 Mediterranean short moist grassland of lowlands
(<##Q +04 R32-Mediterranean-short-moist-grassland-of-lowlands> AND <#03 +04 R32-Mediterranean-short-moist-grassland-of-lowlands>) NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R33 Mediterranean short moist grassland of mountains
(<##Q +04 R33-Mediterranean-short-moist-grassland-of-mountains> AND <#01 R33-Mediterranean-short-moist-grassland-of-mountains-specialists>) NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R34 Submediterranean moist meadow
(<##Q +04 R34-Submediterranean-moist-meadow> AND <#02 R34-Submediterranean-moist-meadow-specialists>) NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R35 Moist or wet mesotrophic to eutrophic hay meadow
(<##Q +04 R35-Moist-or-wet-mesotrophic-to-eutrophic-hay-meadow> AND <#03 +04 R35-Moist-or-wet-mesotrophic-to-eutrophic-hay-meadow>) NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R36 Moist or wet mesotrophic to eutrophic pasture

(<##Q +04 R36-Moist-or-wet-mesotrophic-to-eutrophic-pasture> AND <#03 +04 R36-Moist-or-wet-mesotrophic-to-eutrophic-pasture>) NOT <#TC Trees|#TC Shrubs GR 15>

2 R37 Temperate and boreal moist or wet oligotrophic grassland

(<##Q +04 R37-Temperate-and-boreal-moist-or-wet-oligotrophic-grassland> AND <#03 +04 R37-Temperate-and-boreal-moist-or-wet-oligotrophic-grassland>) NOT <#TC Trees|#TC Shrubs GR 15>

2 R41 Snow-bed vegetation

((<##Q +04 R41-Snow-bed-vegetation> AND <#01 R41-Snow-bed-vegetation-specialists>) NOT ((<#TC Arctic-alpine-dwarf-willows GR 15> AND (<#TC Arctic-alpine-dwarf-willows GE \$25> OR <#SC Arctic-alpine-dwarf-willows GE #\$\$>)) OR <#TC Trees|#TC Shrubs GR 15>)) NOT ((<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 60>) AND (<\$N Altitude (m) GR 0> NOT <\$N Altitude (m) GR 500>))

4 R41! Snow-bed vegetation

(<#03 R41-Snow-bed-vegetation-specialists> NOT ((<#TC Arctic-alpine-dwarf-willows GR 15> AND (<#TC Arctic-alpine-dwarf-willows GE \$25> OR <#SC Arctic-alpine-dwarf-willows GE #\$\$>)) OR <#TC Trees|#TC Shrubs GR 15>)) NOT ((<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 60>) AND (<\$N Altitude (m) GR 0> NOT <\$N Altitude (m) GR 500>))

2 R42 Boreal and arctic acidophilous alpine grassland

((<##Q +04 R42-Boreal-and-arctic-acidophilous-alpine-grassland> AND <#02 +04 R42-Boreal-and-arctic-acidophilous-alpine-grassland>) NOT <#TC Trees|#TC Shrubs GR 15>) NOT (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 55>)

4 R42! Boreal and arctic acidophilous alpine grassland

<#TC R42-Boreal-and-arctic-acidophilous-alpine-grassland-specialists GR 10> NOT <#TC Trees|#TC Shrubs GR 15>

2 R43 Temperate acidophilous alpine grassland

(((<##Q +04 R43-Temperate-acidophilous-alpine-grassland> AND <#02 +04 R43-Temperate-acidophilous-alpine-grassland>) NOT (<#TC Trees|#TC Shrubs GR 15> OR (<#TC Arctic-alpine-dwarf-shrubs GR 25> OR <#TC Lowland-to-alpine-heath-dwarf-shrubs GR 25>))) NOT <\$N DEG_LAT GR 52>) NOT (<\$C Country EQ Spain> AND (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 42>))

4 R43! Temperate acidophilous alpine grassland

(<#TC R43-Temperate-acidophilous-alpine-grassland-specialists GR 25> NOT <#TC Trees|#TC Shrubs GR 15>) NOT (<\$C Country EQ Spain> AND (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 42>))

2 R44 Arctic-alpine calcareous grassland

(<##Q +04 R44-Arctic-alpine-calcareous-grassland> AND <#01 R44-Arctic-alpine-calcareous-grassland-specialists>) NOT ((<#01 R43-Temperate-acidophilous-alpine-grassland-specialists> OR <#01 R1H-Iberian-oromediterranean-basiphilous-drygrassland-specialists>) OR <#TC Trees|#TC Shrubs GR 15>)

2 R45 Alpine and subalpine calcareous grassland of the Balkans and Apennines

(<##Q +04 R45-Alpine-and-subalpine-calcareous-grassland-of-the-Balkans-and-Apennines> AND <#01 R45-Alpine-and-subalpine-calcareous-grassland-of-the-Balkans-and-Apenninesspecialists>) NOT <#TC Trees|#TC Shrubs GR 15>

- 4 R45! Alpine and subalpine calcareous grassland of the Balkans and Apennines
<#TC R45-Alpine-and-subalpine-calcareous-grassland-of-the-Balkans-and-Apennines-specialists GR 10> NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R51 Thermophilous forest fringe of base-rich soils
((<##Q +04 R51-Thermophilous-forest-fringe-of-base-rich-soils> AND <#02 +04 R51-Thermophilous-forest-fringe-of-base-rich-soils>) AND (<#TC +04 R51-Thermophilous-forestfringe-of-base-rich-soils GR 25> OR <#SC +04 R51-Thermophilous-forest-fringeof-base-rich-soils GE #\$\$>)) NOT ((<#01 R52-Forest-fringe-of-acidic-nutrientpoor-soils-specialists> OR <Pteridium aquilinum GR 00>) OR <#TC Trees|#TC Shrubs GR 15>)
- 4 R51! Thermophilous forest fringe of base-rich soils
<#TC R51-Thermophilous-forest-fringe-of-base-rich-soils-specialists GR 50> NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R52 Forest fringe of acidic nutrient-poor soils
((<##Q +04 R52-Forest-fringe-of-acidic-nutrient-poor-soils> AND <#02 +04 R52-Forest-fringe-of-acidic-nutrient-poor-soils>) AND (<#TC +04 R52-Forest-fringe-of-acidicnutrient-poor-soils GR 25> OR <#SC +04 R52-Forest-fringe-of-acidic-nutrientpoor-soils GE #\$\$>)) NOT <#TC Trees|#TC Shrubs GR 15>
- 4 R52! Forest fringe of acidic nutrient-poor soils
<#TC R52-Forest-fringe-of-acidic-nutrient-poor-soils-specialists GR 50> NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R53 Macaronesian thermophilous forest fringe
<##Q +04 R53-Macaronesian-thermophilous-forest-fringe> NOT <#TC Trees|#TC Shrubs GR 15>
- 4 R53! Macaronesian thermophilous forest fringe
<#TC R53-Macaronesian-thermophilous-forest-fringe-specialists GR 25> NOT <#TC Trees|#TC Shrubs GR 15>
- 4 R54 Pteridium aquilinum vegetation
(<Pteridium aquilinum GR 50> OR <#TC Pteridium aquilinum GR #T\$>) NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R55 Lowland moist or wet tall-herb and fern fringe
((<##Q +04 R55-Lowland-moist-or-wet-tall-herb-and-fern-fringe> AND <#03 +04 R55-Lowland-moist-or-wet-tall-herb-and-fern-fringe>) OR <#TC R55-Lowland-moist-or-wet-tall-herband-fern-fringe-dominants GR 50>) NOT (<#TC Trees GR 05> OR <#TC Shrubs GR 05> OR (<#TC +04 Q51-Tall-helophyte-bed GR 25> OR <#TC +04 Q53-Tall-sedge-bed GR 25>)))
- 2 R56 Montane to subalpine moist or wet tall-herb and fern fringe
((<##Q +04 R56-Montane-subalpine-moist-or-wet-tall-herb-and-fern-fringe> AND <#03 +04 R56-Montane-subalpine-moist-or-wet-tall-herb-and-fern-fringe>) OR <#TC R56Montane-subalpine-moist-or-wet-tall-herb-and-fern-fringe-dominants GR 50>) NOT <#TC Trees|#TC Shrubs GR 15>
- 2 R57 Herbaceous forest clearing vegetation
(<##Q +04 R57-Herbaceous-forest-clearing-vegetation> AND <#03 +04 R57-Herbaceous-forest-clearing-vegetation>) NOT (<#TC Trees GR 10> OR <#TC Shrubs GR 25>)
- 2 R61 Mediterranean inland salt steppe

(<##Q +04 R61-Mediterranean-inland-salt-steppe> NOT (<#01 Continental-inland-salt-steppe-specialists> OR <#TC Trees|#TC Shrubs GR 15>)) AND (<\$\$C Coast_EEA EQ N_COAST> NOT <\$\$N DEG_LAT GR 44>)

2 R62 Continental inland salt steppe

(<##Q +04 R62-Continental-inland-salt-steppe> NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$\$C Coast_EEA EQ N_COAST>

2 R63 Temperate inland salt marsh

((<##Q +04 R63-Temperate-inland-salt-marsh> NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$\$C Coast_EEA EQ N_COAST>) NOT (<\$\$C Country EQ Portugal> OR (<\$\$C Country EQ Spain> OR (<\$\$C Country EQ United Kingdom> OR (<\$\$C Country EQ Ireland> OR (<\$\$C Country EQ Belgium> OR (<\$\$C Country EQ Netherlands> OR (<\$\$C Country EQ Denmark> OR (<\$\$C Country EQ Norway> OR (<\$\$C Country EQ France> AND (<\$\$N DEG_LON GR -10> AND <\$\$N DEG_LON GR 1>))))))))))

2 R64 Semi-desert salt pan

(<##Q +04 R64-Semi-desert-salt-pan> NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$\$C Coast_EEA EQ N_COAST>

2 R65 Continental subsaline alluvial pasture and meadow

<##Q +04 R65-Continental-subsaline-alluvial-pasture-and-meadow> NOT <#TC Trees|#TC Shrubs GR 15>

4 S11 Shrub tundra

(((<#TC Arctic-ericoid-dwarf-shrubs GR 15> AND (<#TC Arctic-ericoid-dwarf-shrubs GE \$50> OR <#SC Arctic-ericoid-dwarf-shrubs GE #\$\$>)) OR ((<#TC Arctic-alpine-dwarf-shrubs GR 15> AND (<#TC Arctic-alpine-dwarf-shrubs GE \$50> OR <#SC Arctic-alpine-dwarfshrubs GE #\$\$>)) OR (<#TC Lowland-to-alpine-heath-dwarf-shrubs GR 15> AND (<#TC Lowland-to-alpine-heath-dwarf-shrubs GE \$50> OR <#SC Lowland-to-alpine-heathdwarf-shrubs GE #\$\$>)))) NOT (<#TC Sphagnum GR 25> OR <#TC Trees GR 10>)) AND (<\$\$N DEG_LAT GR 64> NOT (<\$\$C Ecoreg_WWF EQ PA0608> OR <\$\$C Country EQ Iceland>))

4 S12 Moss and lichen tundra

((<#TC Arctic-alpine-bryophytes-lichens GR 15> AND (<#TC Arctic-alpine-bryophytes-lichens GR \$75> AND <#02 Arctic-alpine-bryophytes-lichens>)) NOT (<#TC Sphagnum GR 05> OR <#TC Trees GR 05>)) AND (<\$\$N DEG_LAT GR 64> NOT (<\$\$C Ecoreg_WWF EQ PA0608> OR <\$\$C Country EQ Iceland>))

4 S21 Subarctic and alpine dwarf Salix scrub

(<#TC Arctic-alpine-dwarf-willows GR 15> AND (<#TC Arctic-alpine-dwarf-willows GE \$25> OR <#SC Arctic-alpine-dwarf-willows GE #\$\$>)) NOT ((<\$\$N DEG_LAT GR 0> NOT <\$\$N DEG_LAT GR 60>) AND (<\$\$N Altitude (m) GR 0> NOT <\$\$N Altitude (m) GR 500>))

4 S22 Alpine and subalpine ericoid heath

((((<#TC Alpine-subalpine-ericoid-dwarf-shrubs GR 15> AND (<#TC Alpine-subalpine-ericoid-dwarf-shrubs GE \$50> OR <#SC Alpine-subalpine-ericoid-dwarf-shrubs GE #\$\$>)) OR (<#TC Dryas GR 15> AND (<#TC Dryas GE \$50> OR <#SC Dryas GE #\$\$>))) OR (((<#TC Arcticalpine-dwarf-shrubs GR 15> AND (<#TC Arctic-alpine-dwarf-shrubs GE \$50> OR <#SC Arctic-alpine-dwarf-shrubs GE #\$\$>)) OR (<#TC Lowland-to-alpine-heath-dwarfshrubs GR 15> AND (<#TC Lowland-to-alpine-heath-dwarf-shrubs GE \$50> OR <#SC Lowland-to-alpine-heath-dwarf-shrubs GE #\$\$>))) AND (<#01 Alpine-subalpineericoid-dwarf-shrubs> OR (<#02 Alpine-acidophilous-herbs> OR <#TC Alpineacidophilous-herbs GR 05>)))) OR (((<#TC Arctic-alpine-dwarf-shrubs GR 15> AND (<#TC Arctic-alpine-dwarf-shrubs GE \$50> OR <#SC Arctic-alpine-dwarf-shrubs GE #\$\$>)) OR (<#TC Lowland-to-alpine-heath-dwarf-shrubs GR

15> AND (<#TC Lowlandto-alpine-heath-dwarf-shrubs GE \$50> OR <#SC Lowland-to-alpine-heath-dwarfsrubs GE #\$\$>)) AND (<\$N Altitude (m) GR 1500> AND (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 65>))) NOT ((<#TC Sphagnum GR 25> OR <#TC Bog-vascular-plantsspecialists GR 10>) OR (<#TC Trees GR 05> OR <Pinus mugo GR 25>))

4 S23 Alpine and subalpine Juniperus scrub

((<#TC Arctic-alpine-shrubby-junipers GR 25> AND <#TC Arctic-alpine-shrubby-junipers GE \$50>) OR <#SC Arctic-alpine-shrubby-junipers GE #\$\$>) NOT <#TC Trees GR 05>) NOT ((<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 65>) AND (<\$N Altitude (m) GR 0> NOT <\$N Altitude (m) GR 800>))

4 S24 Subalpine genistoid scrub of the Amphi-Adriatic region

(<#TC Adriatic-Genista GR 25> AND (<#TC Adriatic-Genista GE \$50> OR <#SC Adriatic-Genista GE #\$\$>)) NOT (<#TC Trees GR 10> OR <#TC Shrubs GR 25>)

4 S25 Subalpine and subarctic deciduous scrub

((<#TC Subalpine-and-subarctic-deciduous-shrubs GR 25> AND (<#TC Subalpine-and-subarctic-deciduous-shrubs GE #TC Shrubs EXCEPT #TC Subalpine-and-subarctic-deciduousshrubs> OR <#SC Subalpine-and-subarctic-deciduous-shrubs GE #\$\$>)) NOT (<#TC Sphagnum GR 25> OR <#TC Trees GR 10>)) NOT ((<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 65>) AND (<\$N Altitude (m) GR 0> NOT <\$N Altitude (m) GR 800>))

4 S26 Subalpine Pinus mugo scrub

((<Pinus mugo GR 25> AND (<#TC Pinus mugo GR #TC Shrubs EXCEPT #TC Pinus mugo> OR <Pinus mugo GE #\$\$>)) NOT ((<#TC Sphagnum GR 25> OR <#TC Bog-vascular-plants-specialists GR 10>) OR <#TC Trees GR 10>)) NOT ((<\$N DEG_LAT GR 52> OR (<\$N DEG_LON GR -10> NOT <\$N DEG_LON GR 7.5>)) OR (<\$N Altitude (m) GE 0> NOT <\$N Altitude (m) GR 900>))

4 S26! Subalpine Pinus mugo scrub

(<Pinus mugo aggr. GR 25> AND <#TC Pinus mugo aggr. GR #TC Trees|#TC Shrubs EXCEPT #TC Pinus mugo aggr.>) NOT ((<#TC Sphagnum GR 25> OR <#TC Bog-vascular-plants-specialists GR 10>) AND (<\$N DEG_LON GR 7.5> NOT (<\$N Altitude (m) GE 0> NOT <\$N Altitude (m) GR 900>)))

4 S31 Lowland to montane temperate and submediterranean Juniperus scrub

(<Juniperus communis subsp. communis GR 25> AND <#TC Juniperus communis subsp. communis GR #TC Shrubs EXCEPT #TC Juniperus communis subsp. communis>) NOT <#TC Trees GR 10>

4 S32 Temperate Rubus scrub

(<#TC Temperate-Rubus GR 25> AND (<#TC Temperate-Rubus GR \$50> OR <#SC Temperate-Rubus GR #\$\$>)) NOT <#TC Trees GR 10>

4 S33 Lowland to montane temperate and submediterranean genistoid scrub

(<#TC Genistoid-shrubs GR 25> AND (<#TC Genistoid-shrubs GE \$50> OR <#SC Genistoid-shrubs GE #\$\$>)) NOT <#TC Trees GR 10>

4 S34 Balkan-Anatolian submontane genistoid scrub

(<Genista lydia GR 25> AND (<Genista lydia GE \$50> OR <Genista lydia GE #\$\$>)) NOT (<#TC Trees GR 10> OR <#TC Shrubs GR 25>)

4 S35 Temperate and submediterranean thorn scrub

(<#TC Temperate-submediterranean-deciduous-shrubs GR 25> AND (<#TC Temperate-submediterranean-

deciduous-shrubs GR \$50> OR <#SC Temperate-submediterranean-deciduous-shrubs GR
#\$\$>)) NOT (<#TC Mesomediterranean-maquis-shrubs GR 05> OR <#TC Trees GR 10>)

4 S36 Low steppic scrub

(<#TC Low-steppic-shrubs GR 25> AND (<#TC Low-steppic-shrubs GE \$50> OR <#SC Low-steppic-shrubs
GE #\$\$>)) NOT <#TC Trees GR 10>

4 S37 Corylus avellana scrub

(<Corylus avellana GR 25> AND <Corylus avellana GR #SC Shrubs>) NOT <#TC Trees GR 10>

4 S38 Temperate forest clearing scrub

(((<Salix caprea GR 25> AND <Salix caprea GR #SC Trees>) OR (<Sambucus racemosa GR 25> AND (<Sambucus racemosa GR #SC Shrubs> AND
<Sambucus racemosa GR #SC Trees>))) OR ((<#TC Forest-clearing-trees-and-shrubs GR 25> AND <#TC Forest-clearing-
treesand-shrubs GR #TC Trees EXCEPT #TC Forest-clearing-trees-and-shrubs>) AND (<#TC Forest-clearing-herbs GR
25> AND <#02 Forest-clearing-herbs>))) NOT <\$\$N DEG_LON
GR 60>

4 S41 Wet heath

((<Erica tetralix GR 25> AND (<Erica tetralix GE \$50> OR <Erica tetralix GE #\$\$>)) OR ((<#TC Dry-and-wet-heath-shrubs GR 25> AND (<#TC Dry-
and-wet-heath-shrubs GE \$50> OR <#SC Dry-and-wet-heath-shrubs GE #\$\$>)) AND <#03 Wet-heath-herbs-and-
mosses>))
NOT (<#01 Raised-bog-Sphagnum> OR <#TC Trees|#TC Shrubs GR 15>)

4 S42 Dry heath

(<#TC Dry-heath-shrubs|#TC Dry-and-wet-heath-shrubs GR 25> AND (<#TC Dry-heath-shrubs|#TC Dry-
and-wet-heath-shrubs GE \$50> OR <#SC Dry-heath-shrubs|#TC Dry-and-wet-heathshrubs GE #\$\$>)) NOT (((<#TC
Arctic-alpine-dwarf-shrubs|#TC Arctic-ericoiddwarf-shrubs|#TC Alpine-subalpine-ericoid-dwarf-shrubs|#TC Blanket-
bogspecialists|#TC +10 Mire-species|#TC Raised-bog-Sphagnum|#TC Wet-heath-herbsand-mosses GR 05> OR <#01
Alpine-acidophilous-herbs>) OR <#TC Trees|#TC Shrubs GR 15>) OR <\$\$N Altitude (m) GR 1500>)

7 S43 Macaronesian heath

(((<#TC Macaronesian-low-heath-shrubs GR 25> AND (<#TC Macaronesian-low-heath-shrubs GE \$50> OR
<#SC Macaronesian-low-heath-shrubs GE #\$\$>)) AND <#TC Macaronesian-low-heath-
shrubs GR #TC Macaronesian-tall-heath-shrubs>) NOT <#TC Trees GR 10>) NOT (<\$\$N DEG_LAT GR 40> OR <\$\$N
DEG_LON GR -12>)

4 S51 Mediterranean maquis and arborescent matorral

((<#TC Mesomediterranean-maquis-shrubs GR 25> AND <#TC Mesomediterranean-maquis-shrubs GR #TC Shrubs EXCEPT #TC
Mesomediterranean-maquis-shrubs>) NOT <#TC Trees GR 10>) NOT
((<\$\$N DEG_LON GR -50> NOT <\$\$N DEG_LON GR -12>) OR <\$\$N DEG_LAT GR 47>)

4 S52 Submediterranean pseudomaquis

(((<#TC Mesomediterranean-maquis-shrubs GR 20> AND (<#TC Submediterranean-deciduous-shrubs GR 20> OR <#TC Thermophilous-oak-
forest-trees GR 05>)) OR
<Buxus sempervirens GR 25> AND (<Buxus sempervirens GE \$50> OR <Buxus sempervirens GE #\$\$>))) NOT (<Juniperus phoenicea GR 05>
OR <#TC Trees GR 15>)) NOT <\$\$N DEG_LAT GR
46.5>

4 S53 Spartium junceum scrub

<Spartium junceum GR 25> AND <#TC Spartium junceum GR #TC Shrubs EXCEPT #TC Spartium junceum>

4 S54 Thermomediterranean arid scrub

(<#TC Thermomediterranean-shrubs GR 25> AND <#TC Thermomediterranean-shrubs GE #TC Shrubs EXCEPT
#TC Thermomediterranean-shrubs>) NOT <#TC Trees GR 10>

4 S61 Western basiphilous garrigue

(((<#TC W-basic-garrigue-shrubs GR 25> AND (<#TC W-basic-garrigue-shrubs GE \$50> OR <#SC W-
basic-garrigue-shrubs GE \$\$\$>)) AND <#01 W-basic-garrigue-herbs>) OR
((<#TC Pan-Mediterranean-basic-garrigue-shrubs GR 25> AND (<#TC Pan-Mediterranean-basic-
garrigue-shrubs GE \$50> OR <#SC Pan-Mediterranean-basic-garrigue-shrubs GE \$\$\$>)) AND (<#03 W-basic-garrigue-
herbs> AND <### W-basic-garrigue-herbs GR ### E-garrigue-herbs>)))
NOT ((<#01 Phrygana-shrubs> OR <#05 +04 R1A-Semi-dry-perennial-calcareous-grassland>) OR <#TC
Trees GR 10>)

4 S62 Western acidophilous garrigue

(((<#TC W-acidic-garrigue-shrubs GR 25> AND (<#TC W-acidic-garrigue-shrubs GE \$50> OR <#SC W-
acidic-garrigue-shrubs GE \$\$\$>)) AND <#01 W-acidic-garrigue-herbs>) OR
((<#TC Pan-Mediterranean-acidic-garrigue-shrubs GR 25> AND (<#TC Pan-Mediterranean-acidic-
garrigue-shrubs GE \$50> OR <#SC Pan-Mediterranean-acidic-garrigue-shrubs GE
\$\$\$>)) AND <#03 W-acidic-garrigue-herbs>))
NOT (<#01 Phrygana-shrubs> OR <#TC Trees GR 10>)

4 S63 Eastern garrigue

(((<#TC E-garrigue-shrubs GR 25> AND (<#TC E-garrigue-shrubs GE \$50> OR <#SC E-garrigue-shrubs GE \$\$\$>)) OR
(((<#TC Pan-Mediterranean-acidic-garrigue-shrubs GR 25> AND (<#TC Pan-Mediterranean-acidic-
garrigue-shrubs GE \$50> OR <#SC Pan-Mediterranean-acidic-garrigue-shrubs GE \$\$\$>)) AND <#03 E-garrigue-
herbs>) OR
((<#TC Pan-Mediterranean-basic-garrigue-shrubs GR 25> AND (<#TC Pan-Mediterranean-basic-
garrigue-shrubs GE \$50> OR <#SC Pan-Mediterranean-basic-garrigue-shrubs GE
\$\$\$>)) AND <#03 E-garrigue-herbs>)))
NOT <#TC Trees GR 10>

4 S64 Macaronesian garrigue

(((<#TC Macaronesian-garrigue-shrubs GR 25> AND (<#TC Macaronesian-garrigue-shrubs GE \$50> OR <#SC Macaronesian-garrigue-shrubs GE
\$\$\$>)) OR ((<Cistus monspeliensis GR 25> AND (<Cistus monspeliensis GE \$50> OR <Cistus monspeliensis GE \$\$\$>))
AND <#01
Macaronesian-garrigue-shrubs>)) NOT <#TC Trees GR 10>

4 S65 Mediterranean gypsum scrub

(<#TC Gypsophilous-dwarf-shrubs GR 10> OR ((<#TC W-basic-garrigue-shrubs GR 25> OR <#TC PanMediterranean-basic-garrigue-shrubs GR
25>) AND <#03 Gypsophilous-herbs>)) NOT
(<#TC Trees GR 10> OR <#TC Shrubs GR 05>)

4 S66 Mediterranean halo-nitrophilous scrub

(((<#TC Mediterranean-halo-nitrophilous-scrub-species GE \$50> OR <#SC Mediterranean-halo-
nitrophilous-scrub-species GE \$\$\$>) AND <#02 Mediterranean-halo-nitrophilousscrub-species>) NOT <#TC Trees GR
10>) NOT <\$N DEG_LON GR 40>

4 S66! Mediterranean halo-nitrophilous scrub

(<#TC Macaronesian-xero-halophile-scrub-species GE \$50> OR <#SC Macaronesian-xero-halophile-
scrub-species GE \$\$\$>) NOT <#TC Trees GR 10>

4 S67 Aralo-Caspian semi-desert

(((((<#TC Aralo-Caspian-semi-desert-species GE \$50> OR <#SC Aralo-Caspian-semi-desert-species GE #\$\$>) AND <#03 Aralo-Caspian-semi-desert-species>) AND <### Aralo-Caspiansemi-desert-species GE ### Semi-desert-sand-dune-with-sparse-scrub-species>) AND <### Aralo-Caspian-semi-desert-species GR ### +04 R1C-Desert-steppe>) NOT <#TC Trees GR 10>) NOT (<\$N DEG_LON GR -50> NOT <\$N DEG_LON GR 42>)

4 S68 Semi-desert sand dune with sparse scrub

(((((<#TC Semi-desert-sand-dune-with-sparse-scrub-species GE \$50> OR <#SC Semi-desert-sand-dune-with-sparse-scrub-species GE #\$\$>) AND <#02 Semi-desert-sand-dune-with-sparsescrub-species>) AND <### Semi-desert-sand-dune-with-sparse-scrub-species GR ### Aralo-Caspian-semi-desert-species>) NOT <#TC Trees GR 10>) NOT (<\$N DEG_LON GR -50> NOT <\$N DEG_LON GR 42>)

4 S71 Western Mediterranean spiny heath

(<#TC W-Mediterranean-coastal-spiny-shrubs GR 25> AND (<#TC W-Mediterranean-coastal-spiny-shrubs GE \$50> OR <#SC W-Mediterranean-coastal-spiny-shrubs GE #\$\$>)) NOT <#TC Trees GR 10>

4 S72 Eastern Mediterranean spiny heath (phrygana)

(<#TC Phrygana-shrubs GR 25> AND (<#TC Phrygana-shrubs GE \$50> OR <#SC Phrygana-shrubs GE #\$\$>)) NOT <#TC Trees GR 10>

4 S73 Western Mediterranean mountain hedgehog-heath

(<#TC W-Mediterranean-mountain-thorny-cushion-shrubs GR 15> AND (<#TC W-Mediterranean-mountain-thorny-cushion-shrubs GE \$50> OR <#SC W-Mediterranean-mountain-thorny-cushionshrubs GE #\$\$>)) NOT <#TC Trees GR 10>

4 S74 Central Mediterranean mountain hedgehog-heath

(<#TC C-Mediterranean-mountain-thorny-cushion-shrubs GR 15> AND (<#TC C-Mediterranean-mountain-thorny-cushion-shrubs GE \$50> OR <#SC C-Mediterranean-mountain-thorny-cushionshrubs GE #\$\$>)) NOT <#TC Trees GR 10>

4 S75 Eastern Mediterranean mountain hedgehog-heath

(<#TC E-Mediterranean-mountain-thorny-cushion-shrubs GR 15> AND (<#TC E-Mediterranean-mountain-thorny-cushion-shrubs GE \$50> OR <#SC E-Mediterranean-mountain-thorny-cushionshrubs GE #\$\$>)) NOT <#TC Trees GR 10>

4 S76 Canarian mountain hedgehog-heath

(<#TC Teide-summit-plants GE \$15> AND (<#TC Teide-summit-plants GE \$50> OR <#SC Teide-summit-plants GE #\$\$>)) NOT <#TC Trees GR 10>

4 S81 Canarian xerophytic scrub

(((<#TC Canary-Island-xerophytic-scrub-species GR 15> AND (<#TC Canary-Island-xerophytic-scrub-species GE \$50> OR <#SC Canary-Island-xerophytic-scrub-species GE #\$\$>)) AND (<#TC Canary-Island-xerophytic-scrub-species GR #TC Madeiran-xerophytic-scrubspecies> OR (<#TC Canary-Island-xerophytic-scrub-species EQ #TC Madeiranxerophytic-scrub-species> AND <\$N DEG_LAT GR 30>))) NOT <#TC Trees GR 10>

4 S82 Madeiran xerophytic scrub

(((<#TC Madeiran-xerophytic-scrub-species GR 15> AND (<#TC Madeiran-xerophytic-scrub-species GE \$50> OR <#SC Madeiran-xerophytic-scrub-species GE #\$\$>)) AND ((<#TC Madeiranxerophytic-scrub-species GR #TC Canary-Island-xerophytic-scrub-species> AND <\$N DEG_LON GR -20>) OR (<#TC Madeiran-xerophytic-scrub-species EQ #TC CanaryIsland-xerophytic-scrub-species> AND <\$N DEG_LAT GR 30>))) NOT <#TC Trees GR

10>

4 S91 Temperate riparian scrub

((<#TC Temperate-riparian-shrubs GR 25> AND <#TC Temperate-riparian-shrubs GR #TC Shrubs EXCEPT #TC Temperate-riparian-shrubs>
OR ((<Tamarix ramosissima GR 30> AND <Tamarix ramosissima GE \$50>) AND <#01 Temperate-riparian-shrubs>))
NOT (<#01 Mediterranean-riparian-species> OR <#TC Trees GR 10>)

4 S92 Salix fen scrub

(<#TC Temperate-fen-shrubs GR 25> AND <#TC Temperate-fen-shrubs GR #TC Shrubs EXCEPT #TC
Temperate-fen-shrubs>) NOT <#TC Trees GR 10>

4 S93 Mediterranean riparian scrub

((<#TC Mediterranean-riparian-shrubs GR 25> AND <#TC Mediterranean-riparian-shrubs GR #TC Shrubs EXCEPT #TC Mediterranean-riparian-
shrubs>) OR ((<Tamarix ramosissima GR 25> AND <Tamarix ramosissima GE \$\$\$>) AND <#01 Mediterranean-riparian-
species>)) NOT
<#TC Trees GR 10>

4 S94 Semi-desert riparian scrub

((<#TC Semi-desert-riparian-shrubs GR 15> AND <#SC Semi-desert-riparian-shrubs GE \$\$\$>) OR ((<Tamarix ramosissima GR 15> AND <Tamarix
ramosissima GE \$\$\$>) AND <#01 Semidesert-riparian-shrubs>)) NOT <#TC Trees GR 10>

4 T11 Temperate Salix and Populus riparian forest

((<#TC Softwood-riparian-trees GR 25> AND <#TC Softwood-riparian-trees GR #TC Trees EXCEPT #TC Softwood-riparian-trees>) NOT <#01
Mediterranean-riparian-species>) NOT (<\$\$N
DEG_LAT GR 00> NOT <\$\$N DEG_LAT GR 40>)

4 T12 Alnus glutinosa-Alnus incana forest on riparian and mineral soils

(((<Alnus incana GR 25> AND <Alnus incana GE #SC Trees>) AND (<#02 +05 Temperate-riparian-
forest-species> OR <#03 Temperate-riparian-forest-species-upland>)) OR ((<#TC Alnus-Fraxinus-excelsior GR 25>
AND <#TC Alnus-Fraxinus-excelsior GE #TC Trees EXCEPT #TC Alnus-Fraxinus-excelsior>) AND (<##Q +05 Temperate-
riparian-forest-species> AND <#TC Temperate-riparian-forest-species-upland GR #TC Temperateriparian-forest-
species-lowland>))) OR ((<#TC Alnus-Fraxinus-angustifoliaexcelsior GR 25> AND <#TC Alnus-Fraxinus-angustifolia-
excelsior GE #TC Trees EXCEPT #TC Alnus-Fraxinus-angustifolia-excelsior>) AND (<##Q +05 Temperateriparian-forest-
species> AND <#02 Temperate-riparian-forest-species-western>))

4 T13 Temperate hardwood riparian forest

(((((<#TC Lowland-hardwood-riparian-trees GR 25> AND <#TC Lowland-hardwood-riparian-trees GR #TC Trees EXCEPT #TC Lowland-
hardwood-riparian-trees>) AND <##Q +05 Temperateriparian-forest-species>) NOT (<#02 Temperate-upland-
riparian-forest-species> OR <#01 Mediterranean-riparian-species>)) OR ((<#TC Alnus-Fraxinusangustifolia-excelsior
GR 25> AND <#TC Alnus-Fraxinus-angustifolia-excelsior GE #TC Trees EXCEPT #TC Alnus-Fraxinus-angustifolia-
excelsior>) AND (<##Q +05 Temperate-riparian-forest-species> AND <#TC Temperate-riparian-forest-
specieslowland GR #TC Temperate-riparian-forest-species-upland | #TC Temperate-riparianforest-species-
western>))) NOT <#02 Mediterranean-riparian-species>) NOT (<\$\$N DEG_LAT GR 00> NOT <\$\$N DEG_LAT GR 38>)

4 T14 Mediterranean and Macaronesian riparian forest

(<Platanus orientalis GR 25> OR (((<Alnus glutinosa GR 25> OR <Fraxinus angustifolia GR 25>) OR <#TC Softwood-riparian-trees GR 25>)
AND <#02 Mediterranean-riparian-species>))
NOT <\$\$N DEG_LAT GR 40>

4 T15 Broadleaved swamp forest on non-acid peat

((<Alnus glutinosa GR 25> AND <#TC Alnus glutinosa GR #TC Trees EXCEPT #TC Alnus glutinosa>
AND <##Q +05 Alder-carr-species>) NOT <Salix cinerea GR 25>

4 T16 Broadleaved mire forest on acid peat

(<#TC Betula pendula-pubescent GR 15> AND <#TC Betula pendula-pubescent GR #TC Trees EXCEPT #TC Betula pendula-pubescent>) AND
(<#TC Birch-bog-forest-species GR 10> OR <#TC
Sphagnum GR 25>)

4 T17 Fagus forest on non-acid soils

(((<#TC Fagus-sylvatica-orientalis GR 30> AND (<Fagus sylvatica GR #SC Trees> OR <Fagus
orientalis GR #SC Trees>)) AND <### +05 Eutrophic-deciduous-forest-species GR ### +05 Acidophilous-forest-
species>) NOT <#TC +05 Acidophilous-forest-species GR 25>) NOT ((<\$C Country EQ Ireland> OR (<\$C Country EQ
United Kingdom> AND <\$N DEG_LAT GR 53>)) OR ((<\$N DEG_LAT GR 48> AND <\$N DEG_LON GR 26.5>) OR
(<\$N DEG_LAT GR 55> AND <\$N DEG_LON GR 19>)))

4 T18 Fagus forest on acid soils

(((<#TC Fagus-sylvatica-orientalis GR 30> AND (<Fagus sylvatica GR #SC Trees> OR <Fagus
orientalis GR #SC Trees>)) AND <### +05 Acidophilous-forest-species GR ### +05 Eutrophic-deciduous-forest-
species>) NOT <#TC +05 Eutrophic-deciduous-forest-species GR 25>) NOT ((<\$C Country EQ Ireland> OR (<\$C
Country EQ United Kingdom> AND <\$N DEG_LAT GR 53>)) OR ((<\$N DEG_LAT GR 48> AND <\$N DEG_LON GR
26.5>) OR (<\$N DEG_LAT GR 55> AND <\$N DEG_LON GR 19>)))

4 T19 Temperate and submediterranean thermophilous deciduous forest

(((<#TC Thermophilous-oak-forest-trees-specialists GR 15> AND <#TC Thermophilous-oak-forest-
trees-specialists GR #TC Trees EXCEPT #TC Thermophilous-oak-forest-trees-specialists>) NOT <Carpinus betulus GR
25>) OR ((<#TC Thermophilous-oak-forest-trees GR 15> AND <#TC Thermophilous-oak-forest-trees GR #TC Trees
EXCEPT #TC Thermophilous-oak-forest-trees>) AND (<##Q +05 Thermophilous-oak-forest-species> OR (<Buxus
sempervirens GR 15> AND <#TC Thermophilous-oak-forest-trees GR #TC Buxus sempervirens>)))) NOT (<#TC +05
Acidophilous-forest-species GR 15> OR (<#TC Olea-Ceratonia-woodland-shrubs|#TC Sclerophyllous-tree-
Quercus|#TC Mesomediterranean-maquis-shrubs GR 25> AND <#02 Mesomediterranean-maquis-shrubs>))

4 T1A Mediterranean thermophilous deciduous forest

(((<Quercus ithaburensis GR 15> AND <Quercus ithaburensis GE #SC Trees>) OR ((<Quercus pubescens GR 15> AND <Quercus pubescens GE
#SC Trees>) AND (<#TC Olea-Ceratonia-woodlandshrubs|#TC Sclerophyllous-tree-Quercus|#TC Mesomediterranean-
maquis-shrubs GR
30> AND <#02 Mesomediterranean-maquis-shrubs>))) NOT <\$N DEG_LAT GR 46>

4 T1B Acidophilous Quercus forest

(((<#TC Acidophilous-oak-forest-trees GR 15> AND <#TC Acidophilous-oak-forest-trees GR #TC Trees EXCEPT #TC Acidophilous-oak-forest-
trees>) AND <##Q +05 Acidophilous-forest-species>) NOT (<#TC +05 Thermophilous-oak-forest-species GR 15> OR
<#TC +05 Eutrophic-deciduous-forest-species GR 15>)

4 T1C Temperate and boreal mountain Betula and Populus tremula forest on mineral soils

(((<#TC Boreo-temperate-mountain-Betula GR 15> AND <#TC Boreo-temperate-mountain-Betula GR #TC Trees EXCEPT #TC Boreo-
temperate-mountain-Betula>) NOT (<#TC Birch-bog-forest-species GR 25> OR <#TC Sphagnum GR 25>)) AND (<\$N
Altitude (m) GR 300> OR <\$N DEG_LAT GR 67>)) NOT <\$C Country EQ Spain>

4 T1C! Temperate and boreal mountain Betula and Populus tremula forest on mineral soils

((<Betula pubescens GR 15> AND <#TC Betula pubescens GR #TC Trees EXCEPT #TC Betula pubescens>)
NOT (<#TC Birch-bog-forest-species GR 25> OR <#TC Sphagnum GR 25>)) AND ((<\$N

DEG_LAT GR 55> AND <\$\$N Altitude (m) GR 300>) OR (<\$\$N DEG_LAT GR 44.5> AND
<\$\$N Altitude (m) GR 800>))

4 T1C!!Temperate and boreal mountain Betula and Populus tremula forest on mineral soils

((<Populus tremula GR 15> AND <#TC Populus tremula GR #TC Trees EXCEPT #TC Populus tremula>) NOT (<#TC Birch-bog-forest-species GR
25> OR <#TC Sphagnum GR 25>)) AND ((<\$\$N DEG_LAT GR 55> AND <\$\$N Altitude (m) GR 300>) OR (<\$\$N DEG_LAT
GR 44.5> AND
<\$\$N Altitude (m) GR 800>))

4 T1D Southern European mountain Betula and Populus tremula forest on mineral soils

<Betula pendula var. fontqueri GR 15> AND <Betula pendula var. fontqueri GE #SC Trees>

4 T1D! Southern European mountain Betula and Populus tremula forest on mineral soils

(<Betula pendula GR 15> AND <#TC Betula pendula GR #TC Trees EXCEPT #TC Betula pendula>) AND ((<\$\$N DEG_LAT GR 34> NOT <\$\$N
DEG_LAT GR 44.5>) NOT (<\$\$N Altitude (m) GE 0>
NOT <\$\$N Altitude (m) GR 1000>))

4 T1D!!Southern European mountain Betula and Populus tremula forest on mineral soils

(<Populus tremula GR 15> AND <#TC Populus tremula GR #TC Trees EXCEPT #TC Populus tremula>) AND ((<\$\$N DEG_LAT GR 34> NOT <\$\$N
DEG_LAT GR 44.5>) NOT (<\$\$N Altitude (m) GE 0>
NOT <\$\$N Altitude (m) GR 1000>))

4 T1E Carpinus and Quercus mesic deciduous forest

(((<#TC Carpinus betulus GR 25> AND <#TC Carpinus betulus GR #TC Trees EXCEPT #TC Carpinus
betulus>) OR ((<#TC Oak-hornbeam-forest-trees GR 25> AND <#TC Oak-hornbeamforest-trees GE #TC Trees EXCEPT
#TC Oak-hornbeam-forest-trees>) AND (<##Q +05 Eutrophic-deciduous-forest-species> AND <#TC +05 Eutrophic-
deciduous-forestspecies GR 05>))) OR ((<#TC Noble-hardwood-trees-generalists GR 25> AND <#TC Noble-hardwood-
trees-generalists GE #TC Trees EXCEPT #TC Noble-hardwood-treesgeneralists>) AND <##Q +05 Eutrophic-deciduous-
forest-species>)) NOT (<#02
Ravine-forest-specialists> OR <#TC Ravine-forest-specialists GR 05>))

4 T1F Ravine forest

((<#TC Noble-hardwood-trees-ravine-specialists GR 25> AND <#TC Noble-hardwood-trees-ravine-
specialists GR #TC Trees EXCEPT #TC Noble-hardwood-trees-ravine-specialists>) OR ((<#TC Noble-hardwood-trees GR
25> AND <#TC Noble-hardwood-trees GE #TC Trees EXCEPT #TC Noble-hardwood-trees>) AND (<#02 Ravine-forest-
specialists> AND <#TC Ravine-forest-specialists GR 05>))) NOT (<##Q +05 Temperate-riparian-forestspecies> OR <#TC
Softwood-riparian-trees GR 05>))

4 T1G Alnus cordata forest

(<Alnus cordata GR 25> AND <Alnus cordata GE #SC Trees>) NOT <\$\$N DEG_LAT GR 43>

4 T1H Broadleaved deciduous plantation of non site-native trees

(<#TC Non-native-broadleaf-deciduous-trees GR #TC Native-trees|#TC Non-native-conifer-trees|#TC Non-native-broadleaf-evergreen-trees>
AND <#TC Non-native-broadleaf-deciduoustrees GR 15>) OR ((<#TC Fagus-sylvatica-orientalis GR 30> AND <#TC
Fagussylvatica-orientalis GE #TC Trees EXCEPT #TC Fagus-sylvatica-orientalis>) AND (<\$\$C Country EQ Ireland> OR
((<\$\$C Country EQ United Kingdom> AND <\$\$N DEG_LAT GR 53>) OR ((<\$\$N DEG_LAT GR 48> AND <\$\$N DEG_LON
GR 26.5>) OR (<\$\$N DEG_LAT GR
55> AND <\$\$N DEG_LON GR 19>))))))

4 T21 Mediterranean evergreen Quercus forest

((<#TC Sclerophyllous-tree-Quercus GR 25> AND <#TC Sclerophyllous-tree-Quercus GR #TC Trees EXCEPT #TC Sclerophyllous-tree-
Quercus>) OR ((<Quercus coccifera GR 25> AND <#TC

Quercus coccifera GR #TC Trees EXCEPT #TC Quercus coccifera>) AND <\$\$N DEG_LON
GR 19>)) NOT <\$\$N DEG_LAT GR 48>

4 T22 Mainland laurophyllous forest

((<#TC Mainland-laurophyllous GR 25> AND (<#TC Mainland-laurophyllous GR #TC Trees EXCEPT #TC Mainland-laurophyllous> AND <#TC
Mainland-laurophyllous GR #TC Shrubs EXCEPT #TC Mainland-laurophyllous>)) NOT <#01 Macaronesian-
laurophyllous>) OR ((<Prunus lusitanica GR 25> AND (<#TC Prunus lusitanica GR #TC Trees> AND <#TC Prunus
lusitanica GR #TC Shrubs EXCEPT #TC Prunus lusitanica>)) AND <\$\$N DEG_LON
GR -10>)

4 T23 Macaronesian laurophyllous forest

(<#TC Macaronesian-laurophyllous GR 25> AND (<#TC Macaronesian-laurophyllous GR #TC Trees EXCEPT
#TC Macaronesian-laurophyllous> AND <#TC Macaronesian-laurophyllous GR #TC Shrubs EXCEPT #TC Macaronesian-
laurophyllous>)) OR ((<Prunus lusitanica GR 25> AND (<Prunus lusitanica GR #SC Trees> AND <Prunus lusitanica GR
#SC Shrubs>))
AND (<\$\$N DEG_LON GR -50> NOT <\$\$N DEG_LON GR -10>))

4 T24 Olea europaea-Ceratoniasiliqua forest

(<#TC Olea-Ceratoniasiliqua-woodland-shrubs GR 25> AND (<#TC Olea-Ceratoniasiliqua-woodland-shrubs GR #TC
Shrubs EXCEPT #TC Olea-Ceratoniasiliqua-woodland-shrubs> AND <#TC Olea-Ceratoniasiliqua-
woodland-shrubs GR #TC Trees EXCEPT #TC Olea-Ceratoniasiliqua-woodland-shrubs>)) NOT <#TC Mediterranean-Pinus
GR 15>

4 T25 Phoenix theophrasti vegetation

<Phoenix theophrasti GR 25>

4 T26 Phoenix canariensis vegetation

<Phoenix canariensis GR 25>

4 T27 Ilex aquifolium forest

<Ilex aquifolium GR 25> AND (<#TC Ilex aquifolium GR #TC Trees EXCEPT #TC Ilex aquifolium> AND
<Ilex aquifolium GR #SC Shrubs>)

4 T28 Macaronesian heathy forest

((<#TC Macaronesian-tall-heath-shrubs GR 25> AND <#TC Macaronesian-tall-heath-shrubs GE #TC Macaronesian-low-heath-shrubs>) AND
(<#TC Macaronesian-tall-heath-shrubs GR #TC Trees EXCEPT #TC Macaronesian-tall-heath-shrubs> AND <#TC
Macaronesian-tallheath-shrubs GR #TC Shrubs EXCEPT #TC Macaronesian-tall-heath-shrubs>)) NOT (<\$\$N DEG_LAT
GR 40> OR <\$\$N DEG_LON GR -12>)

4 T29 Broadleaved evergreen plantation of non site-native trees

<#TC Non-native-broadleaf-evergreen-trees GR #TC Native-trees|#TC Non-native-conifer-trees|#TC Non-native-broadleaf-deciduous-trees>
AND <#TC Non-native-broadleaf-evergreentrees GR 15>

4 T31 Temperate mountain Picea forest

((<#TC Picea GR 25> AND <#TC Picea GR #TC Trees EXCEPT #TC Picea>) NOT (<Picea obovata GR 00> OR (<#TC Bog-vascular-plants-
specialists GR 10> OR <#TC Sphagnum GR 25>))) AND (<\$\$N Altitude (m) GR 700> AND (<\$\$N DEG_LON GR 4> AND (<\$\$N DEG_LAT GR 0>
NOT
<\$\$N DEG_LAT GR 52>)))

4 T32 Temperate mountain Abies forest

(<#TC Temperate-Abies GR 25> AND (<Abies alba GE #SC Trees> OR <Abies nordmanniana GE #SC Trees>)) NOT ((((((<\$N Altitude (m) GR 0> NOT <\$N Altitude (m) GR 500>) OR <\$C Ecoreg_WWF EQ PA0402>) OR <\$C Country EQ Ireland>) OR <\$C Country EQ United Kingdom>) OR (<\$C Country EQ Italy> NOT <\$N DEG_LAT GR 43.75>)) OR (<\$C Country EQ Russian Federation> AND <\$N DEG_LAT GR 45>))

4 T33 Mediterranean mountain Abies forest

((<#TC Mediterranean-Abies GR 25> AND (<Abies borisii-regis GE #SC Trees> OR (<Abies cephalonica GE #SC Trees> OR (<Abies cilicica GE #SC Trees> OR (<Abies nebrodensis GE #SC Trees> OR <Abies pinsapo GE #SC Trees>)))) OR ((<Abies alba GR 25> AND <Abies alba GE #SC Trees>) AND (<\$C Country EQ Italy> AND (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 43.75>)))) NOT <\$C Country EQ France>

4 T34 Temperate subalpine Larix, Pinus cembra and Pinus uncinata forest

((<#TC Subalpine-conifer-trees GR 15> AND <#TC Subalpine-conifer-trees GE #TC Trees EXCEPT #TC Subalpine-conifer-trees>) AND (<#01 Subalpine> OR <\$N Altitude (m) GR 1000>)) NOT <\$N DEG_LAT GR 49.5>

4 T34! Temperate subalpine Larix, Pinus cembra and Pinus uncinata forest

((<Pinus uncinata GR 15> AND <Pinus uncinata GE #SC Trees>) AND (<#01 Subalpine> OR <\$N Altitude (m) GR 1200>)) NOT <\$N DEG_LON GR 11>

4 T35 Temperate continental Pinus sylvestris forest

((<Pinus sylvestris GR 15> AND <#TC Pinus sylvestris GR #TC Trees EXCEPT #TC Pinus sylvestris>) NOT (((((((<#01 Junipero-Pinetea-species> OR <#01 Erico-Pinetalia-species>) OR <#01 W-Mediterranean-mountain-thorny-cushion-shrubs>) OR <#TC Sphagnum GR 10>) OR <#TC Bog-vascular-plants-specialists GR 10>) OR <#02 Bog-vascular-plantsspecialists>) OR <#TC +05 Alder-carr-species GR 15>) OR <#TC +05 Eutrophicdeciduous-forest-species GR 15>) OR <#01 Atlantic-forest-species>)) NOT ((((((((((<\$N DEG_LON GR 4> AND <\$N DEG_LAT GR 56.5>) OR <\$C Ecoreg_WWF EQ PA0436>) NOT <### Dry-continental-pine-forest-species GR ### Lowland-toalpine-heath-dwarf-shrubs>) OR <\$C Ecoreg_WWF EQ PA0520>) OR <\$C Ecoreg_WWF EQ PA0608>) OR <\$C Ecoreg_WWF EQ PA0610>) OR <\$C Ecoreg_WWF EQ PA1110>) OR <\$C Ecoreg_WWF EQ PA0402>) OR <\$C Ecoreg_WWF EQ PA0433>) OR (<\$C Country EQ United Kingdom> NOT <\$C Ecoreg_WWF EQ PA0503>)) OR <\$C Country EQ Ireland>) OR <\$C Country EQ Portugal>) OR <\$C Country EQ Spain>))

4 T36 Temperate and submediterranean montane Pinus sylvestris-Pinus nigra forest

((<#TC Pinus-sylvestris-nigra GR 15> AND <#TC Pinus-sylvestris-nigra GR #TC Trees EXCEPT #TC Pinus-sylvestris-nigra>) AND (<#03 Erico-Pinetalia-species> OR (<#03 Pinetaliapallasianae-kochianae-species> AND <\$C Country EQ Ukraine>))) NOT (((<#TC +05 Acidophilous-forest-species GR 15> OR <#02 +05 Acidophilous-forest-species>) OR <#01 Junipero-Pinetea-species>) OR <#01 W-Mediterranean-mountain-thornycushion-shrubs>) OR ((<\$N DEG_LAT GR 00> NOT <\$N DEG_LAT GR 38>) OR <\$N DEG_LON GR 40>))

4 T37 Mediterranean montane Pinus sylvestris-Pinus nigra forest

((<#TC Pinus-sylvestris-nigra GR 15> AND <#TC Pinus-sylvestris-nigra GR #TC Trees EXCEPT #TC Pinus-sylvestris-nigra>) AND (<#01 Junipero-Pinetea-species> OR <#01 W-Mediterranean-mountain-thorny-cushion-shrubs>)) OR ((<Pinus nigra GR 15> AND <#TC Pinus nigra GR #TC Trees EXCEPT #TC Pinus nigra>) AND (<\$N Altitude (m) GR 1000> AND ((<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 43>) AND (<\$N DEG_LON GR -10> NOT <\$N DEG_LON GR 10>))))

4 T38 Mediterranean montane Cedrus forest

(<Cedrus libani GR 15> AND <Cedrus libani GE #SC Trees>) OR ((<Cedrus atlantica GR 15> AND <Cedrus atlantica GE #SC Trees>) NOT <\$N DEG_LAT GR 36>)

- 4 T39 Mediterranean and Balkan subalpine *Pinus heldreichii*-*Pinus peuce* forest
<#TC *Pinus-heldreichii-peuce* GR 15> AND (<*Pinus heldreichii* GE #SC Trees> OR <*Pinus peuce* GE #SC Trees>)
- 4 T3A Mediterranean lowland to submontane *Pinus* forest
(<#TC Mediterranean-*Pinus* GR 15> AND <#TC Mediterranean-*Pinus* GR #TC Trees EXCEPT #TC Mediterranean-*Pinus*>) NOT ((<\$C Ecoreg_WWF EQ PA0402> OR <\$C Ecoreg_WWF EQ PA0406>) OR <\$C Ecoreg_WWF EQ PA0445>)
- 4 T3B *Pinus canariensis* forest
(<*Pinus canariensis* GR 15> AND <*Pinus canariensis* GE #SC Trees>) NOT <\$N DEG_LON GR -15>
- 4 T3C *Taxus baccata* forest
((<*Taxus baccata* GR 25> AND <*Taxus baccata* GE #SC Trees>) AND <#01 +05 Eutrophic-deciduous-forest-species>) NOT (<\$C Country EQ Poland> AND <\$N DEG_LAT GR 49.5>)
- 4 T3D Mediterranean Cupressaceae forest
(<#TC Cupressaceae-trees GR 15> AND <#TC Cupressaceae-trees GE #TC Trees EXCEPT #TC Cupressaceae-trees>) OR ((<*Cupressus sempervirens* GR 15> AND <*Cupressus sempervirens* GE #SC Trees>) AND <\$N DEG_LON GR 23.5>)
- 4 T3E Macaronesian *Juniperus* forest
<#TC Macaronesian-junipers GR 15> AND <#TC Macaronesian-junipers GE #TC Trees EXCEPT #TC Macaronesian-junipers>
- 4 T3F Dark taiga
((<#TC Dark-taiga-trees GR 15> AND <#TC Dark-taiga-trees GR #TC Trees EXCEPT #TC Dark-taiga-trees>) NOT ((<#03 Bog-vascular-plants-specialists> OR <#TC Bog-vascularplants-specialists GR 20>) OR <#TC Sphagnum GR 30>)) AND ((((<\$C Ecoreg_WWF EQ PA0436> OR <\$C Ecoreg_WWF EQ PA0520>) OR <\$C Ecoreg_WWF EQ PA0608>) OR <\$C Ecoreg_WWF EQ PA0610>) OR <\$C Ecoreg_WWF EQ PA1110>) OR (<\$C Ecoreg_WWF EQ PA0412> AND ((<\$N DEG_LAT GR 51> AND <\$N DEG_LON GR 22>) OR (<\$N DEG_LAT GR 52> AND <\$N DEG_LON GR 19>))))
- 4 T3G *Pinus sylvestris* light taiga
((<*Pinus sylvestris* GR 15> AND <#TC *Pinus sylvestris* GR #TC Trees EXCEPT #TC *Pinus sylvestris*>) NOT ((<#03 Bog-vascular-plants-specialists> OR <#TC Bog-vascular-plantsspecialists GR 20>) OR <#TC Sphagnum GR 30>)) AND ((((<\$C Ecoreg_WWF EQ PA0436> NOT <### Dry-continental-pine-forest-species GR ### Lowland-to-alpine-heathdwarf-shrubs>) OR <\$C Ecoreg_WWF EQ PA0520>) OR <\$C Ecoreg_WWF EQ PA0608>) OR <\$C Ecoreg_WWF EQ PA0610>) OR <\$C Ecoreg_WWF EQ PA1110>)
- 4 T3H *Larix* light taiga
(<*Larix sibirica* GR 15> AND <*Larix sibirica* GE #SC Trees>) NOT (((<#03 Bog-vascular-plants-specialists> OR <#TC Bog-vascular-plants-specialists GR 20>) OR <#TC Sphagnum GR 30>) OR <\$C Ecoreg_WWF EQ PA0436>)
- 4 T3J *Pinus* and *Larix* mire forest
(((<#TC Bog-*Pinus* GR 10> AND <#TC Bog-*Pinus* GR #TC Trees|#TC Shrubs EXCEPT #TC Bog-*Pinus*>) OR (<*Larix sibirica* GR 10> AND <#TC *Larix sibirica* GR #TC Trees EXCEPT #TC *Larix sibirica*>)) AND ((<#02 Bog-vascular-plants-specialists> OR <#TC Bog-vascularplants-specialists GR 20>) AND <#TC Sphagnum GR 30>)) NOT <\$C Country EQ Ireland>
- 4 T3K *Picea* mire forest
((<#TC *Picea* GR 10> AND <#TC *Picea* GR #TC Trees EXCEPT #TC *Picea*>) AND <#TC *Picea* GR #TC *Pinus*

mugo>) AND ((<#02 Bog-vascular-plants-specialists> OR <#TC Bog-vascular-plants-specialists GR 20>) AND <#TC Sphagnum GR 30>)

4 T3M Coniferous plantation of non site-native trees

<#TC Non-native-conifer-trees GR #TC Native-trees| #TC Non-native-broadleaf-deciduous-trees| #TC Non-native-broadleaf-evergreen-trees> AND <#TC Non-native-conifer-trees GR 15>

4 T3M Coniferous plantation of non site-native trees

(<Pinus pinaster GR 15> AND <#TC Pinus pinaster GR #TC Trees EXCEPT #TC Pinus pinaster>) AND (((<\$C Ecoreg_WWF EQ PA0402> OR <\$C Ecoreg_WWF EQ PA0406>) OR <\$C Ecoreg_WWF EQ PA0445>) OR <\$C Coast_EEA EQ ATL_COAST>)

4 T3M Coniferous plantation of non site-native trees

(<Pinus canariensis GR 15> AND <#TC Pinus canariensis GR #TC Trees EXCEPT #TC Pinus canariensis>) AND <\$N DEG_LON GR -15>

4 T3M Coniferous plantation of non site-native trees

(<Cedrus atlantica GR 15> AND <#TC Cedrus atlantica GR #TC Trees EXCEPT #TC Cedrus atlantica>) AND <\$N DEG_LAT GR 36>

4 T3M Coniferous plantation of non site-native trees

(<#TC Picea GR 25> AND <#TC Picea GR #TC Trees EXCEPT #TC Picea>) AND (<\$C Country EQ Ireland> OR (<\$C Country EQ United Kingdom> OR (<\$C Country EQ Spain> OR (<\$C Country EQ Belgium> OR (<\$C Country EQ Netherlands> OR (<\$C Country EQ Denmark> OR ((<\$C Country EQ Germany> AND <\$N DEG_LAT GR 52>) OR (<\$C Country EQ France> AND (<\$N DEG_LON GR -5> NOT <\$N DEG_LON GR 4>))))))))

4 T3M Coniferous plantation of non site-native trees

((<#TC Picea GR 25> AND <#TC Picea GR #TC Trees EXCEPT #TC Picea>) NOT ((<#02 Bog-vascular-plants-specialists> OR <#TC Bog-vascular-plants-specialists GR 20>) AND <#TC Sphagnum GR 30>)) AND ((<\$N DEG_LON GR 4> AND (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 52>)) AND (<\$N Altitude (m) GR 0> NOT <\$N Altitude (m) GR 500>))

4 T3M Coniferous plantation of non site-native trees

(<#TC Temperate-Abies GR 25> AND <#TC Temperate-Abies GR #TC Trees EXCEPT #TC Temperate-Abies>) AND (<\$C Ecoreg_WWF EQ PA0402> OR (<\$C Country EQ Ireland> OR <\$C Country EQ United Kingdom>))

4 T3M Coniferous plantation of non site-native trees

(<Larix decidua GR 25> AND <#TC Larix decidua GR #TC Trees EXCEPT #TC Larix decidua>) AND (<\$N Altitude (m) GR 0> NOT <\$N Altitude (m) GR 1000>)

4 T3M Coniferous plantation of non site-native trees (<Larix sibirica GR 15> AND <Larix sibirica GE #SC Trees>) AND <\$C Ecoreg_WWF EQ PA0436>

4 T3M Coniferous plantation of non site-native trees

(<Pinus sylvestris GR 15> AND <#TC Pinus sylvestris GR #TC Trees EXCEPT #TC Pinus sylvestris>) AND (<\$C Ecoreg_WWF EQ PA0402> OR (<\$C Country EQ Ireland> OR (<\$C Country EQ United Kingdom> NOT <\$C Ecoreg_WWF EQ PA0503>)))

4 T3M Coniferous plantation of non site-native trees

(<Pinus nigra GR 15> AND <#TC Pinus nigra GR #TC Trees EXCEPT #TC Pinus nigra>) AND (<\$\$C Ecoreg_WWF EQ PA0402> OR ((<\$\$N DEG_LAT GR 45.5> NOT (<\$\$C Country EQ Austria> OR (<\$\$C Country EQ Italy> OR <\$\$C Country EQ Slovenia>))) OR (<\$\$N Altitude (m) GR 0> NOT <\$\$N Altitude (m) GR 300>)))

4 T3M Coniferous plantation of non site-native trees

(<Cupressus sempervirens GR 15> AND <#TC Cupressus sempervirens GR #TC Trees EXCEPT #TC Cupressus sempervirens>) NOT <\$\$N DEG_LON GR 20>

2 C11a Permanent oligotrophic waterbody with very soft-water species

<##Q +04 C11a-Permanent-oligotrophic-waterbody-with-very-soft-water-species> NOT <#TC Trees|#TC Shrubs GR 15>

2 C11b Permanent oligotrophic to mesotrophic waterbody with soft-water species

<##Q +04 C11b-Permanent-oligotrophic-to-mesotrophic-waterbody-with-soft-water-species> NOT <#TC Trees|#TC Shrubs GR 15>

2 C12a Permanent oligotrophic to mesotrophic waterbody with Characeae

<##Q +04 C12a-Permanent-oligotrophic-to-mesotrophic-waterbody-with-Characeae> NOT <#TC Trees|#TC Shrubs GR 15>

2 C12b Mesotrophic to eutrophic waterbody with vascular plants

<##Q +04 C12b-Mesotrophic-to-eutrophic-waterbody-with-vascular-plants> NOT <#TC Trees|#TC Shrubs GR 15>

2 C14 Permanent dystrophic waterbody

<##Q +04 C14-Permanent-dystrophic-waterbody> NOT <#TC Trees|#TC Shrubs GR 15>

2 C15 Permanent inland saline and brackish waterbody

(<##Q +04 C15-Permanent-inland-saline-and-brackish-waterbody> NOT <#TC Trees|#TC Shrubs GR 15>) AND <\$\$C Coast_EEA EQ N_COAST>

2 C16b Mediterranean temporary waterbody

<##Q +04 C16b-Mediterranean-temporary-waterbody> NOT <#TC Trees|#TC Shrubs GR 15>

2 C21a Base-poor spring and spring brook

<##Q +04 C21a-Base-poor-spring-and-spring-brook> NOT <#TC Trees|#TC Shrubs GR 15>

2 C21b Calcareous spring and spring brook

<##Q +04 C21b-Calcareous-spring-and-spring-brook> NOT <#TC Trees|#TC Shrubs GR 15>

2 C22a Permanent non-tidal, fast, turbulent watercourse of montane to alpine regions with mosses

<##Q +04 C22a-Permanent-non-tidal-fast-turbulent-watercourse-of-montane-to-alpine-regions-with-mosses> NOT <#TC Trees|#TC Shrubs GR 15>

2 C22b Permanent non-tidal, fast, turbulent watercourse of plains and montane regions with Ranunculus spp.

<##Q +04 C22b-Permanent-non-tidal-fast-turbulent-watercourse-of-plains-montane-regions-with-Ranunculus> NOT <#TC Trees|#TC Shrubs GR 15>

2 C23 Permanent non-tidal, smooth-flowing watercourse

<##Q +04 C23-Permanent-non-tidal-smooth-flowing-watercourse> NOT <#TC Trees|#TC Shrubs GR 15>

2 C24 Tidal river, upstream from the estuary

<##Q +04 C24-Tidal-river-upstream-from-the-estuary> NOT <#TC Trees|#TC Shrubs GR 15>

2 C25a Temperate temporary running watercourse
 <##Q +04 C25a-Temperate-temporary-running-watercourse> NOT <#TC Trees|#TC Shrubs GR 15>

2 C35a Periodically exposed shore with stable, eutrophic sediments with pioneer or ephemeral vegetation
 <##Q +04 C35a-Periodically-exposed-shore-with-stable-eutrophic-sediments-with-pioneer-vegetation> NOT <#TC Trees|#TC Shrubs GR 15>

2 C35b Periodically exposed shore with stable, mesotrophic sediments with pioneer or ephemeral vegetation
 <##Q +04 C35b-Periodically-exposed-shore-with-stable-mesotrophic-sediments-with-pioneer-vegetation> NOT <#TC Trees|#TC Shrubs GR 15>

2 C35c Periodically exposed saline shore with pioneer or ephemeral vegetation
 <##Q +04 C35c-Periodically-exposed-saline-shore-with-pioneer-vegetation> NOT <#TC Trees|#TC Shrubs GR 15>

2 C35d Unvegetated or sparsely vegetated shore with mobile sediments in montane and alpine regions
 <##Q +04 C35d-Unvegetated-or-sparsely-vegetated-shore-with-mobile-sediments-in-montane-alpine-regions> NOT <#TC Trees|#TC Shrubs GR 15>

2 C35e Unvegetated or sparsely vegetated shore with mobile sediments in the Mediterranean region
 <##Q +04 C35e-Unvegetated-or-sparsely-vegetated-shore-with-mobile-sediments-in-the-Mediterranean-region> NOT <#TC Trees|#TC Shrubs GR 15>

5 H21 Boreal and arctic siliceous scree and block field
 ((<##Q +03 H21-Boreal-and-arctic-siliceous-scrree-and-block-field> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)) AND (<\$N DEG_LAT GR 58> NOT <\$C Dataset EQ Swedish_National_Forest_Inventory>)

5 H22 Boreal and arctic base-rich scree
 ((<##Q +03 H22-Boreal-and-arctic-base-rich-scrree> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)) AND <\$N DEG_LAT GR 58>

5 H23 Temperate high-mountain siliceous scree
 (<##Q +03 H23-Temperate-high-mountain-siliceous-scrree> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)

5 H24 Temperate high-mountain base-rich scree
 (<##Q +03 H24-Temperate-high-mountain-base-rich-scrree> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)

5 H25 Temperate, lowland to montane siliceous scree
 (<##Q +03 H25-Temperate-lowland-to-montane-siliceous-scrree> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)

5 H26a Temperate, lowland to montane base-rich scree
 (<##Q +03 H26a-Temperate-lowland-to-montane-base-rich-scrree> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)

- 5 H26b Western Mediterranean base-rich scree
 ((<##Q +03 H26b-Western-Mediterranean-base-rich-scree> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)) NOT (<\$N DEG_LON GR 15>)
- 5 H26c Eastern Mediterranean base-rich scree
 ((<##Q +03 H26c-Eastern-Mediterranean-base-rich-scree> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)) NOT ((<\$N DEG_LON GR 0> NOT <\$N DEG_LON GR 15>) OR <\$N DEG_LAT GR 45>)
- 5 H31a Boreal and arctic siliceous inland cliff
 ((<##Q +03 H31a-Boreal-and-arctic-siliceous-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)) NOT (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 57>)
- 5 H31b Temperate high-mountain siliceous inland cliff
 (<##Q +03 H31b-Temperate-high-mountain-siliceous-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)
- 5 H31c Temperate, lowland to montane siliceous inland cliff
 (<##Q +03 H31c-Temperate-lowland-to-montane-siliceous-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)
- 5 H31d Mediterranean siliceous inland cliff
 (<##Q +03 H31d-Mediterranean-siliceous-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)
- 5 H32a Boreal and arctic base-rich inland cliff
 ((<##Q +03 H32a-Boreal-and-arctic-base-rich-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)) NOT (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 57>)
- 5 H32b Temperate high-mountain base-rich inland cliff
 (<##Q +03 H32b-Temperate-high-mountain-base-rich-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)
- 5 H32c Temperate, lowland to montane base-rich inland cliff
 (<##Q +03 H32c-Temperate-lowland-to-montane-base-rich-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)
- 5 H32d Mediterranean base-rich inland cliff
 ((<##Q +03 H32d-Mediterranean-base-rich-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)) AND (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 46>)
- 5 H32e Boreal ultramafic inland cliff
 ((<##Q +03 H32ef-Ultramafic-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)) AND (((<\$C Ecoreg_WWF EQ PA0436> OR <\$C Ecoreg_WWF EQ PA0520>) OR <\$C Ecoreg_WWF EQ PA0608>) OR <\$C Ecoreg_WWF EQ PA0610>) OR <\$C Ecoreg_WWF EQ PA1110>)
- 5 H32f Temperate ultramafic inland cliff

(<##Q +03 H32ef-Ultramafic-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT ((<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>) NOT (((<\$C Ecoreg_WWF EQ PA0436> OR <\$C Ecoreg_WWF EQ PA0520>) OR <\$C Ecoreg_WWF EQ PA0608>) OR <\$C Ecoreg_WWF EQ PA0610>) OR <\$C Ecoreg_WWF EQ PA1110>))

5 H32g Mediterranean ultramafic inland cliff
(<##Q +03 H32g-Mediterranean-ultramafic-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)

5 H33 Macaronesian inland cliff
(<##Q +03 H33-Macaronesian-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)

5 H34 Wet inland cliff
(<##Q +03 H34-Wet-inland-cliff> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)

5 H51b Polar desert
((<##Q +03 H51b-Polar-desert> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)) NOT (<\$N DEG_LAT GR 0> NOT <\$N DEG_LAT GR 65>)

5 H61 Mediterranean and temperate volcanic field
(<##Q +03 H61-Mediterranean-and-temperate-volcanic-field> AND <#01 +10 Inland-sparsely-vegetated-habitat-species>) NOT (<#T\$ GE 30> OR <#TC Trees|#TC Shrubs GR 15>)

4 I1 Arable land and market gardens
<#TC Crops GR 50> OR (<#TC Crops GR #T\$> OR <#SC Crops GR #\$\$>)

2 I1! Arable land and market gardens
((<##Q +04 I1-Arable-land-and-market-gardens> AND <#03 +04 I1-Arable-land-and-market-gardens>) AND <#01 Crops>) NOT <#TC Trees|#TC Shrubs GR 15>

4 I14 Inundated or inundatable croplands, including rice fields
<Oryza sativa GR 50> OR (<#TC Oryza sativa GR #T\$> OR <#SC Oryza sativa GR #\$\$>)

2 I14! Inundated or inundatable croplands, including rice fields
(<##Q +04 I14-Inundated-or-inundatable-croplands-including-rice-fields> AND <#01 +04 I14Inundated-or-inundatable-croplands-including-rice-fields>) AND <Oryza sativa GR 00>

4 IE16 Subnitrophilous annual grassland
(<#TC +04 IE16-Subnitrophilous-annual-grassland GR 50> AND <#02 +04 IE16-Subnitrophilous-annual-grassland>) NOT <#TC Trees|#TC Shrubs GR 15>

2 IE16!Subnitrophilous annual grassland
<##Q +04 IE16-Subnitrophilous-annual-grassland> NOT <#TC Trees|#TC Shrubs GR 15>

2 IE1E Trampled xeric grassland with annuals
(<##Q +04 IE1E-Trampled-xeric-grassland-with-annuals> AND <#02 +04 IE1E-Trampled-xeric-grassland-with-annuals>) NOT <#TC Trees|#TC Shrubs GR 15>

2 IE28 Trampled mesophilous grassland with annuals

(<##Q +04 IE28-Trampled-mesophilous-grassland-with-annuals> AND <#02 +04 IE28-Trampled-mesophilous-grassland-with-annuals>) NOT <#TC Trees|#TC Shrubs GR 15>

2 IE51 Anthropogenic herb stands

(<##Q +04 IE51-Anthropogenic-herb-stands> AND <#04 +04 IE51-Anthropogenic-herb-stands>) NOT <#TC Trees|#TC Shrubs GR 15>

1 Qa Mires

(<##Q +10 Mire-species> AND (<#03 +10 Mire-species> AND <#01 Mire-specialist-bryophytes>)) NOT (<#TC Trees GR 15> OR <#TC Shrubs GR 15>)

1 Qb Wetlands

<##Q +10 Wetland-species> NOT (<#TC Trees GR 05> OR <#TC Shrubs GR 15>)

1 R Grasslands

<##Q +10 Grassland-species> NOT (<#TC Trees GR 05> OR <#TC Shrubs GR 15>)

3 Sa Scrub

((<#TC Shrubs GR 25> AND <#TC Shrubs GR \$50>) AND <#TC Shrubs GR #TC Trees>) NOT (<#TC Trees GR 25> OR <#TC Native-light-canopy-trees GR 15>)

3 Sb Dwarf-shrub vegetation

(<#TC Dwarf-shrubs GR 25> AND (<#TC Dwarf-shrubs GR \$50> OR <#SC Dwarf-shrubs GR #\$\$>)) NOT ((<#TC Bog-vascular-plants-specialists GR 10> OR <#TC Sphagnum GR 25>) OR (<#TC Trees GR 05> OR <#TC Shrubs GR 15>))

3 T Forest

(<#TC Native-trees GR 25> OR <#TC Native-light-canopy-trees GR 15>) NOT <#TC Non-native-trees GR 15>

1 C Surface waters

(<##Q +10 Aquatic-species> AND <#TC +10 Aquatic-species GR \$75>) NOT <#TC Trees|#TC Shrubs GR 15>

1 H Inland sparsely vegetated

<##Q +10 Inland-sparsely-vegetated-habitat-species> NOT (<#T\$ GE 30> OR (<#TC Trees GR 05> OR <#TC Shrubs GR 15>))

1 I Anthropogenic herbaceous vegetation

<##Q +10 Synanthropic-species> NOT (<#TC Trees GR 05> OR <#TC Shrubs GR 15>)

Appendix E: Lists of indicator species of the revised EUNIS Coastal habitats (N) and Wetlands (Q)

N11 - Atlantic, Baltic and Arctic sand beach

*Diagnostic species (phi coefficient * 100)*

Honckenya peploides	34.7	Atriplex littoralis	
Atriplex laciniata	28.0	Salsola kali aggr.	30.7
Atriplex prostrata	26.8	Leymus arenarius	26.9
Atriplex calotheca	20.9	Elytrigia juncea	22.8
	18.5		19.9

Atriplex glabriuscula

Constant species (occurrence frequencies)

Cakile maritima	89.0	Salsola kali aggr.	49.0
Atriplex prostrata	46.0	Elytrigia juncea	39.0
Honckenya peploides	36.0	Atriplex littoralis	25.0
Leymus arenarius	21.0	Tripleurospermum maritimum aggr.	17.0
Ammophila arenaria	16.0	Atriplex laciniata	15.0
Atriplex calotheca	13.0	Polygonum maritimum	12.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Cakile maritima	17.0	Atriplex prostrata	12.0
Honckenya peploides	10.0	Atriplex littoralis	7.0
Atriplex calotheca	6.0		

N12 - Mediterranean and Black Sea sand beach

*Diagnostic species (phi coefficient * 100)*

Polygonum maritimum	46.5	Cakile maritima	Euphorbia peplis	36.4	41.6
Salsola kali aggr.					34.1
Medicago marina	21.7	Eryngium maritimum			21.7
Xanthium orientale	20.7	Calystegia soldanella			20.0
Sporobolus pungens	17.2	Pancremium maritimum			15.1

Constant species (occurrence frequencies)

Cakile maritima	79.0	Salsola kali aggr.	
Polygonum maritimum	54.0	Eryngium maritimum	62.0
Euphorbia peplis	32.0	Xanthium orientale	41.0
Elytrigia juncea	28.0	Medicago marina	29.0
Calystegia soldanella	24.0	Sporobolus pungens	27.0
Pancremium maritimum	19.0	Cynodon dactylon	19.0
Leymus racemosus	14.0	Matthiola tricuspidata	15.0
Atriplex prostrata	13.0	Euphorbia paralias	13.0
			12.0

Glaucium flavum 11.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Salsola kali aggr.	10.0	Sporobolus pungens	8.0
Cakile maritima	6.0		

N13 - Atlantic and Baltic shifting coastal dune

*Diagnostic species (phi coefficient * 100)*

Ammophila arenaria	37.0	Leymus arenarius	
Elytrigia juncea	26.2	x Ammocalamagrostis baltica	32.3
	19.6	Honckenya peploides	26.1
Euphorbia paralias	17.5		19.2

Constant species (occurrence frequencies)

Ammophila arenaria	66.0	Elytrigia juncea	
Festuca rubra aggr.	33.0	Leymus arenarius	51.0
Eryngium maritimum	28.0	Calystegia soldanella	30.0
Honckenya peploides	20.0	Euphorbia paralias	24.0
	19.0	Cakile maritima	20.0
			18.0
x Ammocalamagrostis baltica	12.0	Sonchus arvensis	12.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Ammophila arenaria	39.0	Elytrigia juncea	
Leymus arenarius	7.0		15.0

N14 - Mediterranean, Macaronesian and Black Sea shifting coastal dune

*Diagnostic species (phi coefficient * 100)*

Echinophora spinosa	40.4	Medicago marina	40.0
			37.7
Elytrigia juncea	38.8	Eryngium maritimum	31.0
			28.9
Euphorbia paralias	35.3	Cyperus capitatus	26.9
Pancratium maritimum	30.8	Achillea maritima	24.9
Cutandia maritima	27.0	Sporobolus pungens	16.6
Ammophila arenaria	25.9	Calystegia soldanella	
	21.2	Matthiola sinuata	
		Cakile maritima	16.3

Constant species (occurrence frequencies)

Elytrigia juncea	75.0	Eryngium maritimum	69.0
Medicago marina	49.0	Ammophila arenaria	46.0
Euphorbia paralias	40.0	Pancratium maritimum	39.0
Echinophora spinosa	37.0	Cyperus capitatus	32.0
Cakile maritima	32.0	Sporobolus pungens	30.0

Calystegia soldanella	30.0	Achillea maritima	25.0
Cutandia maritima	19.0	Polygonum maritimum	12.0
Anthemis maritima		Matthiola sinuata	15.0
Euphorbia peplis	11.0		12.0
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>			
Ammophila arenaria	26.0	Elytrigia juncea	19.0
Achillea maritima	6.0	Sporobolus pungens	5.0

N15 - Atlantic and Baltic coastal dune grassland (grey dune)

*Diagnostic species (phi coefficient * 100)*

Corynephorus canescens	26.2	Carex arenaria	
Malcolmia littorea	22.8	Armeria welwitschii	26.2
Phleum arenarium	20.9	Euphorbia portlandica	21.3
Festuca polesica	20.1	Galium arenarium	20.3
Verbascum litigiosum	18.7	Ammophila arenaria	19.5
Anchusa calcarea	17.0	Linaria caesia	18.6
Iberis procumbens	16.6	Vulpia alopecuros	16.8
Thymus carnosus		Herniaria ciliolata	16.4
Crucianella maritima	15.5		15.7

Constant species (occurrence frequencies)

Carex arenaria	56.0	Corynephorus canescens	34.0	Festuca rubra aggr.
Jasione montana	22.0	Artemisia campestris		
Sedum acre	20.0	Hypochaeris radicata		44.0
Hieracium umbellatum	18.0	Rumex acetosella		31.0
	17.0	Syntrichia ruralis aggr.		21.0
Hypnum cupressiforme aggr.	15.0	Cetraria aculeata		19.0
Plantago lanceolata	14.0	Galium verum		17.0
Euphorbia portlandica	14.0	Cladonia furcata		15.0
Calamagrostis epigejos	13.0	Phleum arenarium		14.0
Leontodon saxatilis	12.0	Dicranum scoparium		13.0
Crucianella maritima	12.0	Aira praecox		12.0
Agrostis capillaris	12.0	Helichrysum italicum		12.0
Eryngium maritimum	11.0	Cerastium semidecandrum		11.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Corynephorus canescens	11.0	Syntrichia ruralis aggr.	Calamagrostis epigejos	9.0
7.0	Carex arenaria			6.0

N16 - Mediterranean and Macaronesian coastal dune grassland (grey dune)

*Diagnostic species (phi coefficient * 100)*

Medicago marina	29.0	Vulpia fasciculata	
Pancratium maritimum	22.4	Medicago littoralis	
Elytrigia juncea	21.9	Pseudorlaya pumila	27.4
Silene niceensis	20.7	Cyperus capitatus	22.1
Eryngium maritimum	18.3	Crucianella maritima	21.7
Lagurus ovatus	17.4	Sporobolus pungens	20.4
Malcolmia ramosissima	16.9	Ononis variegata	18.2
Euphorbia terracina	16.8	Echinophora spinosa	17.1
Erodium laciniatum	16.2	Centaurea spinosa	16.8
Silene colorata	15.3	Cutandia maritima	16.5
Anthemis maritima	15.2		15.7
			15.2

Constant species (occurrence frequencies)

Elytrigia juncea	43.0	Medicago marina	
Eryngium maritimum	34.0	Pancratium maritimum	
Lagurus ovatus	26.0	Vulpia fasciculata	
Medicago littoralis	21.0	Cyperus capitatus	36.0
Cakile maritima	21.0	Sporobolus pungens	29.0
Ammophila arenaria	18.0	Lotus cytisoides	21.0
Echinophora spinosa	15.0	Silene colorata	21.0
Crucianella maritima	14.0	Calystegia soldanella	19.0
Pseudorlaya pumila	13.0	Euphorbia paralias	17.0
Helichrysum stoechas	12.0	Euphorbia terracina	14.0
		Cynodon dactylon	13.0
12.0	Achillea maritima	Silene niceensis	12.0
		11.0	Salsola kali
aggr.			12.0
Cutandia maritima	11.0		11.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

N17 - Black Sea coastal dune grassland (grey dune)

*Diagnostic species (phi coefficient * 100)*

Centaurea odessana	49.4	Leymus racemosus	
Carex colchica	36.0	Crambe maritima	43.3
Secale sylvestre	31.7	Silene subconica	33.5
Linaria genistifolia	26.9	Alyssum hirsutum	26.9
Silene thymifolia	25.1	Jurinea kilaea	25.7
Eryngium maritimum	21.6	Seseli tortuosum	25.0
Lactuca tatarica	21.2	Centaurea arenaria aggr.	21.5
Silene euxina	19.3	Plantago arenaria	20.5
Artemisia arenaria	19.1	Astragalus varius	19.2
Galium humifusum	18.3	Euphorbia seguieriana	18.4
Lepidotrichum uechtritizianum	17.4	Agropyron cimmericum	17.9
Gypsophila perfoliata	16.3	Silene chersonensis	16.9
Astrodaucus littoralis	16.0	Linaria sabulosa	15.9
Festuca beckeri	15.9	Verbascum pinnatifidum	15.5
Ephedra distachya	15.1		

Constant species (occurrence frequencies)

Leymus racemosus	52.0	Eryngium maritimum	
Carex colchica	35.0	Crambe maritima	
Centaurea odessana	32.0	Euphorbia seguieriana	
Linaria genistifolia	28.0	Secale sylvestre	25.0
Anisantha tectorum	Lactuca tatarica	24.0	40.0
Artemisia campestris	Teucrium polium aggr.		33.0
Seseli tortuosum	21.0	Syntrichia ruralis aggr.	29.0
Medicago falcata	18.0	Chondrilla juncea	26.0
Galium humifusum	18.0	Eryngium campestre	24.0
Cynanchum acutum	Centaurea arenaria aggr.	18.0	21.0
Artemisia arenaria	18.0	Xanthium orientale	20.0
Ephedra distachya	16.0	Alyssum hirsutum	18.0
Silene subconica	15.0	Senecio leucanthemifolius	18.0
Poa bulbosa	15.0	Astragalus onobrychis	17.0
Plantago arenaria	14.0	Festuca beckeri	16.0
Plantago lanceolata	13.0	Cynodon dactylon	15.0
Astragalus varius	12.0	Artemisia santonicum	14.0
Gypsophila perfoliata	11.0	Alyssum turkestanicum	13.0
			12.0
			11.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Leymus racemosus	9.0	Carex colchica	8.0
Artemisia campestris	5.0	Artemisia arenaria	5.0

N18 - Atlantic and Baltic coastal Empetrum heath

<i>Diagnostic species (phi coefficient * 100)</i>		32.6
Carex arenaria	36.6 Empetrum nigrum aggr.	26.3
Hieracium umbellatum	32.1 Salix repens	21.8
Carex trinervis	22.7 Hypnum cupressiforme aggr.	20.1
Dicranum scoparium	21.2 Lophocolea bidentata	19.4
Festuca filiformis	19.8 Genista anglica	16.3
Ammophila arenaria	18.1 Cladonia portentosa	
<i>Constant species (occurrence frequencies)</i>		
Empetrum nigrum aggr.	100.0 Carex arenaria	77.0
Dicranum scoparium	69.0 Hypnum cupressiforme aggr.	67.0
Hieracium umbellatum	52.0 Calluna vulgaris	52.0
Salix repens	46.0 Pleurozium schreberi	37.0
Ammophila arenaria	33.0 Calamagrostis epigejos	31.0
Luzula campestris aggr.	29.0 Polypodium vulgare	27.0
Erica tetralix	27.0 Pseudoscleropodium purum Lophocolea bidentata	25.0
Cladonia arbuscula aggr.		25.0
Festuca filiformis	23.0 Cladonia portentosa Genista anglica	23.0
Cladonia pyxidata aggr.	17.0	17.0
Avenella flexuosa	17.0 Potentilla erecta	15.0
Poa pratensis aggr.	15.0 Lotus corniculatus	13.0
Festuca rubra aggr.	13.0 Carex trinervis	12.0
Agrostis capillaris	13.0 Hypochaeris radicata	
Cladonia gracilis	12.0	
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>		
Empetrum nigrum aggr.	79.0 Calluna vulgaris	33.0
Hypnum cupressiforme aggr.	29.0 Dicranum scoparium	6.0
Cladonia arbuscula aggr.	6.0	

N19 - Atlantic coastal Calluna and Ulex heath

<i>Diagnostic species (phi coefficient * 100)</i>		
Erica cinerea	33.9 Ulex europaeus	21.9
Calluna vulgaris	19.9 Scilla verna	19.4
Festuca filiformis	18.0 Carex arenaria	17.7
<i>Constant species (occurrence frequencies)</i>		

Calluna vulgaris	83.0	Erica cinerea	54.0
Carex arenaria	38.0	Festuca ovina	34.0
Agrostis capillaris	34.0	Potentilla erecta	33.0
Lotus corniculatus	32.0	Hypnum cupressiforme aggr.	32.0
Ulex europaeus	30.0	Hypochaeris radicata	28.0
Dicranum scoparium	26.0	Anthoxanthum odoratum aggr.	26.0
Danthonia decumbens	24.0	Dactylis glomerata	24.0
Viola riviniana	21.0	Pilosella officinarum	21.0
Leontodon saxatilis	21.0	Festuca filiformis	18.0
Plantago lanceolata	20.0	Thymus praecox	18.0
Holcus lanatus	18.0	Daucus carota	17.0
Jasione montana	17.0	Cladonia portentosa	14.0
Empetrum nigrum aggr.	16.0	Viola canina	14.0
Thymus serpyllum	14.0	Scilla verna	13.0
Salix repens	14.0	Pleurozium schreberi	
Stachys officinalis	13.0	Galium verum	
Festuca rubra aggr.	13.0	Carex caryophyllea	13.0
Pseudoscleropodium purum	12.0	Luzula campestris aggr.	12.0
Cladonia arbuscula aggr.	12.0	Ammophila arenaria	12.0
Teucrium scorodonia	11.0	Sedum anglicum	11.0
Rumex acetosella	11.0	Hieracium umbellatum	11.0
Euphorbia portlandica	11.0	Armeria maritima	11.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Calluna vulgaris	58.0	Erica cinerea	37.0	Ulex europaeus	18.0	Hypnum cupressiforme aggr.	8.0
Ulex minor		7.0	Erica vagans				7.0

N1A - Atlantic and Baltic coastal dune scrub

*Diagnostic species (phi coefficient * 100)*

Hippophae rhamnoides	29.0	Carex arenaria	18.1	Vaccinium macrocarpon	16.9	Rosa rugosa	15.6
Rubus caesius		15.4	Rosa spinosissima				15.4

Constant species (occurrence frequencies)

Carex arenaria	39.0	Rubus caesius	33.0
Calamagrostis epigejos	31.0	Festuca rubra aggr.	30.0
Urtica dioica	23.0	Hippophae rhamnoides	23.0
Poa pratensis aggr.	22.0	Salix repens	20.0
Hypnum cupressiforme aggr.	19.0	Crataegus monogyna	19.0

Ligustrum vulgare	18.0	Sambucus nigra	17.0	Rubus fruticosus aggr.	17.0	Rosa spinosissima	17.0
Holcus lanatus			17.0	Galium verum			17.0
Luzula campestris aggr.			16.0	Brachythecium rutabulum			16.0
Lotus corniculatus			15.0	Jacobaea vulgaris			15.0
Cirsium arvense			15.0	Ammophila arenaria			15.0
Lonicera periclymenum			14.0	Cistus salviifolius			14.0
Solanum dulcamara	13.0	Pseudoscleropodium purum	13.0	Plantago lanceolata	13.0	Galium mollugo aggr.	13.0
Ulex europaeus	12.0	Pinus pinaster	12.0				
Galium aparine			12.0	Dactylis glomerata			12.0
Cytisus scoparius			12.0				

Dominant species (percentage frequencies of occurrences with cover > 25%)

Rubus caesius			14.0	Rosa spinosissima			12.0
Hippophae rhamnoides			9.0	Ligustrum vulgare			8.0
Salix cinerea	7.0	Rubus fruticosus aggr.	7.0	Ulex europaeus	6.0	Sambucus nigra	6.0
Salix repens	6.0	Myrica gale	6.0				
Hypnum cupressiforme aggr.			6.0	Festuca rubra aggr.			6.0

N1B - Mediterranean and Black Sea coastal dune scrub

*Diagnostic species (phi coefficient * 100)*

Asparagus acutifolius			19.4	Smilax aspera			18.2
Lonicera implexa			17.0				

Constant species (occurrence frequencies)

Asparagus acutifolius			52.0	Smilax aspera			
Rubia peregrina			39.0	Pistacia lentiscus			
Juniperus oxycedrus aggr.			33.0	Phillyrea latifolia			46.0
Lonicera implexa			26.0	Rhamnus alaternus			33.0
Phillyrea angustifolia			22.0	Rubus ulmifolius			26.0
Daphne gnidium			17.0	Clematis flammula			24.0
Prasium majus			15.0	Helichrysum stoechas			17.0
Spartium junceum			13.0	Quercus ilex			15.0
Dactylis glomerata			13.0	Cistus creticus			13.0
Teucrium flavum			11.0	Ruscus aculeatus			13.0
Pinus halepensis			11.0	Myrtus communis			11.0
Geranium purpureum			11.0				

Dominant species (percentage frequencies of occurrences with cover > 25%)

Juniperus oxycedrus aggr.	19.0	Smilax aspera	11.0
Tamarix hampeana	7.0	Spartium junceum	7.0
Phillyrea angustifolia	7.0	Juniperus phoenicea	6.0
Suaeda vera	6.0	Rubus ulmifolius	

N1C - Macaronesian coastal dune scrub

*Diagnostic species (phi coefficient * 100)*

	68.7	Traganum moquinii	61.5
Tetraena fontanesii	58.4	Frankenia laevis	40.1
Polycarpaea nivea	37.4	Atriplex glauca	36.5
Heliotropium crispum	31.7	Suaeda vermiculata	29.7
Launaea arborescens	23.2	Salsola vermiculata	23.0
Lotus sessilifolius	22.9	Reichardia crystallina	21.8
Schizogyne sericea	20.0	Polycarpaea teneriffae	20.0
Pulicaria burchardii	20.0	Astragalus solandri	19.9
Launaea mucronata	19.8	Ononis tournefortii	19.5
Echium bonnetii	19.5	Citrullus colocynthis	19.2
Ononis serrata	19.4	Mesembryanthemum nodiflorum	18.4
Medicago laciniata	18.8	Suaeda vera	17.0
Helianthemum canariense	17.2	Dichanthium foveolatum	16.7
Mairetis microsperma	16.9	Patellifolia procumbens	15.6
Lotus lancerottensis	15.9	Launaea nudicaulis	
Volutaria lippii	15.4		
Artemisia reptans			

Constant species (occurrence frequencies)

Tetraena fontanesii	68.0	Polycarpaea nivea	44.0
Frankenia laevis	44.0	Traganum moquinii	40.0
Launaea arborescens	40.0	Atriplex glauca	28.0
Suaeda vera	24.0	Schizogyne sericea	24.0
Salsola vermiculata	20.0	Heliotropium crispum	20.0
Suaeda vermiculata	16.0	Mesembryanthemum nodiflorum	16.0
Lotus sessilifolius	16.0	Reichardia crystallina	12.0
Limonium pectinatum	12.0	Helianthemum canariense	12.0
Euphorbia balsamifera	12.0		

Dominant species (percentage frequencies of occurrences with cover > 25%)

Traganum moquinii	28.0	Tetraena fontanesii	28.0
Polycarpaea nivea	20.0		

N1D - Atlantic and Baltic broad-leaved coastal dune forest

*Diagnostic species (phi coefficient * 100)*

Lonicera periclymenum	17.5	Kindbergia praelonga	16.2
Ribes rubrum aggr.	16.0		

Constant species (occurrence frequencies)

Quercus robur	43.0	Lonicera periclymenum	
Crataegus monogyna	40.0	Urtica dioica	
Rubus caesius	31.0	Rubus fruticosus aggr.	
Carex arenaria	29.0	Pseudoscleropodium purum	
Hedera helix	28.0	Galium aparine	
Calamagrostis epigejos	28.0	Sorbus aucuparia	43.0
Geum urbanum	27.0	Kindbergia praelonga	35.0
Acer pseudoplatanus	23.0	Brachythecium rutabulum	30.0
Pinus pinaster	21.0	Holcus lanatus	28.0
Ligustrum vulgare		Rosa canina aggr.	27.0
Poa trivialis	19.0	Moehringia trinervia	25.0
Geranium robertianum	19.0	Dactylis glomerata	22.0
Rubia peregrina	18.0	Hypnum cupressiforme aggr.	21.0
Betula pendula		Dicranum scoparium	19.0
Sambucus nigra	16.0	Poa pratensis aggr.	19.0
Betula pubescens		Agrostis capillaris	18.0
Ulex europaeus		Ribes rubrum aggr.	17.0
Populus tremula	15.0	Glechoma hederacea	16.0
Teucrium scorodonia	14.0	Polypodium vulgare	15.0
Dryopteris dilatata	14.0	Prunus serotina	15.0
Frangula alnus	13.0	Cytisus scoparius	14.0
Ruscus aculeatus	12.0	Plagiomnium affine aggr.	13.0
Mnium hornum	12.0	Ilex aquifolium	12.0
Fraxinus excelsior	12.0	Euonymus europaeus	12.0
Dryopteris filix-mas	12.0	Avenella flexuosa	12.0
Anthriscus sylvestris	12.0	Alnus glutinosa	12.0
Stellaria media	11.0	Festuca rubra aggr.	11.0
Fagus sylvatica	11.0	Corylus avellana	11.0
Cistus salviifolius	11.0		

Dominant species (percentage frequencies of occurrences with cover > 25%)

Quercus robur	24.0	Hedera helix	
Betula pubescens	11.0	Quercus ilex	11.0
Populus tremula	9.0	Acer pseudoplatanus	10.0
Pinus pinaster	5.0	Crataegus monogyna	8.0
Betula pendula	5.0	Alnus glutinosa	5.0

N1E - Black Sea broad-leaved coastal dune forest

*Diagnostic species (phi coefficient * 100)*

Elaeagnus angustifolia	83.8	Scorzonera parviflora	
Plantago cornutii	35.7	Inula caspica	
Veronica triphyllos	34.1	Cynoglossum officinale	
Papaver dubium	33.9	Salvia sclarea	
Bupleurum rotundifolium	33.0	Potentilla chrysantha	
Elytrigia elongata	32.5	Astragalus asper	35.8
Echinops bannaticus	32.4	Bryonia alba	34.3
Cirsium alatum	30.8	Achillea euxina	34.0
Euphorbia platyphyllos	30.3	Senecio leucanthemifolius	33.4
Erysimum cuspidatum	29.4	Centaurea salonitana	32.6
Milium vernale	27.5	Melilotus neapolitanus	32.5
Valerianella carinata	25.3	Diploaxis muralis	31.9
Inula aspera	24.2	Erodium ciconium	30.4
Achillea clypeolata	24.2	Sonchus palustris	30.2
Prunus dulcis	23.7	Ruta graveolens	28.5
Typha laxmannii	22.8	Arabidopsis thaliana	26.4
Sisymbrium altissimum	22.1	Cruciata pedemontana	24.3
Seseli rigidum	21.3	Syringa vulgaris	24.2
Viola kitaibeliana	20.9	Tamarix laxa	23.8
Colutea arborescens	20.7	Verbascum blattaria	23.5
Cynanchum acutum	19.5	Limonium meyeri	22.3
Gypsophila perfoliata	18.5	Hypericum rumeliacum	21.6
Jacobaea erucifolia	18.2	Carex extensa	21.0
Stipa borysthena aggr.	18.0	Onobrychis alba	20.9
Jasminum fruticans	17.7	Galium aparine	19.6
Epilobium tetragonum	16.5	Orlaya grandiflora	18.6
Myosotis sicula	16.1	Xeranthemum annuum	18.4
	15.5	Malva sylvestris	18.1
			16.7
			16.3
			15.8
			15.5
			15.2

Paliurus spina-christi
Calamagrostis epigejos

15.5 Halimione verrucifera

Constant species (occurrence frequencies)

Elaeagnus angustifolia	88.0	Phragmites australis	50.0
Galium aparine	50.0	Senecio leucanthemifolius	38.0
Elytrigia elongata	38.0	Calamagrostis epigejos	38.0
Veronica triphyllos	25.0	Scorzonera parviflora	25.0
Plantago cornutii	25.0	Papaver dubium	25.0
Limonium meyeri	25.0	Chenopodium album	25.0
Elytrigia repens	25.0	Cynoglossum officinale	25.0
Cynanchum acutum	25.0	Capsella bursa-pastoris	25.0
Arabidopsis thaliana	25.0	Anisantha tectorum	

Dominant species (percentage frequencies of occurrences with cover > 25%)

Elaeagnus angustifolia	62.0	Elytrigia elongata	38.0
Fraxinus ornus	12.0	Calamagrostis epigejos	12.0

N1F - Baltic coniferous coastal dune forest

*Diagnostic species (phi coefficient * 100)*

Dicranum undulatum	48.0	Goodyera repens	
Pseudoscleropodium purum	39.4	Carex arenaria	
Chimaphila umbellata	27.2	Moneses uniflora	
Pinus sylvestris	25.8	Hypopitys monotropa	40.7
Pleurozium schreberi	22.0	Hylocomium splendens	32.9
Empetrum nigrum aggr.	21.4	Pyrola chlorantha	26.0
Cladonia portentosa	20.0	Betula pendula	23.5
Melampyrum pratense	18.5	Quercus robur	22.0
Polypodium vulgare	17.1	Neottia cordata	20.3
Dicranum scoparium	16.2	Avenella flexuosa	18.7
Vaccinium vitis-idaea	15.7	Hieracium umbellatum	17.8
Cladonia arbuscula aggr.	15.5	Peltigera polydactyla	17.1
Cladonia scabriuscula	15.3	Dicranum polysetum	15.9

Constant species (occurrence frequencies)

Pinus sylvestris	97.0	Pseudoscleropodium purum	
Pleurozium schreberi	82.0	Hylocomium splendens	
Avenella flexuosa	72.0	Carex arenaria	
Empetrum nigrum aggr.	67.0	Vaccinium vitis-idaea	87.0
Quercus robur	56.0	Dicranum scoparium	72.0
Calluna vulgaris	54.0	Betula pendula	69.0
Vaccinium myrtillus	51.0	Dicranum undulatum	59.0
Melampyrum pratense	44.0	Hypnum cupressiforme aggr.	54.0
Sorbus aucuparia	38.0	Goodyera repens	54.0
Polypodium vulgare	33.0	Cladonia arbuscula aggr.	46.0
Frangula alnus	28.0	Cladonia portentosa	41.0
Anthoxanthum odoratum aggr.	28.0	Juniperus communis subsp. communis	36.0
Hieracium umbellatum	26.0	Rhododendron tomentosum	33.0
Dicranum polysetum	21.0	Cladonia furcata	28.0
Vaccinium uliginosum	18.0	Moneses uniflora	26.0
Luzula pilosa	18.0	Leucobryum glaucum	21.0
Salix repens	15.0	Poa pratensis aggr.	18.0

Luzula campestris aggr.	15.0	Hypopitys monotropa	Erica tetralix	15.0
15.0 Sphagnum capillifolium aggr.				13.0
Rubus fruticosus aggr.	13.0	Pyrola chlorantha		13.0
Pohlia nutans	13.0	Picea abies	Neottia cordata	13.0
Lophocolea bidentata	Chimaphila umbellata	13.0	Festuca rubra	13.0
aggr.				13.0
Fagus sylvatica	13.0	Cladonia rangiferina		
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>				
Pinus sylvestris	95.0	Pseudoscleropodium purum		
Pleurozium schreberi	46.0	Avenella flexuosa		51.0
Empetrum nigrum aggr.	18.0	Calluna vulgaris		26.0
Vaccinium vitis-idaea	15.0	Hylocomium splendens	Rhododendron tomentosum	18.0
5.0 Polypodium vulgare				8.0
Pinus nigra	5.0			5.0

N1G - Mediterranean coniferous coastal dune forest

*Diagnostic species (phi coefficient * 100)*

Pinus pinea	43.6	Pinus halepensis		
Smilax aspera	22.6	Asparagus acutifolius	Pistacia lentiscus	17.0
alaternus			Rhamnus	25.4
Cistus creticus	15.2			20.3
				16.7

Constant species (occurrence frequencies)

Smilax aspera	57.0	Asparagus acutifolius		
Rubia peregrina	49.0	Pinus pinea		
Pistacia lentiscus	46.0	Pinus halepensis		54.0
Quercus ilex	32.0	Rhamnus alaternus		49.0
Ruscus aculeatus	27.0	Phillyrea latifolia		46.0
Phillyrea angustifolia	24.0	Cistus creticus		30.0
Sonchus bulbosus	19.0	Lonicera implexa		24.0
Lagurus ovatus	19.0	Daphne gnidium		24.0
Clematis flammula	19.0	Quercus coccifera		19.0
Prasium majus	16.0	Myrtus communis		16.0
Juniperus oxycedrus aggr.	16.0	Hedera helix		16.0
Dactylis glomerata	16.0	Brachypodium retusum		16.0
Teucrium chamaedrys	14.0	Piptatherum miliaceum		14.0
Dorycnium hirsutum	14.0	Briza maxima		14.0
Trachynia distachya	11.0	Teucrium polium aggr.		11.0
Sonchus oleraceus	11.0	Rubus ulmifolius		11.0

Rosmarinus officinalis	11.0	Juniperus phoenicea	11.0
Hypochaeris achyrophorus	11.0	Hippocrepis emerus	11.0
Geranium robertianum	11.0	Crepis vesicaria	11.0
Cistus salviifolius	11.0	Carex halleriana	11.0
Anagallis arvensis	11.0		
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>			
Pinus halepensis	46.0	Pinus pinea	41.0
Brachypodium retusum	11.0	Pistacia lentiscus	8.0
Smilax aspera	5.0	Quercus ilex	5.0
Pinus pinaster	5.0		

N1H - Atlantic and Baltic moist and wet dune slack

*Diagnostic species (phi coefficient * 100)*

Salix repens	19.7	Hydrocotyle vulgaris	17.6
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Constant species (occurrence frequencies)

Agrostis stolonifera	45.0	Salix repens	35.0
Holcus lanatus	31.0	Festuca rubra aggr.	29.0
Phragmites australis	27.0	Lotus corniculatus	25.0
Hydrocotyle vulgaris	25.0	Trifolium repens	24.0
Mentha aquatica	24.0	Carex flacca	23.0
Juncus articulatus	24.0	Calliergonella cuspidata	21.0
Argentina anserina	22.0	Plantago lanceolata	19.0
Ranunculus repens	21.0	Galium palustre aggr.	18.0
Carex arenaria	18.0	Prunella vulgaris	17.0
Carex nigra	18.0	Poa pratensis aggr.	15.0
Ranunculus flammula	14.0	Eleocharis palustris	14.0
Calamagrostis epigejos	14.0	Linum catharticum	13.0
Leontodon saxatilis	14.0		12.0
Anthoxanthum odoratum aggr.	13.0	Cerastium fontanum subsp. vulgare	
Pseudoscleropodium purum	13.0	Ranunculus acris	
Rhytidadelphus squarrosus	12.0	Potentilla erecta	
	11.0		

Dominant species (percentage frequencies of occurrences with cover > 25%)

Salix repens	14.0	Phragmites australis	9.0
Agrostis stolonifera	8.0	Calliergonella cuspidata	7.0
Carex nigra	5.0		

N1J - Mediterranean and Black Sea moist and wet dune slack

*Diagnostic species (phi coefficient * 100)*

Juncus littoralis	29.2	Tripidium ravennae	28.8
Schoenus nigricans	24.5	Juncus acutus	23.7
Scirpoides holoschoenus	18.3	Juncus maritimus	18.1
Phragmites australis	17.4	Plantago crassifolia	16.9
Bolboschoenus maritimus	15.8	Centaureum spicatum	15.7

Constant species (occurrence frequencies)

Phragmites australis	60.0	Schoenus nigricans	
Scirpoides holoschoenus	30.0	Bolboschoenus maritimus	40.0
Juncus acutus	24.0	Juncus maritimus	28.0
Tripidium ravennae	18.0	Typha angustifolia	22.0
Tripolium pannonicum	14.0	Dittrichia viscosa	14.0
aggr.	12.0	Salicornia europaea	14.0
Juncus littoralis			12.0
Hypochaeris radicata	12.0		

Dominant species (percentage frequencies of occurrences with cover > 25%)

Schoenus nigricans	20.0	Phragmites australis	18.0
Bolboschoenus maritimus	10.0	Tripidium ravennae	8.0
Scirpoides holoschoenus	6.0	Cladium mariscus	6.0

N21 - Atlantic, Baltic and Arctic coastal shingle beach

*Diagnostic species (phi coefficient * 100)*

Honckenya peploides	33.0	Beta vulgaris subsp. maritima	
Tripleurospermum maritimum aggr.	25.7	Atriplex praecox	31.4
Atriplex prostrata	23.8	Atriplex littoralis	24.2
Rumex crispus		Lathyrus japonicus	20.8
Atriplex glabriuscula	17.7		21.0

Constant species (occurrence frequencies)

Tripleurospermum maritimum aggr.	41.0	Atriplex prostrata	41.0
Rumex crispus	36.0	Honckenya peploides	34.0
Beta vulgaris subsp. maritima	30.0	Festuca rubra aggr.	21.0
Sonchus arvensis	21.0	Argentina anserina	17.0
Atriplex littoralis	17.0		14.0
Elytrigia juncea	16.0	Elytrigia repens	13.0
Lathyrus japonicus	13.0	Cakile maritima	12.0
Galium aparine	12.0	Crambe maritima	
	11.0	Agrostis stolonifera	
		Cirsium arvense	

Dominant species (percentage frequencies of occurrences with cover > 25%)

Honckenya peploides	13.0	Atriplex prostrata	10.0
Argentina anserina	8.0	Tripleurospermum maritimum aggr.	7.0
Lathyrus japonicus	7.0	Beta vulgaris subsp. maritima	5.0
Atriplex littoralis	5.0		

N22 - Mediterranean and Black Sea coastal shingle beach

*Diagnostic species (phi coefficient * 100)*

Matthiola tricuspidata	48.0	Crithmum maritimum	
Glaucium flavum	30.1	Eryngium maritimum	37.6
Cakile maritima	23.6	Elytrigia juncea	26.9
Sporobolus pungens	23.3	Silene sericea	23.5
Pancremium maritimum	18.6	Matthiola sinuata	19.9
Anchusa crispa	17.0	Carpobrotus edulis	18.2
			15.8

Constant species (occurrence frequencies)

Crithmum maritimum	61.0	Eryngium maritimum	
Elytrigia juncea	46.0	Cakile maritima	
Matthiola tricuspidata	41.0	Glaucium flavum	50.0
Sporobolus pungens	26.0	Pancremium maritimum	46.0
Salsola kali aggr.	22.0	Cynodon dactylon	28.0
Calystegia soldanella	17.0	Silene sericea	24.0
Matthiola sinuata	13.0	Echinophora spinosa	17.0
			13.0
Achillea maritima	13.0	Sonchus tenerrimus	13.0
		Medicago marina	11.0
Euphorbia peplis			11.0
Ammophila arenaria	11.0		

Dominant species (percentage frequencies of occurrences with cover > 25%)

Crithmum maritimum	30.0	Elytrigia juncea	13.0
Sporobolus pungens	11.0	Matthiola tricuspidata	11.0
Glaucium flavum	9.0	Cakile maritima	7.0

N31 - Atlantic and Baltic rocky sea cliff and shore

<i>Diagnostic species (phi coefficient * 100)</i>			37.2
Spergularia rupicola	50.2	Crithmum maritimum	31.9
Armeria pubigera	33.1	Limonium binervosum	23.6
Armeria maritima	30.6	Cochlearia danica	19.9
Silene uniflora	22.4	Limonium dodartii	18.8
Limonium ovalifolium	20.6	Limonium binervosum aggr.	17.6
Catapodium maritimum	19.7	Cochlearia officinalis	15.5
	18.6	Plantago coronopus aggr.	
		Beta vulgaris subsp. maritima	
	16.5	Plantago maritima	
<i>Constant species (occurrence frequencies)</i>			
Crithmum maritimum	60.0	Festuca rubra aggr.	57.0
Armeria maritima	49.0	Spergularia rupicola	36.0
Plantago coronopus aggr.	34.0	Plantago maritima	31.0
Silene uniflora	24.0	Limbarda crithmoides	19.0
Catapodium maritimum	16.0	Beta vulgaris subsp. maritima	16.0
Daucus carota	15.0	Cochlearia danica	15.0
Limonium binervosum	14.0	Armeria pubigera	12.0
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>			
Crithmum maritimum	21.0	Armeria maritima	10.0
Silene uniflora	7.0		

N32 - Mediterranean and Black Sea rocky sea cliff and shore

<i>Diagnostic species (phi coefficient * 100)</i>			
Lotus cytisoides	29.8	Silene sedoides	
Jacobaea maritima	21.2	Limonium graecum	22.9
Helichrysum litoreum	20.2	Crithmum maritimum	20.4
		Limonium ilvae	19.2
Reichardia picroides			16.3
Limonium minutum	16.3	Catapodium maritimum	15.3
<i>Constant species (occurrence frequencies)</i>			
Lotus cytisoides	33.0	Crithmum maritimum	31.0
Reichardia picroides	28.0	Daucus carota	24.0
Dactylis glomerata	23.0	Silene sedoides	15.0
Jacobaea maritima	15.0	Plantago coronopus aggr.	14.0
13.0	Parapholis incurva	Catapodium maritimum	12.0
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>			
Thymbra capitata	5.0	Elytrigia elongata	5.0

N33 - Macaronesian rocky sea cliff and shore

*Diagnostic species (phi coefficient * 100)*

Astydamia latifolia	52.3	Limonium pectinatum	
Frankenia ericifolia	45.6	Mesembryanthemum crystallinum	48.7
Schizogyne sericea	31.9	Reichardia crystallina	33.1
Frankenia laevis	30.2	Senecio incrassatus	30.3
Euphorbia balsamifera	27.4	Atriplex semibaccata	28.2
Argyranthemum frutescens	25.6	Lotus glaucus	25.8
Lotus sessilifolius	24.2	Lotus loweanus	23.5
Helichrysum obconicum	23.5	Gymnocarpos decander	23.5
Spergularia azorica	22.7	Atriplex glauca	21.6
Crithmum maritimum	20.3	Aizoon canariense	19.5
Ceballosia fruticosa	19.0	Spergula fallax	18.5
Umbilicus gaditanus	18.3	Hyoscyamus albus	18.3
Matthiola maderensis	18.2	Helichrysum devium	18.2
Nicotiana paniculata	18.0	Asplenium marinum	17.4
Euphorbia aphylla	16.6	Tetraena fontanesii	16.5
Limonium papillatum	16.1	Datura stramonium	16.1
Ricinus communis	16.0		

Constant species (occurrence frequencies)

Limonium pectinatum	44.0	Astydamia latifolia	
Schizogyne sericea	33.0	Frankenia laevis	
Crithmum maritimum	33.0	Frankenia ericifolia	
Euphorbia balsamifera	28.0	Argyranthemum frutescens	39.0
Tetraena fontanesii	17.0	Reichardia crystallina	28.0
Mesembryanthemum crystallinum	17.0	Lotus sessilifolius	22.0
Atriplex glauca	17.0	Umbilicus gaditanus	17.0
Suaeda vera	11.0	Spergularia azorica	17.0
Senecio incrassatus	11.0	Ricinus communis	11.0
Polygonum maritimum	11.0	Plantago coronopus aggr.	11.0
Mesembryanthemum nodiflorum	11.0	Lycium intricatum	11.0
Lotus glaucus	11.0	Launaea arborescens	11.0
Asplenium marinum		Atriplex semibaccata	11.0
Aizoon canariense	11.0		

Dominant species (percentage frequencies of occurrences with cover > 25%)

Astydamia latifolia	39.0	Crithmum maritimum	
Frankenia laevis	11.0	Argyranthemum frutescens	17.0
Salsola oppositifolia	6.0	Lotus loweanus	11.0
Helichrysum devium	6.0	Frankenia ericifolia	6.0
Euphorbia balsamifera	6.0	Aizoon canariense	6.0

N34 - Atlantic and Baltic soft sea cliff

*Diagnostic species (phi coefficient * 100)* 43.9

Silene uniflora	51.3	Armeria maritima	23.0
Brassica oleracea	24.6	Anthyllis vulneraria	20.3
Plantago coronopus aggr.	20.6	Cochlearia danica	18.9
Euphrasia tetraquetra	18.9	Daucus carota	18.5
Plantago maritima			15.8
Festuca rubra aggr.	18.5	Jacobaea vulgaris	15.9

Primula scotica

Constant species (occurrence frequencies)

Festuca rubra aggr.	77.0	Armeria maritima	70.0
Anthyllis vulneraria	63.0	Silene uniflora	53.0
Daucus carota	50.0	Lotus corniculatus	47.0
Plantago coronopus aggr.	40.0	Plantago maritima	37.0
Plantago lanceolata	33.0	Dactylis glomerata	30.0
Jacobaea vulgaris	23.0	Agrostis stolonifera	23.0
Trifolium repens	20.0	Leontodon saxatilis	20.0
Sonchus oleraceus	17.0	Bromus hordeaceus	17.0
Cochlearia danica	13.0	Cerastium fontanum subsp. vulgare	13.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Anthyllis vulneraria	Silene	27.0	Plantago maritima	20.0	23.0
uniflora		Festuca rubra	aggr.		17.0
Armeria maritima		17.0			

N35 - Mediterranean and Black Sea soft sea cliff

*Diagnostic species (phi coefficient * 100)*

Glycyrrhiza glabra	48.9	Elytrigia elongata	
Cynanchum acutum	31.9	Galium humifusum	35.1
Artemisia santonicum	22.0	Limonium meyeri	28.1
Echinops ossicus	17.8	Lactuca tatarica	21.5
Melilotus hirsutus	15.8	Argusia sibirica	16.7
Cuscuta monogyna	15.1		15.3

Constant species (occurrence frequencies)

Glycyrrhiza glabra	52.0	Elytrigia elongata	40.0
Cynanchum acutum	40.0	Artemisia santonicum	35.0
Limonium meyeri	29.0	Galium humifusum	27.0
Elytrigia repens	27.0	Calamagrostis epigejos	23.0
Phragmites australis	19.0	Lactuca tatarica	19.0
Poa pratensis aggr.	17.0	Cichorium intybus	17.0
Convolvulus arvensis	15.0	Medicago falcata	13.0
Leymus racemosus	13.0	Bromus squarrosus	13.0
Falcaria vulgaris	12.0		
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>			
Glycyrrhiza glabra	40.0	Elytrigia elongata	25.0
Teucrium polium aggr.	8.0	Artemisia santonicum	6.0

Q11 - Raised bog

*Diagnostic species (phi coefficient * 100)*

Sphagnum magellanicum aggr.	39.5	Sphagnum fuscum	35.8
Eriophorum vaginatum	35.1	Sphagnum recurvum aggr.	31.3
Vaccinium oxycoccos	30.9	Chamaedaphne calyculata	29.5
Andromeda polifolia	29.1	Vaccinium microcarpum	28.0
Carex pauciflora	27.4	Polytrichum strictum	26.6
Sphagnum rubellum	23.7	Myrica anomala	21.6
Drosera rotundifolia	20.2	Rubus chamaemorus	19.6
Rhododendron tomentosum	17.8	Sphagnum capillifolium aggr.	17.3
Vaccinium uliginosum	17.0		

Constant species (occurrence frequencies)

66.0

Eriophorum vaginatum	82.0	Sphagnum recurvum aggr.	61.0
Sphagnum magellanicum aggr.	63.0	Andromeda polifolia	48.0
Vaccinium oxycoccos	59.0	Vaccinium uliginosum	48.0
Polytrichum strictum Empetrum	48.0	Calluna vulgaris	42.0
nigrum aggr.	47.0	Sphagnum fuscum	39.0
Drosera rotundifolia	40.0	Rubus chamaemorus	32.0
Pinus sylvestris	34.0	Vaccinium myrtillus	31.0
Pleurozium schreberi	32.0	Betula nana	29.0
Rhododendron tomentosum	30.0	Vaccinium microcarpum	28.0
Aulacomnium palustre		Sphagnum capillifolium aggr.	25.0
Carex pauciflora	26.0	Vaccinium vitis-idaea	22.0
Sphagnum rubellum	22.0	Chamaedaphne calyculata	18.0
Mylia anomala	19.0	Trichophorum cespitosum	16.0
Betula pubescens	18.0	Sphagnum russowii	16.0
Cladonia rangiferina		Cladonia arbuscula aggr.	15.0
Polytrichum commune	15.0	Molinia caerulea aggr.	13.0
Eriophorum angustifolium Potentilla	14.0	Picea abies	12.0
erecta	12.0	Carex rostrata	
Carex nigra	12.0		
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>			
Sphagnum recurvum aggr.	27.0	Sphagnum fuscum	
Sphagnum magellanicum aggr.	23.0	Eriophorum vaginatum	27.0
Calluna vulgaris	14.0	Sphagnum capillifolium aggr.	18.0
Empetrum nigrum aggr. Sphagnum	8.0	Vaccinium uliginosum	12.0
rubellum	6.0	Rubus chamaemorus	6.0
Chamaedaphne calyculata	5.0		5.0

Q12 - Blanket bog

*Diagnostic species (phi coefficient * 100)*

Pleurozia purpurea	61.5	Campylopus atrovirens	51.0
Racomitrium lanuginosum	46.9	Narthecium ossifragum	43.8
Odontoschisma sphagni Carex	41.9	Sphagnum tenellum	40.1
durieui	35.6	Erica mackaiana	33.9
Erica tetralix	33.5	Trichophorum cespitosum	32.9
Kurzia pauciflora	31.4	Sphagnum subnitens	31.1
Cladonia portentosa	29.6	Mylia taylorii	28.2
Diplophyllum albicans	27.5	Sphagnum papillosum	25.2

Sphagnum capillifolium aggr.	25.1	Erica cinerea	24.2
Breutelia chrysocoma	23.5	Sphagnum auriculatum+inundatum	22.9
Eriophorum angustifolium	22.3	Polygala serpyllifolia	21.3
Molinia caerulea aggr.	21.0	Kurzia trichoclados	20.5
Calluna vulgaris	20.4	Sphagnum compactum	19.4
		Drosera rotundifolia	18.3
18.9 Nowellia curvifolia			17.6
Cladonia uncialis	17.9	Juncus squarrosus	17.4
Hypnum cupressiforme aggr.	17.6	Scapania gracilis	17.3
			16.2
Campylopus flexuosus	17.4	Cephalozia connivens	15.5
Rhynchospora alba	16.6	Cephalozia bicuspidata	
Sphagnum rubellum	16.0	Sphagnum cuspidatum	
<i>Constant species (occurrence frequencies)</i>			
Calluna vulgaris	85.0	Molinia caerulea aggr.	
Racomitrium lanuginosum	73.0	Erica tetralix	
Trichophorum cespitosum	66.0	Narthecium ossifragum	
Eriophorum angustifolium Hypnum	62.0	Potentilla erecta	
cupressiforme aggr. Cladonia	55.0	Pleurozia purpurea	77.0
portentosa	41.0	Sphagnum tenellum	72.0
Sphagnum capillifolium aggr.	40.0	Odontoschisma sphagni	63.0
Erica cinerea	39.0	Drosera rotundifolia	58.0
Cladonia uncialis	36.0	Sphagnum papillosum	44.0
Eriophorum vaginatum	32.0	Campylopus atrovirens	40.0
Sphagnum subnitens	30.0	Carex panicea	39.0
Sphagnum auriculatum+inundatum	24.0	Juncus squarrosus	38.0
Diplophyllum albicans	22.0	Polygala serpyllifolia	34.0
Schoenus nigricans	20.0	Rhynchospora alba	31.0
Kurzia pauciflora	19.0	Sphagnum cuspidatum	26.0
Sphagnum compactum	17.0	Carex duriei	21.0
Leucobryum glaucum	16.0	Erica mackaiana	19.0
Sphagnum rubellum	15.0	Pleurozium schreberi	17.0
Cephalozia bicuspidata	14.0	Breutelia chrysocoma	16.0
Myrica gale	13.0	Myrica taylorii	14.0
Drosera longifolia	12.0	Rhytidiadelphus loreus	13.0
Nardus stricta	11.0	Avenella flexuosa	11.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Calluna vulgaris	32.0	Molinia caerulea aggr.	
Trichophorum cespitosum	22.0	Racomitrium lanuginosum	26.0
Sphagnum papillosum	11.0	Carex duriei	14.0
Sphagnum capillifolium aggr.	9.0	Eriophorum angustifolium	10.0
Erica tetralix	6.0	Schoenus nigricans	8.0
Narthecium ossifragum	5.0		6.0

Q21 - Oceanic valley mire

*Diagnostic species (phi coefficient * 100)*

Narthecium ossifragum	52.8	Erica tetralix	44.4
Sphagnum papillosum	43.6	Odontoschisma sphagni	35.0
Eriophorum angustifolium	31.6	Sphagnum tenellum	26.8
Drosera rotundifolia	26.6	Trichophorum cespitosum	23.6
Sphagnum capillifolium aggr.	19.6	Eriophorum vaginatum	18.8
Calluna vulgaris	18.2	Cephalozia connivens	17.4
Molinia caerulea aggr.	17.3	Sphagnum rubellum	16.8
Rhynchospora alba	16.3	Sphagnum subnitens	16.1
Kurzia pauciflora	15.8		

Constant species (occurrence frequencies)

Erica tetralix	95.0	Eriophorum angustifolium	
Calluna vulgaris	77.0	Narthecium ossifragum	
Molinia caerulea aggr.	64.0	Sphagnum papillosum	
Drosera rotundifolia	52.0	Trichophorum cespitosum	86.0
Eriophorum vaginatum	45.0	Odontoschisma sphagni	76.0
Sphagnum capillifolium aggr.	32.0	Hypnum cupressiforme aggr.	57.0
Potentilla erecta	30.0	Sphagnum tenellum	48.0
Vaccinium oxycoccos	25.0	Sphagnum magellanicum aggr.	33.0
Sphagnum recurvum aggr.	22.0	Andromeda polifolia	32.0
Rhynchospora alba	19.0	Aulacomnium palustre	27.0
Cladonia portentosa	18.0	Sphagnum subnitens	23.0
Sphagnum rubellum	16.0	Juncus squarrosus	20.0
Pleurozium schreberi	15.0	Sphagnum cuspidatum	19.0
Carex panicea	14.0	Myrica gale	16.0
Cladonia uncialis	12.0	Polygala serpyllifolia	14.0
Myrica anomala	11.0	Dicranum scoparium	12.0
			11.0

<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>		
Calluna vulgaris	23.0	Sphagnum papillosum
Erica tetralix	20.0	Narthecium ossifragum
Molinia caerulea aggr.	13.0	Eriophorum vaginatum
Sphagnum magellanicum aggr.		Trichophorum cespitosum
Sphagnum capillifolium aggr.	8.0	Sphagnum recurvum aggr.

Q22 - Poor fen

*Diagnostic species (phi coefficient * 100)*

Sphagnum recurvum aggr.	29.4	Sphagnum palustre aggr.	21.5
Viola palustris	20.9	Straminergon stramineum	17.9
Eriophorum angustifolium	17.8	Carex echinata	17.3
Agrostis canina	16.0	Drosera rotundifolia	15.9
Sphagnum papillosum	15.7	Carex canescens	15.6
Vaccinium oxycoccos	15.5	Carex nigra	15.3
Polytrichum commune	15.0		

Constant species (occurrence frequencies)

Sphagnum recurvum aggr.	62.0	Eriophorum angustifolium	
Carex nigra	42.0	Potentilla erecta	
Molinia caerulea aggr.	39.0	Polytrichum commune	
Carex echinata	34.0	Carex rostrata	50.0
Agrostis canina	33.0	Drosera rotundifolia	41.0
Sphagnum palustre aggr.	31.0	Viola palustris	36.0
Vaccinium oxycoccos	30.0	Aulacomnium palustre	33.0
Straminergon stramineum	26.0	Eriophorum vaginatum	32.0
Sphagnum papillosum	21.0	Carex canescens	30.0
Juncus effusus	18.0	Comarum palustre	29.0
Calluna vulgaris	17.0	Nardus stricta	23.0
Carex panicea	16.0	Anthoxanthum odoratum aggr.	19.0
Menyanthes trifoliata	15.0	Sphagnum magellanicum aggr.	17.0
Betula pubescens	14.0	Sphagnum capillifolium aggr.	16.0
Lysimachia vulgaris	13.0	Andromeda polifolia	16.0
rubra aggr.	12.0	Erica tetralix	13.0
Sphagnum cuspidatum	11.0	Polytrichum strictum	13.0
Galium palustre	11.0	Epilobium palustre	12.0
Cirsium palustre	11.0		11.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Sphagnum recurvum aggr.	45.0	Sphagnum palustre aggr.	
Sphagnum papillosum	13.0	Polytrichum commune	15.0
Molinia caerulea aggr.	8.0	Carex rostrata	10.0
Eriophorum angustifolium	5.0	Carex nigra	6.0
			5.0

Q23 - Relict mire of Mediterranean mountains

*Diagnostic species (phi coefficient * 100)*

Pinguicula balcanica	77.9	Gymnadenia frivaldii	
Primula frondosa	60.6	Dactylorhiza cordigera	
Carex bulgarica	52.9	Plantago gentianoides	71.9
Taraxacum apenninum	46.8	Geum coccineum	53.3
Cardamine rivularis	42.9	Primula deorum	51.9
Soldanella pindicola	42.0	Scapania irrigua	45.3
Eriophorum latifolium	34.9	Narthecium scardicum	42.1
Philonotis seriata	34.0	Carex echinata	34.9
Juncus thomasi	30.6	Warnstorfia sarmentosa	34.7
Sphagnum platyphyllum	29.1	Warnstorfia exannulata	32.3
Carex nigra	28.0	Gentianella bulgarica	29.2
Festuca frigida	25.4	Sphagnum subsecundum	28.7
Epilobium nutans	23.5	Nardus stricta	26.4
Palustriella decipiens	23.1	Silene asterias	24.1
			23.4
Cirsium heterotrichum	22.0	Bellis bernardii	22.1
Willemetia stipitata	20.9	Sesleria comosa	21.6
Pinguicula corsica	19.4	Parnassia palustris	19.4
Bryum pseudotriquetrum	18.7	Juncus alpinoarticulatus	19.1
Veratrum lobelianum	17.7	Philonotis fontana	18.5
Calliergonella lindbergii	17.4	Scorzoneroideis microcephala	17.4
Saxifraga stellaris	17.0	Agrostis canina	17.3
Scapania paludicola	16.7	Sphagnum contortum	16.9
Ranunculus pyrenaicus	15.9	Euphrasia willkommii	16.1
Silene quadridentata	15.8	Narthecium reverchonii	15.9
Dichodontium palustre	15.4	Gentiana pyrenaica	15.5

Constant species (occurrence frequencies)

Carex nigra	75.0	Nardus stricta	68.0
Pinguicula balcanica	65.0	Carex echinata	62.0
Gymnadenia frivaldii	52.0	Eriophorum latifolium	52.0
Parnassia palustris Bryum	42.0	Primula frondosa	38.0
pseudotriquetrum Luzula	38.0	Plantago gentianoides	35.0
campestris aggr.	35.0	Deschampsia cespitosa	32.0
Agrostis canina	35.0	Warnstorfia exannulata	32.0
Juncus articulatus	32.0	Dactylorhiza cordigera	28.0
Carex bulgarica Philonotis	32.0	Taraxacum apenninum	28.0
seriata Festuca rubra	28.0	Geum coccineum	25.0
aggr.	28.0	Cardamine rivularis	22.0
Warnstorfia sarmentosa	22.0	Trichophorum cespitosum	20.0
Sphagnum subsecundum	22.0	Scapania irrigua	20.0
Soldanella pindicola	20.0	Saxifraga stellaris	20.0
Primula deorum	20.0	Potentilla erecta	15.0
Philonotis fontana	20.0	Juncus alpinoarticulatus	15.0
Eriophorum angustifolium	20.0	Campylium stellatum	12.0
Veratrum lobelianum	18.0	Straminergon stramineum	12.0
Sphagnum platyphyllum	15.0	Primula farinosa	12.0
Ligusticum mutellina	15.0	Willemetia stipitata	12.0
Sphagnum contortum	12.0	Silene pusilla	12.0
Sesleria comosa	12.0	Palustriella decipiens	12.0
Narthecium scardicum	12.0	Juncus thomasii	12.0
Juncus filiformis Carex	12.0	Gentianella bulgarica	12.0
viridula	12.0	Carex pallescens	12.0
Carex lepidocarpa	12.0		

Dominant species (percentage frequencies of occurrences with cover > 25%)

Sphagnum subsecundum	12.0	Carex nigra	12.0
Warnstorfia sarmentosa	10.0	Trichophorum cespitosum	10.0
Eriophorum latifolium	10.0	Warnstorfia exannulata	5.0
Sphagnum warnstorffii	5.0	Philonotis seriata	5.0
Narthecium scardicum	5.0	Carex lepidocarpa	5.0

Carex echinata 5.0

Q24 - Intermediate fen and soft-water spring mire

*Diagnostic species (phi coefficient * 100)*

Warnstorfia exannulata	19.8	Sphagnum subsecundum	Eriophorum	17.7
angustifolium	16.2	Comarum palustre		15.1
Sphagnum teres	15.0			

Constant species (occurrence frequencies)

Eriophorum angustifolium	46.0	Carex nigra		
Carex rostrata	34.0	Carex echinata		
Potentilla erecta	29.0	Comarum palustre		
Molinia caerulea aggr.	27.0	Menyanthes trifoliata		
Agrostis canina	27.0	Carex panicea		38.0
Galium palustre aggr.	25.0	Viola palustris		30.0
Warnstorfia exannulata	23.0	Equisetum fluviatile		29.0
Calliergonella cuspidata	20.0	Epilobium palustre		27.0
Straminergon stramineum	18.0	Aulacomnium palustre		26.0
Sphagnum subsecundum	17.0	Drosera rotundifolia		24.0
Carex canescens	17.0	Caltha palustris		21.0
Ranunculus flammula	16.0	Parnassia palustris		19.0
Juncus bulbosus	14.0	Bryum pseudotriquetrum		18.0
Sphagnum teres	13.0	Juncus articulatus		17.0
Festuca rubra aggr.	13.0	Equisetum palustre		16.0
lasiocarpa	13.0	Hydrocotyle vulgaris		14.0
Galium uliginosum	12.0	Valeriana dioica		13.0
Lysimachia vulgaris	11.0	Juncus effusus		12.0
Cirsium palustre	11.0	Carex limosa		11.0
Cardamine pratensis	11.0	Anthoxanthum odoratum aggr.		11.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Warnstorfia exannulata	8.0	Carex rostrata	8.0
Carex nigra	8.0	Sphagnum subsecundum	7.0
Menyanthes trifoliata	7.0	Sphagnum teres	6.0

Q25 - Non-calcareous quaking mire

*Diagnostic species (phi coefficient * 100)*

Sphagnum cuspidatum	35.3	Scheuchzeria palustris	32.4
Sphagnum lindbergii	27.5	Sphagnum majus	27.2
Carex limosa	24.8	Warnstorfia fluitans	22.1
Sphagnum recurvum aggr.	19.9	Carex rostrata	18.3
Vaccinium oxycoccos	17.6	Sphagnum riparium	17.3

Sphagnum balticum	16.8	Rhynchospora alba	16.3
<i>Constant species (occurrence frequencies)</i>			
Sphagnum recurvum aggr.	42.0	Eriophorum angustifolium	
Carex rostrata	41.0	Sphagnum cuspidatum	
Vaccinium oxycoccos	34.0	Carex limosa	41.0
Andromeda polifolia	26.0	Scheuchzeria palustris	39.0
Drosera rotundifolia	24.0	Menyanthes trifoliata	29.0
Eriophorum vaginatum	21.0	Rhynchospora alba	24.0
Warnstorfia fluitans	17.0	Comarum palustre	23.0
Straminergon stramineum	16.0	Carex lasiocarpa	19.0
Molinia caerulea aggr.	14.0	Sphagnum magellanicum aggr.	17.0
Sphagnum lindbergii	13.0	Sphagnum majus	15.0
Sphagnum papillosum	11.0	Sphagnum balticum	13.0
Equisetum fluviatile	11.0	Carex canescens	12.0
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>			
Sphagnum recurvum aggr.	30.0	Sphagnum cuspidatum	11.0
Carex rostrata	13.0	Sphagnum lindbergii	28.0
Sphagnum majus	6.0	Sphagnum balticum	8.0
Rhynchospora alba	5.0	Carex limosa	6.0
			5.0
Q3132 - Palsa and polygon mires			
<i>Diagnostic species (phi coefficient * 100)</i>			
	79.3	Cladonia amaurocraea	
Dicranum elongatum	63.6	Cladonia subfurcata	
Sphenolobus minutus	57.3	Bryocaulon divergens	
Cetraria nivalis	55.7	Alectoria nigricans	66.0
Ochrolechia androgyna	51.6	Ochrolechia frigida	61.2
Rubus chamaemorus	49.6	Cladonia sulphurina	55.8
Sphaerophorus globosus aggr.	46.7	Icmadophila ericetorum	52.0
Cladonia arbuscula aggr.	46.0	Cladonia stellaris	51.4
Cetraria cucullata	44.2	Cladonia coccifera aggr.	47.8
Cladonia gracilis	43.4	Ochrolechia inaequatula	46.1
Cladonia rangiferina	42.5	Cetraria islandica	44.7
Cladonia bellidiflora	39.3	Rhododendron tomentosum	43.8
Polytrichum hyperboreum	38.4	Cetrariella delisei	42.6
Polytrichum strictum	37.3	Cladonia cornuta	40.7
Pertusaria dactylina	36.8	Cladonia deformis aggr.	39.2
			38.0
			37.3
			35.1

Betula nana

Luzula wahlenbergii	33.3	Andromeda polifolia	31.0
Sphagnum fuscum	30.8	Carex rariflora	30.5
Thamnolia vermicularis	30.3	Empetrum nigrum aggr.	30.2
Cladonia uncialis	30.2	Tuckermannopsis inermis	29.4
Polytrichum jensenii	29.1	Botrydina viridis	28.8
Cladonia crispata	28.2	Dicranum flexicaule	27.9
Cladonia groenlandica	27.8	Omphalina umbellifera	26.6
Cladonia macrophylla	26.2	Cladonia squamosa	25.8
Cetrariella fastigiata	24.0	Arctocetraria andrejevii	23.4
Alectoria ochroleuca	23.3	Eriophorum scheuchzeri	22.5
Vaccinium uliginosum	22.4	Vaccinium vitis-idaea	21.7
Vaccinium microcarpum	20.8	Bryoria nitidula	20.5
Coriscium viride	20.2	Sphagnum russowii	20.0
Cladonia rei	19.9	Cladonia maxima	19.5
Peltigera scabrosa	18.6	Omphalina hudsoniana	18.6
Sphagnum balticum	17.8	Aulacomnium turgidum	17.2
Cladonia cyanipes		Sphagnum lenense	16.9
Poa arctica	15.9		16.2
Constant species (occurrence frequencies)			100.0

Rubus chamaemorus	100.0	Dicranum elongatum	97.0	93.0
Cladonia arbuscula aggr.		Empetrum nigrum aggr.		81.0
Cladonia rangiferina	86.0	Cetraria nivalis		80.0
Vaccinium vitis-idaea	80.0	Cladonia gracilis		78.0
Cladonia amaurocraea	80.0	Cetraria islandica		74.0
Betula nana	75.0	Ochrolechia frigida		68.0
Cladonia coccifera aggr.	70.0	Polytrichum strictum		64.0
Andromeda polifolia	65.0	Rhododendron tomentosum	62.0	61.0
Vaccinium uliginosum		Sphaerophorus globosus aggr.		55.0
Cladonia uncialis	59.0	Sphenolobus minutus		52.0
Cladonia bellidiflora	55.0	Cetraria cucullata		49.0
Bryocaulon divergens	52.0	Cladonia stellaris		45.0
Alectoria nigricans	49.0	Ochrolechia androgyna		43.0
Cladonia sulphurina	45.0	Cladonia subfurcata		36.0
Pleurozium schreberi	41.0	Sphagnum fuscum		35.0
Eriophorum vaginatum	36.0	Cladonia cornuta		33.0
Polytrichum hyperboreum	33.0	Ochrolechia inaequatula		32.0
Cladonia crispata	33.0	Icmadophila ericetorum		30.0
Thamnia vermicularis Cladonia	30.0	Carex rariflora		29.0
deformis aggr. Pertusaria	29.0	Cetrariella delisei		23.0
dactylina	26.0	Cladonia squamosa		22.0
Vaccinium microcarpum	22.0	Sphagnum russowii		22.0
Ptilidium ciliare	22.0	Cladonia macrophylla		17.0
Cladonia pyxidata aggr. Peltigera	17.0	Alectoria ochroleuca		13.0
scabrosa	16.0	Luzula wahlenbergii		12.0
Eriophorum scheuchzeri	13.0	Sphagnum balticum		
Polytrichum jensenii	12.0	Aulacomnium turgidum		
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>				
Cladonia arbuscula aggr.	23.0	Rhododendron tomentosum		20.0
Rubus chamaemorus	14.0	Cladonia rangiferina		14.0
Cetraria nivalis	9.0	Dicranum elongatum		7.0
Polytrichum strictum	6.0			

Q41 - Alkaline, calcareous, carbonate-rich small - sedge spring fen

*Diagnostic species (phi coefficient * 100)*

Carex davalliana	31.6	Eleocharis quinqueflora	
Eriophorum latifolium	29.2	Carex lepidocarpa	
Carex panicea	26.6	Palustriella commutata aggr.	30.1
Juncus alpinoarticulatus	22.5	Philonotis calcarea	27.1
Campylium stellatum	21.7	Carex hostiana	25.2
Scorpidium revolvens aggr.	20.9	Fissidens adianthoides	21.7
Primula farinosa	19.9	Parnassia palustris	21.3
Bryum pseudotriquetrum	19.3	Dactylorhiza majalis	20.1
Carex flava	18.4	Tofieldia calyculata	19.9
Pinguicula vulgaris	18.1	Valeriana dioica	18.7
Equisetum palustre	16.6	Triglochin palustris	18.2
Epipactis palustris	15.4	Juncus articulatus	17.9
			16.2
			15.2

Constant species (occurrence frequencies)

Carex panicea	66.0	Potentilla erecta	
Campylium stellatum	50.0	Carex davalliana	
Parnassia palustris Molinia	44.0	Eriophorum latifolium	42.0
caerulea aggr.		Scorpidium revolvens aggr.	
Bryum pseudotriquetrum	39.0	Carex nigra	55.0
Equisetum palustre	36.0	Juncus articulatus	45.0
Carex lepidocarpa	34.0	Eriophorum angustifolium	44.0
Eleocharis quinqueflora	33.0	Pinguicula vulgaris	41.0
Calliergonella cuspidata	32.0	Valeriana dioica	38.0
Succisa pratensis	28.0	Palustriella commutata aggr.	34.0
Primula farinosa	27.0	Carex flacca	33.0
Briza media	27.0	Juncus alpinoarticulatus	32.0
Carex hostiana	24.0	Triglochin palustris	28.0
Carex flava	23.0	Tofieldia calyculata	28.0
Epipactis palustris	22.0	Linum catharticum	27.0
Fissidens adianthoides	19.0	Plagiomnium affine aggr.	24.0
Cirsium palustre	18.0	Prunella vulgaris	23.0
Phragmites australis	16.0	Menyanthes trifoliata	22.0
Dactylorhiza majalis	16.0	Caltha palustris	19.0
Agrostis stolonifera	16.0	Equisetum variegatum	18.0
Crepis paludosa	15.0	Selaginella selaginoides	16.0
Festuca rubra aggr.	14.0	Aneura pinguis	16.0
Ranunculus acris	13.0	Deschampsia cespitosa	15.0
Tomentypnum nitens	11.0	Philonotis calcarea	14.0
			12.0
			11.0

Mentha aquatica	11.0	Leontodon hispidus	11.0
Galium uliginosum	11.0	Carex rostrata	11.0
Carex echinata	11.0	Carex dioica	11.0
Blysmus compressus	11.0	Bellidiastrum michelii	11.0
Bartsia alpina	11.0		

Dominant species (percentage frequencies of occurrences with cover > 25%)

Scorpidium revolvens aggr.	19.0	Carex davalliana	17.0
Palustriella commutata aggr.	12.0	Campylium stellatum	10.0
Eleocharis quinqueflora	9.0	Carex panicea	5.0
Carex lepidocarpa	5.0		

Q42 - Extremely rich moss-sedge fen

*Diagnostic species (phi coefficient * 100)*

Sphagnum warnstorffii	50.2		
Sphagnum contortum	34.7		
Tomentypnum nitens	29.8	Menyanthes trifoliata	23.2
Carex dioica	21.5		
Scorpidium revolvens aggr.	21.1		
Cinclidium stygium	20.6		
Straminergon stramineum	19.4	Eriophorum angustifolium	17.6
Aneura pinguis	16.9		
Carex panicea	16.7		
Hamatocaulis vernicosus	16.2	Breidleria pratensis	15.9
Viola palustris	15.6		
Carex diandra	15.6		

Constant species (occurrence frequencies)

Eriophorum angustifolium	49.0	Sphagnum warnstorffii	47.0
Potentilla erecta	45.0		
Menyanthes trifoliata	44.0	Scorpidium revolvens aggr.	41.0
Drosera rotundifolia	37.0	Tomentypnum nitens	34.0
Parnassia palustris	31.0		
Vaccinium oxycoccos	29.0		
Sphagnum teres	28.0		
Carex lasiocarpa	28.0		
Sphagnum contortum	27.0		
Viola palustris	26.0		
Galium uliginosum	24.0		

Paludella squarrosa	36.0
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		Sphagnum teres	32.6
		Trichophorum alpinum	26.5
		Aulacomnium palustre	21.7
		Campylium stellatum	21.2
		Carex rostrata	20.7
		Carex lasiocarpa	19.8
		Drosera rotundifolia	18.7
		Helodium blandowii	17.1
		Loeskypnum badium	16.7
		Calliergon giganteum	16.3
		Galium uliginosum	16.1
		Carex chordorrhiza	15.7
		Carex flava	15.6
		Meesia triquetra	15.1
		Campylium stellatum	49.0
		Carex rostrata	46.0
		Aulacomnium palustre	45.0
		Carex panicea	42.0
		Carex nigra	40.0
		Molinia caerulea aggr.	35.0
		Equisetum palustre	32.0
		Bryum pseudotriquetrum	30.0
		Calliergonella cuspidata	29.0
		Comarum palustre	28.0
		Carex echinata	28.0
		Equisetum fluviatile	27.0
		Straminergon stramineum	25.0
		Trichophorum alpinum	23.0
Paludella squarrosa	23.0	Carex dioica	23.0
Eriophorum latifolium	22.0	Andromeda polifolia	22.0
Valeriana dioica	21.0	Cirsium palustre	21.0
Agrostis canina	21.0	Trichophorum cespitosum	20.0
Carex flava	20.0	Aneura pinguis	20.0
Plagiomnium affine aggr.	19.0	Festuca rubra aggr.	19.0

Cinclidium stygium	19.0	Epilobium palustre	17.0	18.0
Succisa pratensis		Galium palustre aggr.		17.0
Sphagnum recurvum aggr.	16.0	Crepis paludosa		16.0
Calliergon giganteum	16.0	Briza media		15.0
Betula pubescens	16.0	Selaginella selaginoides		14.0
Carex limosa	15.0	Sphagnum subsecundum		14.0
Phragmites australis	14.0	Carex chordorrhiza		13.0
Caltha palustris	14.0	Scorpidium scorpioides		13.0
Pinguicula vulgaris	13.0	Pedicularis palustris		13.0
Lysimachia vulgaris	13.0	Filipendula ulmaria		12.0
Climacium dendroides	13.0	Anthoxanthum odoratum aggr.		12.0
Triglochin palustris	12.0	Salix repens		11.0
Luzula campestris aggr.	12.0	Juncus articulatus		11.0
Epipactis palustris	12.0	Carex diandra		11.0
Betula nana	12.0	Vaccinium uliginosum		
Peucedanum palustre	11.0	Hamatocaulis vernicosus		
Fissidens adianthoides	11.0	Carex davalliana		
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>				
Sphagnum warnstorffii	22.0	Scorpidium revolvens aggr.		
Sphagnum contortum	9.0	Campylium stellatum		13.0
Tomentypnum nitens	7.0	Sphagnum teres		9.0
Carex lasiocarpa	7.0	Trichophorum cespitosum		7.0
Menyanthes trifoliata	6.0	Carex rostrata		6.0

Q43 - Tall-sedge base-rich fen

*Diagnostic species (phi coefficient * 100)*

	45.3	Campylium stellatum		
Schoenus ferrugineus	29.2	Carex hostiana		
Juncus subnodulosus	24.4	Schoenus nigricans		29.6
Fissidens adianthoides	23.3	Scorpidium revolvens aggr.		28.3
Carex panicea	21.8	Succisa pratensis	21.3	22.1
Eriophorum latifolium		Molinia caerulea aggr.		21.3
Parnassia palustris				20.3
Primula farinosa	19.9	Carex lepidocarpa		19.0
Pinguicula vulgaris	17.6	Epipactis palustris		17.6
Carex davalliana	17.6	Dactylorhiza incarnata		17.1
Valeriana dioica	15.5	Potentilla erecta		15.0

Constant species (occurrence frequencies)

Molinia caerulea aggr.	75.0	Campylium stellatum	67.0
Potentilla erecta	62.0	Carex panicea	58.0
Parnassia palustris	47.0	Scorpidium revolvens aggr.	43.0
Succisa pratensis	42.0	Schoenus ferrugineus	41.0
Phragmites australis	41.0	Schoenus nigricans	39.0
Juncus subnodulosus	38.0	Eriophorum latifolium	33.0
Carex hostiana	32.0	Pinguicula vulgaris	31.0
Equisetum palustre	28.0	Primula farinosa	27.0
Calliergonella cuspidata	27.0	Carex davalliana	24.0
Epipactis palustris	25.0	Valeriana dioica	24.0
Fissidens adianthoides	24.0	Carex lepidocarpa	22.0
Mentha aquatica	23.0	Cirsium palustre	20.0
Eriophorum angustifolium	21.0	Scorpidium scorpioides	19.0
Bryum pseudotriquetrum	20.0	Menyanthes trifoliata	18.0
Tofieldia calyculata	18.0	Carex flacca	15.0
Linum catharticum	17.0	Aneura pinguis	15.0
Carex nigra	16.0	Galium uliginosum	14.0
Carex flava	15.0	Briza media	14.0
Lythrum salicaria	14.0	Juncus articulatus	13.0
Dactylorhiza incarnata	14.0	Cladium mariscus	11.0
Carex rostrata	14.0	Eupatorium cannabinum	
Ctenidium molluscum	13.0	Carex elata	
Selaginella selaginoides	11.0	Drosera longifolia	
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>			
Schoenus ferrugineus	35.0	Schoenus nigricans	29.0
Juncus subnodulosus	26.0	Campylium stellatum	18.0
Scorpidium revolvens aggr.	13.0	Molinia caerulea aggr.	9.0
Cladium mariscus	5.0		

Q44 - Calcareous quaking mire

<i>Diagnostic species (phi coefficient * 100)</i>		39.3
Scorpidium scorpioides	59.2	Carex limosa 30.3
Pseudocalliergon trifarium	34.7	Utricularia intermedia 28.2
Carex chordorrhiza	29.5	Menyanthes trifoliata 24.4
Carex lasiocarpa	25.8	Carex livida 21.4
Utricularia minor	22.0	Calliergon giganteum 18.5
Scorpidium revolvens aggr.		Drosera longifolia 15.9
Carex rostrata	18.3	
Eriophorum angustifolium	15.8	Carex diandra 15.0

Constant species (occurrence frequencies)

Scorpidium scorpioides	79.0	Menyanthes trifoliata	53.0
Carex limosa	46.0	Eriophorum angustifolium	45.0
Carex rostrata	41.0	Scorpidium revolvens aggr.	36.0
Carex lasiocarpa	36.0	Campylium stellatum	31.0
Equisetum fluviatile	30.0	Carex chordorrhiza	26.0
Utricularia intermedia	24.0	Pseudocalliergon trifarium	23.0
Utricularia minor	21.0	Comarum palustre	21.0
Calliergon giganteum	21.0	Drosera longifolia	19.0
Phragmites australis	17.0	Carex panicea	17.0
Rhynchospora alba	15.0	Molinia caerulea aggr.	14.0
Carex elata	13.0	Aneura pinguis	13.0
Trichophorum cespitosum	12.0	Pedicularis palustris	12.0
Carex diandra	12.0	Andromeda polifolia	11.0
Eleocharis quinqueflora	11.0	Cinclidium stygium	

Dominant species (percentage frequencies of occurrences with cover > 25%)

Scorpidium scorpioides	50.0	Scorpidium revolvens aggr.	
Carex limosa	11.0	Carex lasiocarpa	15.0
Menyanthes trifoliata	8.0	Carex rostrata	9.0
Carex chordorrhiza	7.0		7.0

Q45 - Arctic-alpine rich fen

*Diagnostic species (phi coefficient * 100)*

Juncus triglumis	42.1	Carex microglochin	37.7
Tofieldia pusilla	35.2	Carex bicolor	34.6
Carex capillaris	33.7	Thalictrum alpinum	29.7
Oncophorus virens	29.6	Juncus biglumis	29.4
Kobresia simpliciuscula	28.5	Bistorta vivipara	28.4
Salix arbuscula	28.2	Catoscopium nigrum	28.0
Equisetum variegatum	27.5	Scorpidium revolvens aggr.	27.1
Juncus arcticus	25.8	Carex atrofusca	25.5
Carex maritima	24.2	Campylium stellatum	23.8
Salix reticulata	23.2	Saxifraga aizoides	22.8
Selaginella selaginoides	22.3	Juncus alpinoarticulatus	21.2
Carex saxatilis	21.0	Bryum pseudotriquetrum	20.7
Tritomaria polita	20.0	Lophozia bantriensis	19.8
Meesia uliginosa	19.4	Carex parallela	18.2
Juncus castaneus	18.0	Fissidens osmundoides	17.6
Carex norvegica	16.9	Bartsia alpina	16.8
Pinguicula vulgaris	16.5	Bryum pallens	16.4
Aneura pinguis	16.3	Carex dioica	16.0
Carex frigida	15.6	Ranunculus hyperboreus	15.3

Constant species (occurrence frequencies)

Bistorta vivipara	68.0	Campylium stellatum	54.0
Scorpidium revolvens aggr.	53.0	Juncus triglumis	43.0
Bryum pseudotriquetrum	41.0	Selaginella selaginoides	35.0
Saxifraga aizoides	35.0	Equisetum variegatum	34.0
Carex capillaris	34.0	Thalictrum alpinum	33.0
Tofieldia pusilla	30.0	Eriophorum angustifolium	30.0
Pinguicula vulgaris	29.0	Parnassia palustris	28.0

Carex nigra	25.0	Trichophorum cespitosum	24.0
Salix reticulata	24.0	Juncus alpinoarticulatus	23.0
Bartsia alpina	23.0	Deschampsia cespitosa	22.0
Carex bicolor	19.0	Aneura pinguis	19.0
Primula farinosa	17.0	Carex microglochin	17.0
Carex dioica	17.0	Betula nana	16.0
Agrostis stolonifera	17.0	Philonotis fontana	15.0
Palustriella commutata aggr.	16.0	Tomentypnum nitens	15.0
Saussurea alpina aggr.	15.0	Salix arbuscula	14.0
Juncus biglumis	15.0	Eleocharis quinqueflora	15.0
Carex davalliana		Festuca rubra aggr.	13.0
Equisetum arvense	14.0	Catospodium nigrum	12.0
Carex panicea	14.0	Vaccinium uliginosum	12.0
Oncophorus virens	13.0	Cinclidium stygium	11.0
Sanionia uncinata	12.0	Salix myrsinites	11.0
Pinguicula alpina	12.0	Meesia uliginosa	
Carex atrofusca	12.0	Kobresia simpliciuscula	
Equisetum palustre	11.0	Carex saxatilis	
<i>Dominant species (percentage frequencies of occurrences with cover > 25%)</i>			
Scorpidium revolvens aggr.	21.0	Campylium stellatum	11.0
Carex microglochin	9.0	Trichophorum cespitosum	8.0

Q46 - Carpathian travertine fen with halophytes

*Diagnostic species (phi coefficient * 100)*

Blysmus compressus	76.1	Trichophorum pumilum	
Schoenoplectus lacustris subsp. glaucus	64.8	Triglochin maritima	
Epipactis palustris	56.2	Primula farinosa	73.6
Carex davalliana	46.6	Pinguicula vulgaris	57.4
Triglochin palustris	40.2	Campylium stellatum	49.7
Carex hostiana	39.2	Centaureum littorale	44.9
Parnassia palustris	35.6	Bryum neodamense	39.6
Polygala amarella	29.5	Valeriana dioica	38.8
Scorpidium revolvens aggr.	28.7	Equisetum variegatum	30.4
Campyliadelphus elodes	25.7	Juncus articulatus	29.1
Schoenus ferrugineus	24.2	Odontites vulgaris aggr.	26.5
Carex panicea	22.4	Bryum pseudotriquetrum	25.0

Eriophorum latifolium	21.9	Eleocharis quinqueflora	20.1
Juncus tenuis	20.2	Campyliadelphus chrysophyllus	18.9
Carex distans	19.5	Tofieldia calyculata	18.0
Glaux maritima	18.2	Taraxacum sect. Palustria	17.0
Carex lepidocarpa	17.7	Potentilla erecta	16.3
Plantago maritima	16.7	Marchantia polymorpha	15.3
Equisetum palustre	15.3	Cirsium palustre	15.1
Calliergonella cuspidata	20.6		

Constant species (occurrence frequencies)

Triglochin maritima	89.0	Schoenoplectus lacustris subsp. glaucus	
Campylium stellatum	89.0	Pinguicula vulgaris	
Parnassia palustris	78.0	Epipactis palustris	
Blysmus compressus	78.0	Primula farinosa	
Potentilla erecta	67.0	Carex davalliana	89.0
Trichophorum pumilum	56.0	Triglochin palustris	56.0 78.0
Scorpidium revolvens aggr.		Molinia caerulea aggr.	78.0
Juncus articulatus	56.0	Carex panicea	67.0
Valeriana dioica	44.0	Carex hostiana	67.0
Calliergonella cuspidata	44.0	Bryum pseudotriquetrum	56.0
Plantago maritima	33.0	Eriophorum latifolium	56.0
Equisetum variegatum	33.0	Equisetum palustre	44.0
Cirsium palustre	33.0	Trifolium pratense	44.0
Tofieldia calyculata	22.0	Succisa pratensis	33.0
Schoenus ferrugineus	22.0	Salix repens	22.0
Salix cinerea	22.0	Polygala amarella	22.0
Odontites vulgaris aggr.	22.0	Glaux maritima	22.0
Frangula alnus		Festuca rubra aggr.	22.0
Eupatorium cannabinum	22.0	Eriophorum angustifolium	22.0
Eleocharis quinqueflora	22.0	Centaurium littorale	22.0
Carex nigra	22.0	Carex lepidocarpa	22.0
Carex distans	22.0	Briza media	22.0
Agrostis stolonifera	22.0		

Dominant species (percentage frequencies of occurrences with cover > 25%)

Campylium stellatum	44.0	Scorpidium revolvens aggr.	33.0
Trichophorum pumilum	22.0		

Q51 - Tall-helophyte bed

*Diagnostic species (phi coefficient * 100)*

Glyceria maxima	20.9	Typha latifolia	17.9
Acorus calamus	15.4		

Constant species (occurrence frequencies)

Phragmites australis	42.0	Lythrum salicaria	30.0
Galium palustre aggr.	29.0	Glyceria maxima	28.0
Phalaroides arundinacea	26.0	Typha latifolia	22.0
Lycopus europaeus	22.0	Iris pseudacorus	22.0
Lysimachia vulgaris	21.0	Mentha aquatica	20.0
Equisetum fluviatile	19.0	Lemna minor	18.0
Sparganium erectum aggr.	16.0	Alisma plantago-aquatica	15.0
		Typha angustifolia	14.0
14.0 Myosotis scorpioides aggr.			12.0
Carex acuta	12.0	Agrostis stolonifera	11.0
Solanum dulcamara	11.0	Schoenoplectus lacustris	11.0
Persicaria amphibia		Ranunculus repens	11.0
Calystegia sepium	11.0		

Dominant species (percentage frequencies of occurrences with cover > 25%)

Phragmites australis	21.0	Glyceria maxima	12.0
Typha latifolia	10.0	Phalaroides arundinacea	7.0
Typha angustifolia	6.0		

Q52 - Small-helophyte bed

*Diagnostic species (phi coefficient * 100)*

Glyceria fluitans	16.4	Alisma plantago -aquatica	16.0
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Constant species (occurrence frequencies)

Galium palustre aggr.	30.0	Glyceria fluitans	
Alisma plantago-aquatica	27.0	Eleocharis palustris	
Myosotis scorpioides aggr.	23.0	Agrostis stolonifera	28.0
Ranunculus repens	21.0	Mentha aquatica	26.0
Ranunculus flammula	19.0	Persicaria amphibia	22.0
Lycopus europaeus	18.0	Lemna minor	20.0
Lythrum salicaria	15.0	Veronica beccabunga	18.0
Oenanthe aquatica	13.0	Juncus effusus	16.0
Rorippa amphibia	12.0	Juncus articulatus	13.0
Phragmites australis	11.0	Phalaroides arundinacea	12.0
Lysimachia vulgaris	11.0	Glyceria maxima	11.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Glyceria fluitans	10.0	Eleocharis palustris	9.0
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Q53 - Tall-sedge bed*Diagnostic species (phi coefficient * 100)*

Carex acuta	33.4	Carex vesicaria	27.9
Carex riparia	22.5		

Constant species (occurrence frequencies)

Carex acuta	42.0	Galium palustre aggr.	
Lythrum salicaria	33.0	Lysimachia vulgaris	
Carex vesicaria	26.0	Phragmites australis	37.0
Carex riparia	22.0	Iris pseudacorus	27.0
Carex acutiformis	19.0	Phalaroides arundinacea	22.0
Equisetum fluviatile	17.0	Lycopus europaeus	20.0
Caltha palustris	16.0	Ranunculus repens	17.0
Persicaria amphibia	14.0	Equisetum palustre	16.0
Mentha aquatica	12.0	Juncus effusus	15.0
Filipendula ulmaria	12.0	Carex rostrata	13.0
Glyceria maxima	11.0	Carex paniculata	12.0
Carex disticha	11.0		11.0

Dominant species (percentage frequencies of occurrences with cover > 25%)

Carex acuta	31.0	Carex riparia	15.0
Carex vesicaria	13.0	Carex acutiformis	10.0
Cladium mariscus	9.0	Carex paniculata	8.0

Q54 - Inland saline or brackish helophyte bed*Diagnostic species (phi coefficient * 100)*

Schoenoplectus lacustris subsp. glaucus	27.1	Phragmites australis	23.4
Typha domingensis	21.7	Bolboschoenus maritimus	18.6
Tripolium pannonicum	15.9	Juncus subulatus	15.6

Constant species (occurrence frequencies)

Phragmites australis	79.0	Schoenoplectus lacustris subsp. glaucus	38.0
Bolboschoenus maritimus	33.0	Tripolium pannonicum	
Juncus gerardi	19.0	Agrostis stolonifera	25.0
Atriplex prostrata	17.0	Puccinellia distans	19.0
Typha domingensis	12.0	Juncus maritimus	13.0
			12.0

<i>Dominant species (percentage frequencies of occurrences</i>				<i>with cover > 25%)</i>
Phragmites australis	31.0	Schoenoplectus lacustris subsp.	glaucus	15.0
Bolboschoenus maritimus		10.0	Typha domingensis	
Juncus maritimus		6.0		6.0