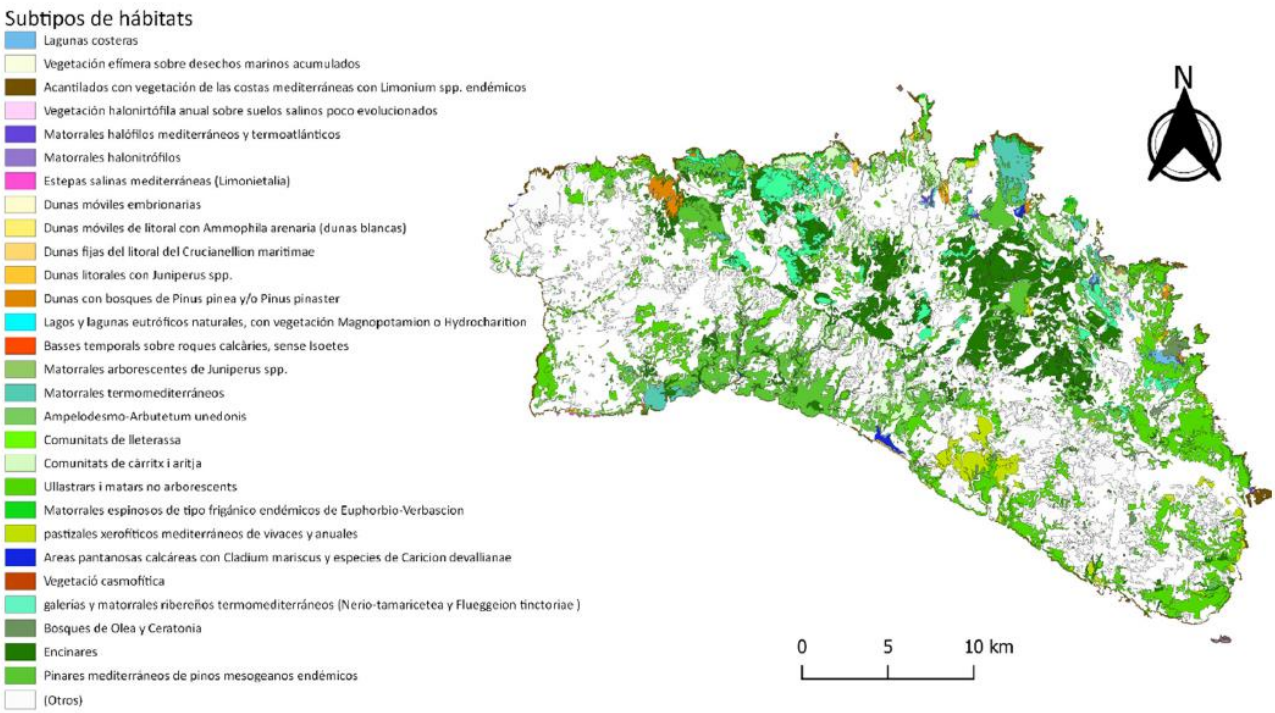
G CONSELLERIA
O MEDI AMBIENT
I I TERRITORI
B DIRECCIÓ GENERAL
/ ESPAIS NATURALS
I BIODIVERSITAT

Illes Balears Sostenibles

THE CARTOGRAPHY OF TERRESTRIAL HABITATS OF THE BALEARIC ISLANDS (CHIB10)

Legend Key

Syntaxa - HTCI - habitats LPEHT correspondence list



September 2022

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Legend Key

The updated syntaxonomic scheme of the Balearic Islands.

For the update of the syntaxonomical scheme, an unpublished document provided by the technical direction of the cartography project of the Ministry of the Environment and Territory of the Comunitat Autònoma de les Illes Balears was taken as a source reference, whose nomenclature fits quite precisely with that published in the Syntaxonomical checklist of vascular plant communities of Spain and Portugal to association level (Rivas-Martínez & al. 2001).

The classic works of Balearic vegetation were reviewed. The basic document was compared with the syntaxonomic schemes published in the most recent reference works at the archipelago level (Bolòs, 1996), of islands (Mallorca: Llorenç & al., 2007; Ibiza and Formentera: Rivas-Martínez & al., 1992; Cabrera: Rita & Bibiloni, 1993 and Gil & al. 1995; Es Vedrà: Tébar & al., 1989), as well as the Fitxes bàsiques per a la interpretació dels Hàbitat terrestres de l'EU a les Illes Balears (Llorens & al., 2014), taking as a reference the book La vegetació de Mallorca i Cabrera. Bases per a la interpretació i gestió d'hàbitats i paisatge vegetal: Vegetation of the Islands of Mallorca and Cabrera. Bases for the interpretation and management of habitats and vegetal landscape (Llorens et al., 2011, reedited 2021)[1] and different works of more limited scope.

The comparison revealed numerous discrepancies. However, these discrepancies were cleared up in the process of elaborating the draft of the description section of the legend's syntaxa, which required the revision of the schema's syntaxa. This review had the collaboration of the group of experts, formed by: Dr. Lleonard Llorens and Dr. Llorenç Gil, specialists in phytosociology from the Botany Laboratory of the UIB; Carles Cardona, Dr in Botanical sciences that works at the Centro Forestal CEFOR and some other experts.

Broadly speaking, the resolution of discrepancies consisted in the purification of the communities that have not yet been mapped (basically ruderal, weeds and sea plants), the updating of the terminology, the elimination of synonyms through the consultation of specialized monographs and the exclusion/provision of verification of the current presence of those who have not been located recently.

The cartographic syntaxonomic scheme consists of 35 classes, 51 orders and 87 alliances. It is somewhat smaller than syntaxiometric scheme of the Balearic Islands, given the exclusions of agricultural and maritime communities. All alliances are represented with their respective orders, alliances and associations; however, in certain cases, lower-ranking units such as the community and the population

[1] Link to the digital version of the book (CAT):
http://www.caib.es/govern/sac/fitxa.do?codi=5082546&lang=ca&coduo=1

have been used, due to the fact that in order to translate into Habitat Types of Community Interest (HTCI), it has been required to map lower-ranking syntaxa (See correspondence list section).

Description of the syntax of the legend

The quality of the assignment is closely linked to the quality of the scientific descriptions of each syntaxon. To fulfil this purpose all syntaxa of the legend have been described. The minimum level to which each syntax has been mapped has also been given in detail. For most of the cases, this was at the level of an alliance, although for all cases where it has been possible to reach a lower level this has been indicated, even though this degree was not necessary for the correspondence to the Habitat of Community Interest.

Just as there are well-described associations that have an extensive bibliography to support them, there are undescribed plant communities, as well as others of doubtful existence. This means that, when assessing the content of the tessellations, the reference bibliography behind each plant community or habitat must always be considered.

Alliances that should be considered as Order: On some occasions there are some syntaxa that, due to the difficulty of determining the diagnostic species, it was impossible to make the assignment to a syntaxon level lower than order. In these cases, syntaxon has only been assigned at the alliance level if the previous mapping data has been obtained or in which an expert in that specific problematic syntaxon group has indicated it. The main taxa involved are the following: Quercetalia ilicis, Tamaricetalia africanae, Charetalia hispidae, which are discussed below:

- QUERCETALIA ILICIS: The Cyclamini balearicae-Quercetum ilicis and Clematido cirrhosae-Quercetum rotundifoliae associations belong to the Quercion ilicis and Querco rotundifoliae-Oleion sylvestris alliances, respectively. These two communities can be differentiated mainly by the dominant tree species, which in the first is Quercus ilex and in the second Quercus rotundifolia. However, in most cases, for different reasons, it is very difficult to determine the identity of these species. In the previous mapping it has been considered that the oaks of the Serra de Tramuntana belong to the species Quercus ilex and the other oaks have been considered Quercus rotundifolia. Despite that the floral composition of these two communities is certainly different in its extremes, it is very difficult to establish their boundaries. On the other hand, there is evidence that non-enclaved oaks in the Tramuntana mountains show a strong degree of hybridization and even

such that that a Quercus ilex tree can have Quercus rotundifolia grafts. For this reason, it is recommended that oaks are analyzed at the syntaxonomic level of the order (Quercetalia ilicis).

- TAMARICETALIA AFRICANAE: The alliances Tamaricion africanae and Tamaricion boveano-canariensis can be differentiated mainly by the different species of tamarisks (Tamarix sp.) that comprise them. However, for the correct determination of the species it is essential that it is in the flowering period. In the great majority of occasions, the tamarisks have been found without flowers, which has made their determination impossible in this project. For this reason, it is recommended that tamarisk forests be considered at the level of order (Tamaricetalia africanae).

- CHARETALIA HISPIDAE: The thallophytic vegetation of charophytes can belong to three different alliances: Charion vulgaris, Charion fragilis and Charion canescentis. They can be differentiated by the three species that give name to each one of them; however, it is very difficult to differentiate these three species. For this reason, it is recommended that they be considered at order level (Charetalia hispidae).

The special case of the Rosmarino-Ericion associations: It has been shown, during the visits, that there are more typologies than those presented in the syntaxonomic list, which in many cases has been assigned to Anthyllido-Teucrietum in Mallorca, Teucrio-Corydothymetum in Ibiza and Fomentera and Loto-Ericetum in Menorca. On the other hand, those linked to dune systems (suballiance Halimionenion halimifoli) are all described in Mallorca, which indicates that their respective vicariants must be established in Menorca, Ibiza and Formentera. Likewise, the class Cisto-Lavanduletea, alliance Cistion ladaniferi, has a very uncertain position within the taxonomic scheme. This syntaxonomic group requires a specific scientific study through relevés (floristic inventory) throughout the Balearic Islands, in order to highlight the different typologies, evaluate the biotic and abiotic differences between areas; detect the most unique ones and prioritize their protection. This could lead to the definition of different sub-associations (some of them known) or the need to define new associations.

Interpretation of Habitat Types of Community Interest (HTCI) present in the Balearic Islands

The documentation relating to the interpretation of HTCI can be classified according to the territorial scope it covers. Thus, we find approaches from the community level (Interpretation Manual of European Union Habitats, EUR 28; European Commission DG Environment), the national level (Fichas Tipos de Hábitat de Interés Comunitario de España[2] : Factsheets of Habitat Types of Community Interest (HTCI) present in Spain, Ministry for the Ecological Transition and the Demographic Challenge; *Bases ecológicas preliminares para la conservación de los tipos de hábitat de interés comunitario en España*: Preliminary ecological bases for the conservation of the types of habitat of community interest in Spain, Ministry of the Environment, Rural and Marine Affairs)[3] , the autonomic level (*Fitxes bàsiques per a la interpretació dels Hàbitat terrestres de l'EU a les Illes Balears*; Basic sheets for the interpretation of the Terrestrial Habitat of the EU in the Balearic Islands, which corresponds in the List of Habitats published on the website of *Red Natura 2000*), and including the iIsland (*La vegetació de Mallorca i Cabrera*; Llorens *et al*., 2011, reedited 2021)

Their interpretation is included in all these documents, generic at the level of the European Union and more adapted the more local the scope. For the Balearic Islands, the interpretation is the one that appears in the List of Habitats, which is the one that has been adopted as a basis and has been revised.

In the proposed interpretation (whether its own or adopted by other authors), there is an attempt to abandon the tendency to force the identity of plant communities to the level of habitat types (for example, Hypericion balearici = 5430 or Launaeion cervicornis = 5320) in cases where this identity is not established in the original definition of the HTCI. Instead, the HTCI is conceived as an ecosystem (biotope + biocenosis). For example: Hypericion balearici, is divided into three HTCI (4090, 5320, 8130) based on not only floristic criteria (those that define the associations that are distributed), but also on environmental criteria of weight in the definition of the habitat type; among them, orophilia vs. thermophilicity, or stoniness and mobility of the substrate.

[2] Link to the factsheets: https://www.miteco.gob.es/es/biodiversidad/temas/espacios-protegidos/red-natura-2000/rn_tip_hab_esp_espana_acceso_fichas.aspx

[3] Link to the document: https://www.miteco.gob.es/es/biodiversidad/temas/espacios-protegidos/red-natura-2000/rn_tip_hab_esp_espana.aspx

Revision/Establishment of the correspondences between the syntaxa and the HTCI: Correspondence list.

Because the main management unit is the HTCI, yet the cartography basic unit of information were syntaxa, a correspondence has been created between plant communities (syntaxons), HTCI. This correspondence list is, therefore, the cornerstone upon which the results of the cartography rest

To achieve this, other variables had to be considered that were beyond establishing which plant communities are found in each tessellation, amongst which the facies and physiognomy stand out:

Facies is the presence of and extraordinary or conspicuous abundance of a taxon related in phytosociology to the ecology or the dynamism of the plant community; for example: Ampelodesmos mauritanica in Cneoro tricocci-Ceratonietum siliquae or Pinus halepensis in Aro picti-Phyllyreetum rodriguezii. It is the dominance of certain relevant species or any other singular character (temporary raft, dunes...). This data - and the physiognomy-structure data - is used to facilitate the interpretation of the plant community as a type of habitat and adapt the use of the cartography to the management of the natural environment. It has been decisive for tessellation process, so that a plant community of continuous distribution has been divided into individual tessellations if different floristic facies were recognized in it.

The physiognomic-structural aspect of terrestrial communities is described by means of the following predefined classes:

- Forest: Plant formation in which the trees (>5 m) have, altogether, a land cover greater than 30%.
- Scrub: Plant formation that cannot be defined as a forest and in which the scrub (up to 5 m) has a cover of more than 30%.
- Scrub with trees: Scrub in which some tree species participate and their individuals are scattered and have, together, a cover of between 5% and 30%.
- Grassland: plant formation that cannot be defined as any of the previous classes and in which the herbaceous plants have a cover of more than 30%.
- Grassland with trees: Grassland in which arboreal species participate and their individuals are scattered and have a cover of between 5% and 30%.

As in the case of the facies, the physiognomy-structure is decisive for individualizing tessellations, so that a plant community of continuous distribution has been divided into individual tessellations if different physiognomic-structural classes were recognized in it.

For the creation of the correspondence list, the existing documentation was revised; The list that appears in the book Vegetation of the Islands of Mallorca and Cabrera (Llorens et al., 2011, reedited 2021) was taken as a basic reference. A group of experts was created to discuss its modifications and the final list was agreed upon.

However, for a correct management of the habitats an exhaustive study of the syntaxa present in the Balearic Islands is required.

Although it seems implausible, even the experts themselves cannot clarify the presence or absence of certain communities in one habitat or another. Likewise, the communities themselves sometimes do not have attached bibliography or have not been described. Among some of the reasons that have promoted this situation, it stands out that syntaxonomy is an area of research in decline due to the current model of highly productive and high-impact research, and for this reason in recent decades it has not received the attention it deserves. Furthermore, this will become more accused in the coming years due to a notable lack of taxonomists. This is especially problematic because, as mentioned initially, if the syntaxa are not clearly described, the correspondence with the habitat is incorrect, and therefore the management work in that area will also be. In Menorca, due to its high floristic complexity, this fact is especially relevant, which leads to Menorca having, from the start, the lowest quality when it comes to cartography.

It is presented, if any, for each combination of alliance - syntaxon - facies - physiognomy the corresponding habitat type and subtype (Annex I). The majority of habitats have been mapped at alliance level, but the need to be able to transform the syntaxonomic information to habitats of community interest requires mapping the syntaxons of lower rank in which the alliance does not fit unequivocally with a single habitat.:

- Some alliances have syntaxons that correspond to many different habitat types (e.g. Cneoro triccoci-Ceratonietum siliquae),
- There are cases in which a single population constitutes a habitat by itself (e.g. the population of *Taxus baccata*).
- There are many cases in which a habitat encompasses different alliances or, even, orders and classes (e.g.: 6220* Substeppic areas of grasses and annuals of the Thero-Brachypodietea, which includes taxa of the classes Polygono-Poetea annuae, Lygeo-Stipetea and Helianthemetea guttati)

Below are some of the most controversial points within the development of the correspondence list:

- In the Balearic Islands, especially in Mallorca, it is conflicting to distinguish between HTCI 5330 (Thermo-Mediterranean and Pre-Steppe Shrubs), dominated by *Olea europaea* of shrub-tree type and HTCI 9320 (Olea and Ceratonia forests). According to the description of the habitats, much of what we consider shrubby *ullastrar* (wild olive groves) of great size could be considered as Olea forests with a high degree of degradation. It should be established if there are edaphic, environmental, floristic and faunal differences between the Olea forests, that do not present doubts about their differentiation, and these potential degraded phases, in order to establish which is the corresponding habitat for each.

- The populations of *Arundo donax* in which the presence of lianoid communities has not been evidenced have been considered ruderal, and therefore do not lead to any specific habitat (Other). However, this implies that the surface of Arundini-Convolvuletum is underrepresented and, being part of a singular habitat within the Balearic Islands (see document Manual CHIB10), its presence should be especially evaluated in future field visits, especially in torrents.

- The plant communities belonging to the Phragmito-Magnocaricetea class have been considered HTCI 7210* (Calcareous fens with Cladium mariscus and species of the Caricion davallianae), as established by the latest revision of the book Vegetation of the Island of Mallorca and Cabrera (Llorens et al., 2021). As with *Arundo donax*, and the syntaxonomic position of Phragmites sp., it is doubtful and it is possible that it is a species with low fidelity, transformative and highly invasive as it happens with Ampelodesmos mauritanica or Pinus halepensis. Therefore, it should be evaluated if all areas where the presence of Phragmito-Magnocaricetea communities has been evidenced deserve to be considered as HTCI or, on the contrary, the presence of these species should be associated with specific environmental and biotic characteristics.

- *Fraxinus sp.* has been considered as the guiding species for the presence of the Vinco-Fraxinetum association. This association leads to HTCI 91B0 (Thermophilous Fraxinus angustifolia woods). However, just as it happens with the Olea forests, it should be analyzed to what degree ash forests, present in certain areas, differ from areas of Populion albae with isolated individuals of Fraxinus sp.

- The reference documents at National level (available in the Jolube) on several occasions do not allow to distinguish between different types of habitats. This is the case, for example, of coastal water bodies, which can be considered as HTCI 1150* (Coastal lagoons) or HTCI 2190 (Humid dune slacks). It should be explored the differences between habitats in the Balearic Islands, before continuing to expand the information available in the cartography.

- The habitat subtypes that appear in the national reference documents are not the same as in the list available on the Xarxa Natura website. This last document has been followed as a reference for the correspondence list, but it should be evaluated if it would be more correct to take into account the typologies of sub-habitats established at the National level so that there can be a correspondence between CCAA.

- It is very likely that HTCI 2260 (Cisto-Lavenduletalia dune sclerophyllous scrubs) is strongly under-represented, since it represents a transition between dune communities and interior sclerophyllous scrub. Likewise, in Menorca it is possible that there is a greater diversity of the Cisto-Lavanduletalia class than is recorded, due to the uniqueness of the substrate in the northern area, which requires an exhaustive study.

- Habitat 5320 (Low formations of Euphorbia close to cliffs) has a very dubious syntaxonomic position within the Balearic Islands. The habitat description sheet itself states:
  "*Although it could be considered the possibility of unifying it with other formations (especially that of habitat type 5430, for the reasons previously pointed out), it would first be preferable to compare the structure and functionality of this one based on its complete regional distribution throughout the Mediterranean, where this formation is more abundant and better represented*".
  Therefore, it has been decided to include the 3 associations that, in theory, should be considered as 5320 in 5430:
  - Launaeetum cervicornis,
  - Helichryso microphylli-Dorycnietum fulgurantis
  - Santolino magonicae-Anthyllidetum hystricis

  In any case, an exhaustive analysis is required both environmental and through surveys to evaluate the existence or not of this habitat.

- Wetlands, like the Albufera de Mallorca, require a completely different project. They are tremendously changing habitats, in which aquatic plants, difficult to access and determined, play a fundamental role. In addition, water levels change drastically throughout the year, leaving communities, linked to periodic floods with variable salinity, exposed at certain times of the year, which are rare in the Balearic Islands. In these areas, the methodology established for the rest of the territory has been strictly followed; for this reason, the results obtained in wetlands must be interpreted with caution.

- Bare Soil and Water Body categories are very difficult to manage. It has been considered that its cover does not belong to any plant community. However, at the habitat level, its calculation would be debatable and the subject of debate. The littoral rock habitat by definition could include the bare soil on its surface, although it would be difficult to establish the difference with other nearby habitats. Waterbodies can occupy a very significant extension of the territory in areas that are particularly interesting at a naturalistic level. Therefore, it has been decided that the bare soil does not count for any habitat, just like the bodies of fresh water (not temporary raft), since it is impossible to establish a habitat for them. However, the masses of salt water and the temporary rafts each lead to a habitat 1150 and 3170*, respectively. This case perfectly exemplifies the added difficulty of building a correspondence list.

Finally, it should be noted, with regard to the actual interpretation of the results of this project and with regard to the execution of future similar studies, that the quality of data from a correspondence list will always be very inferior to the quality of data that directly evaluate reality according to the expected result model. In other words, if the objective is to estimate the presence of habitats, the cartography must be done in the field evaluating the habitats, and not just the syntaxa to then carry out a subsequent conversion. However, it was a necessary requirement for the later conversion, to the Lista Patrón de los Hábitats presents en España (Master List of Terrestrial habits present in Spain; LPEHT)[4]. As an alternative method, both lists could be evaluated separately, which would duplicate the work, but increases the accuracy of the observation.

[4] Link to the LPEHT: https://www.miteco.gob.es/es/biodiversidad/servicios/banco-datos-naturaleza/informacion-disponible/BDN_listas_patron.aspx

Establishment of correspondence with other habitat lists

It is presented, if available, for each combination of alliance - syntaxon - facies - physiognomy the code of the corresponding pattern list (Annex I: syntaxa - HTCI – LPEHT correspondence list).

The creation of the syntaxon to LPEHT correlation is, under the established methodology, somewhat impossible, for two very clear reasons:

First of all, there are more taxa in the master list than in the syntaxonomy, and the hierarchy between taxa would not be complementary, so it is practically impossible to establish a precise correspondence.

On the other hand, there is no professional in the Balearic Islands capable of differentiating all the groups that exist in the master list, since it is difficult to find personnel trained to differentiate the taxa (which account for a fifth) and even the habitats (of which there are about fifty).

Annex I: syntaxa - HTCI – LPEHT correspondence list

SINTAXON	FACIES	FISONOMIA	HIC	Sub-type	LPEHT
CHARETEA FRAGILIS					C1.141 / C1.25
Charetalia hispidae					C1.141 / C1.25
Charion fragilis	**Pond**	**Grassland**	**3170***	**3170-2**	**C1.141 / C1.25**
Charion fragilis	**Fresh water**	**Grassland**	**3140**		**C1.141 / C1.25**
Charion fragilis	**Salt water**	**Grassland**	**1150***		**C1.141 / C1.25**
Charion vulgaris	**Pond**	**Grassland**	**3170***	**3170-2**	**C1.141 / C1.25**
Charion vulgaris	**Fresh water**	**Grassland**	**3140**		**C1.141 / C1.25**
Charion vulgaris	**Salt water**	**Grassland**	**1150***		**C1.141 / C1.25**
Charion canescentis	**Pond**	**Grassland**	**3170***	**3170-2**	**C1.141 / C1.25**
Charion canescentis	**Fresh water**	**Grassland**	**3140**		**C1.141 / C1.25**
Charion canescentis	**Salt water**	**Grassland**	**1150***		**C1.141 / C1.25**
Charetum canescentis	Pond	Grassland	3170*	3170-2	C1.141 / C1.25
Charetum canescentis	Fresh water	Grassland	3140		C1.141 / C1.25
Charetum canescentis	Salt water	Grassland	1150*		C1.141 / C1.25
LEMNETEA					
Lemnetalia minoris					
Lemnion minoris	**Pond**	**Grassland**	**3170***	**3170-2**	**C1.221**
Lemnion minoris	**Fresh water**	**Grassland**	**3150**		**C1.221**
Lemnion minoris	**Salt water**	**Grassland**	**1150***		**C1.221**
Lemnetum gibbae	Pond	Grassland	3170*	3170-2	C1.221
Lemnetum gibbae	Fresh water	Grassland	3150		C1.221
Lemnetum gibbae	Salt water	Grassland	1150*		C1.221
Lemnetum minoris	Pond	Grassland	3170*	3170-2	C1.221
Lemnetum minoris	Fresh water	Grassland	3150		C1.221
Lemnetum minoris	Salt water	Grassland	1150*		C1.221
Lemnion trisulcae	**Pond**	**Grassland**	**3170***	**3170-2**	**C1.221**
Lemnion trisulcae	**Fresh water**	**Grassland**	**3150**		**C1.221**
Lemnion trisulcae	**Salt water**	**Grassland**	**1150***		**C1.221**
Ricciocarpetum natantis	Pond	Grassland	3170*	3170-2	C1.221
Ricciocarpetum natantis	Fresh water	Grassland	3150		C1.221
Ricciocarpetum natantis	Salt water	Grassland	1150*		C1.221
POTAMETEA					**C1.232 / C1.341 / C1.69**
Potametalia					**C1.232 / C1.341 / C1.69**
Potamion	**Pond**	**Grassland**	**3170***	**3170-2**	**C1.2321.ES / C1.69 (ponds)**
Potamion	**Fresh water**	**Grassland**	**3150**		**C1.2321.ES / C1.69 (ponds)**

Potamion	**Salt water**	**Grassland**	**1150***		**C1.2321.ES / C1.69 (ponds)**
Myriophyllo verticillati-Potametum pectinati	Pond	Grassland	3170*	3170-2	C1.2321.ES / C1.69 (ponds)
Myriophyllo verticillati-Potametum pectinati	Fresh water	Grassland	3150		C1.2321.ES / C1.69 (ponds)
Myriophyllo verticillati-Potametum pectinati	Salt water	Grassland	1150*		C1.2321.ES / C1.69 (ponds)
Potametum colorati	Pond	Grassland	3170*	3170-2	C1.2321.ES / C1.69 (ponds)
Potametum colorati	Fresh water	Grassland	3150		C1.2321.ES / C1.69 (ponds)
Potametum colorati	Salt water	Grassland	1150*		C1.2321.ES / C1.69 (ponds)
Potamo pectinati-Myriophylletum spicati	Pond	Grassland	3170*	3170-2	C1.2321.ES / C1.69 (ponds)
Potamo pectinati-Myriophylletum spicati	Fresh water	Grassland	3150		C1.2321.ES / C1.69 (ponds)
Potamo pectinati-Myriophylletum spicati	Salt water	Grassland	1150*		C1.2321.ES / C1.69 (ponds)
Ranunculion aquatilis	**Pond**	**Grassland**	**3170***	**3170-2**	**C1.341 / C1.69**
Ranunculion aquatilis	**Fresh water**	**Grassland**	**3150**		**C1.341 / C1.69**
Ranunculion aquatilis	**Salt water**	**Grassland**	**1150***		**C1.341 / C1.69**
Ranunculetum baudotii	Pond	Grassland	3170*	3170-2	C1.341
Ranunculetum baudotii	Fresh water	Grassland	3170*	3170-2	C1.341
Ranunculetum baudotii	Salt water	Grassland	1150*		C1.341
Callitricho-Ranunculetum aquatilis	Pond	Grassland	3170*	3170-2	C1.69
Callitricho-Ranunculetum aquatilis	Fresh water	Grassland	3150		C1.69
Callitricho-Ranunculetum aquatilis	Salt water	Grassland	1150*		C1.69
Zannichellion pedicellatae	**Pond**	**Grassland**	**3170***	**3170-2**	**C1.2324.ES**
Zannichellion pedicellatae	**Fresh water**	**Grassland**	**3150**		**C1.2324.ES**
Zannichellion pedicellatae	**Salt water**	**Grassland**	**1150***		**C1.2324.ES**
Najadetum marinae	Pond	Grassland	3170*	3170-2	C1.2324.ES
Najadetum marinae	Fresh water	Grassland	3150		C1.2324.ES
Najadetum marinae	Salt water	Grassland	1150*		C1.2324.ES
Zannichellietum pedicellatae	Pond	Grassland	3170*	3170-2	C1.2324.ES
Zannichellietum pedicellatae	Fresh water	Grassland	3150		C1.2324.ES
Zannichellietum pedicellatae	Salt water	Grassland	1150*		C1.2324.ES
Com. of *Althenia filiformis*	Fresh water	Grassland	3150		C1.2324.ES
Com. of *Althenia filiformis*	Salt water	Grassland	1150*		C1.2324.ES
Utricularietalia					**C1.23264.ES**
Ceratophyllion demersi	**Pond**	**Grassland**	**3170***	**3170-2**	**C1.23264.ES**

Ceratophyllion demersi	**Fresh water**	**Grassland**	**3150**		**C1.23264.ES**
Ceratophyllion demersi	**Salt water**	**Grassland**	**1150***		**C1.23264.ES**
Potamo-Ceratophylletum demersi	Pond	Grassland	3170*	3170-2	C1.23264.ES
Potamo-Ceratophylletum demersi	Fresh water	Grassland	3150		C1.23264.ES
Potamo-Ceratophylletum demersi	Salt water	Grassland	1150*		C1.23264.ES
RUPPIETEA					**C1.5211**
Ruppietalia maritimae					**C1.5211**
Ruppion maritimae	**Pond**	**Grassland**	**3170***	**3170-2**	**C1.5211**
Ruppion maritimae	**Fresh water**	**Grassland**	**3150**		**C1.5211**
Ruppion maritimae	**Salt water**	**Grassland**	**1150***		**C1.5211**
Enteromorpho intestinalidis-Ruppietum maritimae	Pond	Grassland	3170*	3170-2	C1.5211
Enteromorpho intestinalidis-Ruppietum maritimae	Fresh water	Grassland	3150		C1.5211
Enteromorpho intestinalidis-Ruppietum maritimae	Salt water	Grassland	1150*		C1.5211
Ruppietum drepanensis	Pond	Grassland	3170*	3170-2	C1.5211
Ruppietum drepanensis	Fresh water	Grassland	3150		C1.5211
Ruppietum drepanensis	Salt water	Grassland	1150*		C1.5211
Ruppietum spiralis	Pond	Grassland	3170*	3170-2	C1.5211
Ruppietum spiralis	Fresh water	Grassland	3150		C1.5211
Ruppietum spiralis	Salt water	Grassland	1150*		C1.5211
ISOETONANOJUNCETEA					**C3.42 / E3.2**
Isoetalia durieui					**C3.421 (ponds) / E3.2 (no ponds)**
Isoetion durieui	**Pond**	**Grassland**	**3170***	**3170-2**	**C3.421 (ponds) / E3.2 (no ponds)**
Isoetion durieui	**No pond**	**Grassland**	**6220***		**C3.421 (ponds) / E3.2 (no ponds)**
Isoetion durieui	**Salt water**	**Grassland**	**1150***		**C3.421 (ponds) / E3.2 (no ponds)**
Bellio bellidiodis-Menthetum pulegii	Pond	Grassland	3170*	3170-2	C3.421 (ponds) / E3.2 (no ponds)
Bellio bellidiodis-Menthetum pulegii	No pond	Grassland	6220*		C3.421 (ponds) / E3.2 (no ponds)
Bellio bellidiodis-Menthetum pulegii	Salt water	Grassland	1150*		C3.421 (ponds) / E3.2 (no ponds)
Isoetetum durieui	Pond	Grassland	3170*	3170-1	C3.421
Damasonio bourgaei-Crassuletum vaillantii	Pond	Grassland	3170*	3170-2	C3.421
Damasonio bourgaei-Crassuletum vaillantii	Salt water	Grassland	1150*	1150-2	C3.421
Com. of *Lythrum borysthenicum*	Pond	Grassland	3170*	3170*	C3.421

Nanocyperetalia					**C3.421 (ponds) / E3.2 (no ponds)**
Verbenion supinae	**Pond**	**Grassland**	**3170***	**3170-2**	**C3.421 (ponds) / E3.2 (no ponds)**
Verbenion supinae	**No pond**	**Grassland**	**6220***		**C3.421 (ponds) / E3.2 (no ponds)**
Polypogono maritimi-Centaurietum spicati	Pond	Grassland	3170*	3170-2	C3.421 (ponds) / E3.2 (no ponds)
Polypogono maritimi-Centaurietum spicati	No pond	Grassland	6220*		C3.421 (ponds) / E3.2 (no ponds)
Heleochloion schoenoidis	Pond	Grassland	3170*	3170-3	C3.423
Heleochloion schoenoidis	Salicornia /Sarcocornia	Grassland	1310		C3.423
Com. of *Crypsis aculeata*	Pond	Grassland	3170*	3170-3	C3.423
Com. of *Crypsis aculeata*	Salicornia /Sarcocornia	Grassland	1310		C3.423
MONTIOCARDAMINETEA					**C2.121 o D4.1N11**
Montio-Cardaminetalia		**Grassland**	**7220**	**7220-1**	**C2.121 o D4.1N11**
Cratoneurion commutati		Grassland	7220	7220-1	C2.121 o D4.1N11
Cratoneuro filicini-Anagallidetum tenellae		Grassland	7220	7220-1	C2.121 o D4.1N11
PHRAGMITO-MAGNOCARICETEA					**C3.2 / C3.421**
Phragmitetalia communis					**C3.2**
Phragmition communis		**Grassland**	**7210***		**C3.2**
Bolboschoenetum maritimi		Grassland	7210*		C3.27
Typho angustifoliae-Phragmitetum australis		Grassland	7210*		C3.21 / C3.22 / C3.23
Typho domingensis-Phragmitetum maximi		Grassland	7210*		C3.21 / C3.22 / C3.23
Typho–Schoenoplectetum glauci					C3.22 / C3.23
Nasturtio-Glycerietalia					**C3.24A / C3.26**
Glycerio-Sparganion	**pond**	**Grassland**	**3170***		**C3.24A / C3.26**
Glycerio-Sparganion		**Grassland**	**7210***		**C3.24A / C3.26**
Oenantho globulosae-Eleocharitetum palustris	pond	Grassland	3170*		C3.24A o C3.421A
Oenantho globulosae-Eleocharitetum palustris		Grassland	7210*		C3.24A o C3.421A
Phalaridetum arundinaceae		Grassland	7210*		C3.26
Nasturtion officinalis		**Grassland**	**7210***		**C3.421**
Apietum bermejoi		Grassland	7210*		C3.421
Helosciadietum nodiflori		Grassland	7210*		C3.421

Magnocaricetalia					**C3.24 / C3.28**
Magnocaricion elatae		**Grassland**	**7210***		**C3.24 / C3.28**
Cladio marisci-Caricetum hispidae		Grassland	7210*		C3.28
Irido pseudacori-Polygonetum serrulati		Grassland	7210*		C3.24
Bolboschoenetalia compacti		**Grassland**			**C3.27**
Bolboschoenion compacti		**Grassland**	**Others**		**C3.27**
Bolboschoenetum compacti		Grassland	Others		C3.27
AMMOPHILETEA					**B1.312 / B1.322 /B1.43**
Ammophiletalia					**B1.312 / B1.322**
Ammophilion australis		**Grassland**	**2120**		**B1.322**
Medicago marinae-Ammophiletum australis		Grassland	2120		B1.322
Eryngio maritimi-Pancratietum maritimi		Grassland	2120		B1.322
Agropyro-Minuartion peploidis		Grassland	2110		B1.312
Cypero mucronati-Agropyretum juncei		Grassland	2110		B1.312
Sporobolion sandrii		**Grassland**	**2120**		**B1.312**
Eryngio maritimi-Sporoboletum sandrii		Grassland	2120		B1.312
Crucianelletalia maritimae					**B1.43**
Crucianellion maritimae		**Scrub**	**2210**		**B1.43 / E1.66.ES (grassland) ???**
Loto cretici-Crucianelletum maritimae		Scrub	2210		B1.43
Ononido crispae-Scrophularietum minoricensis		Scrub	2210		B1.43
Fumano laevis-Scrophularietum ramosissimae prov.		Scrub	2210		B1.43
Com. of *Ononis ramosissima*		Scrub	2210		B1.43
CAKILETEA MARITIMAE					**B1.131 / B2.13**
Cakiletalia integrifoliae					**B1.131 (sand) / B2.13 (gravel)**
Cakilion maritimae		**Grassland**	**1210**		**B1.131 (sand) / B2.13 (gravel)**
Hypochoerido radicatae-Glaucietum flavi		Grassland	1210		B1.131 (sand) / B2.13 (gravel)
Salsolo kali-Cakiletum aegyptiacae		Grassland	1210		B1.131 (sand) / B2.13 (gravel)
CRITHMO - LIMONIETEA					**B3.3313.ES / B3.4 /F7.12**
Crithmo-Limonietalia					**B3.3313.ES / B3.4 /F7.12**

Crithmo-Limonion		**Scrub**	**1240**		**B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)**
Crithmo-Limonietum balearici		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Dauco commutati-Limonietum biflori		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Dauco commutati-Limonietum marisolii		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Limonietum caprariensis		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Limonietum ebusitani		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Limonietum majorico gymnesici		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Limonietum pseudodictyoclado-carregadorensis		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Com. of *Limonium cossonianum and L. formenterae prov.*		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)

Com. of *Limonium minoricensis*		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Com. of *Limonium fontquerii*		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Com. of *Limonium artruchium prov.*		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Com. of *Frankenia composita and Polycarpon colomense*		Scrub	1240		B3.3313.ES (consolidated substrate) / B3.4 (unconsolidated substrate)
Launaeion cervicornis		**Scrub**	**5430**		**F7.12**
Euphorbio pithyusae-Anthemidetum maritimae		Scrub	5430		F7.12
Helichryso microphylli-Dorycnietum fulgurantis		Scrub	5430		F7.12
Launaeetum cervicornis		Scrub	5430		F7.12
Thymelaeo hirsutae-Asteriscetum maritimi		Scrub	5430		F7.12
Com. of Atriplex halimus and Launaea cervicornis		Scrub	5430		F7.12
JUNCETEA MARITIMI -					**A2.5 / E3.14.ES**
Juncetalia maritimi -					**A2.5221.ES**
Juncion maritimi		**Grassland**	**1410**		**A2.5221.ES**
Caricetum divisae		Grassland	1410		A2.5221.ES
Elymo elongati-Juncetum maritimi		Grassland	1410		A2.5221.ES
Juncetum maritimosubulati		Grassland	1410		A2.5221.ES
Spartino versicolori-Juncetum maritimi		Grassland	1410		A2.5221.ES
Plantaginion crassifoliae	**Salt marsh**	**Grassland**	**1410**		**E3.14.ES (no Dunes) /A2.532 (Dunes)**
Plantaginion crassifoliae	**Dunes**	**Grassland**	**2190**		**E3.14.ES (no Dunes) /A2.532 (Dunes)**
Schoeno nigricantis-Plantaginetum crassifoliae	Salt marsh	Grassland	1410		E3.14.ES (no Dunes)

					/A2.532 (Dunes)
Schoeno nigricantis-Plantaginetum crassifoliae	Dunes	Grassland	2190		E3.14.ES (no Dunes) /A2.532 (Dunes)
Schoenus nigricans and Juncus acutus	Salt marsh	Grassland	1410		E3.14.ES (no Dunes) /A2.532 (Dunes)
Com. of Schoenus nigricans and Juncus acutus	Dunes	Grassland	2190		E3.14.ES (no Dunes) /A2.532 (Dunes)
SAGINETEA MARITIMAE					**A2.552**
Frankenietalia pulverulentae					**A2.552**
Frankenion pulverulentae		**Grassland**	**1310**		**A2.552**
Parapholido incurvae-Frankenietum pulverulentae		Grassland	1310		A2.552
Sagino maritimae-Bellidetum bellidioidis		Grassland	1310		A2.552
Com. of Limonium echioides and Sagina maritima		Grassland	1310		A2.552
Com. of Spergularia heldreichii		Grassland	1310		A2.552
Hordeion marini		Grassland	1310		A2.552
Plantagini coronopodi-Hordeetum marini		Grassland	1310		A2.552
SALICORNIETEA FRUTICOSAE					**A2.55 / F6.82 /E6.1115.ES**
Salicornietalia fruticosae					**A2.5516 / A2.552 /F6.82**
Salicornion fruticosae		**Scrub**	**1420**		**A2.5516**
Statico bellidifoliae-Salicornietum fruticosae	Salt marsh	Scrub	1420		A2.5516
Statico bellidifoliae-Salicornietum fruticosae		Scrub	1420		A2.5516
Arthrocnemion glauci		**Scrub**	**1420**		**A2.5516**
Sphenopo divaricati-Arthrocnemetum glauci		Scrub	1420		A2.5516
Sarcocornietum alpini		Scrub	1420		A2.5516
Suaedion verae	**Salt marsh**	**Scrub**	**1420**		**A2.552 (Salt marshes) /F6.82 (nitrófila)**
Suaedion verae	**Nitrófila**	**Scrub**	**1430**		**A2.552 (Salt marshes) /F6.82 (nitrófila)**
Suaedetum fruticosae	Salt marsh	Scrub	1420		A2.552 (Salt marshes) /F6.82 (nitrófila)

Suaedetum fruticosae	Nitrófila	Scrub	1430		A2.552 (Salt marshes) /F6.82 (nitrófila)
Limonietalia		**Scrub**	**1510***		**E6.1115.ES**
Limonion confusi		**Scrub**	**1510***		**E6.1115.ES**
Artemisio gallicae-Staticetum virgatae		Scrub	1510*		E6.1115.ES
Frankenio marcosii-Limonietum ferulacei		Scrub	1510*		E6.1115.ES
Frankenio pulverulentae-Limonietum grosii		Scrub	1510*		E6.1115.ES
Inulo crithmoidis-Limonietum virgati		Scrub	1510*		E6.1115.ES
Limonietum antonillorensii-migjornensis		Scrub	1510*		E6.1115.ES
Limonietum magallufiano-boirae		Scrub	1510*		E6.1115.ES
Limonietum retusoformenterae		Scrub	1510*		E6.1115.ES
THERO-SUAEDETEA					**A2.55**
Thero-Suaedetalia					**A2.552**
Thero-Suaedion		**Grassland**	**1310**		**A2.552**
Atriplici salinae-Suaedetum spicati		Grassland	1310		A2.552
Cressetum villosae		Grassland	1310		A2.552
Com. of*Salsola soda*		Grassland	1310		A2.552
Thero-Salicornietalia -					A2.5516
Salicornion patulae		**Grassland**	**1310**		**A2.5516**
Salicornietum emerici		Grassland	1310		A2.5516
Pop. of *Suaeda spicata*		Grassland	1310		A2.5516
ANOMODONTOPOLYPODIETEA					**H3.2**
Anomodonto-Polypodietalia					**H3.2**
Polypodion serrati		**Grassland**	**8210**		**H3.2143**
Polypodietum serrati		Grassland	8210		H3.2143
Com. of Saxifraga cossoniana and Chaenorhinum pithyusicum		Grassland	8210		?
Sandrion balearici		**Grassland**	**8210**	**8210-2**	**H3.2**
Micromerio filiformis-Allietum antonii-bolosii		Grassland	8210	8210-2	H3.2
Sibthorpio africanae-Sandrietum balearicae		Grassland	8210	8210-2	H3.2
Solenopsio balearicae-Naufragetum balearicae		Grassland	8210	8210-2	H3.2
Bellio bellidiodis-Crocetum cambessedesii		Grassland	8210	8210-2	H3.2
Selaginello denticulatae-Anogrammion leptophyllae		**Grassland**	**8210**		**H3.1F.ES (silicícola) /H3.2K.ES (calcícola)**

Selaginello denticulatae-Anogrammetum leptophyllae		Grassland	8210	8210-1	H3.1F.ES (silicícola) /H3.2K.ES (calcícola)
Com. of *Asplenium balearicum*		Grassland	8210	8210-2	H3.2K.ES
THLASPIETEA ROTUNDIFOLII					**H2.6J.ES**
Andryetalia ragusinae					**H2.6J.ES**
Glaucion flavi		**Grassland**	**8130**		**H2.6J.ES**
Com. of *Linaria aeruginea* and *Scrophularia canina*		Grassland	8130		H2.6J.ES
Pop. of *Cystopteris fragilis* and *Dryopteris tyrrhena*		Grassland	8130		H2.6J.ES
ADIANTETEA					**H3.411.ES**
Adiantetalia capilli-veneris					**H3.411.ES**
Adiantion capilli-veneris		**Grassland**	**7220**	**7220-2**	**H3.411.ES**
Eucladio-Adiantetum capilli-veneris		Grassland	7220	7220-2	H3.411.ES
Trachelio coerulei-Adiantetum capilliveneris		Grassland	7220	7220-2	H3.411.ES
Com. of *Adiantum capillus-veneris and Crithmum maritimum*		Grassland	7220	7220-2	H3.411.ES
ASPLENIETEA TRICHOMANIS					**H3.21**
Asplenietalia glandulosi					**H3.21**
Asplenion glandulosi		**Scrub**	**8210**	**8210-1**	**H3.211**
Saturejo filiformis-Asplenietum petrarchae		Scrub	8210	8210-1	H3.211
Brassico balearicae-Helichrysion rupestris		**Scrub**	**8210**	**8210-1**	**H3.213**
Hippocrepidetum balearicae		Scrub	8210	8210-1	H3.213
Potentillo caulescentis-Pimpinelletum balearicae		Scrub	8210	8210-1	H3.213
Scabioso creticae-Asperuletum paui		Scrub	8210	8210-1	H3.213
Thymo ebusitani-Hippocrepidetum grosii		Scrub	8210	8210-1	H3.213
Cheilanthetalia maranto-maderensis		**Scrub**	**8210**	**8210-1**	**H3.21**
Phagnalo saxatilis-Cheilanthion maderensis		**Scrub**	**8210**	**8210-1**	**H3.21**
Com. of *Cheilanthes acrostica and Cosentinia vellea*		Scrub	8210	8210-1	H3.21
PARIETARIETEA					**H3.7.ES**
Parietarietalia					**H3.7.ES**
Parietario-Galion muralis		**Scrub**	**8210**		**H3.7.ES**
Parietario-Galion muralis		**Scrub**	**Others**		**H3.7.ES**
Capparidetum inermis		Scrub	Others		H3.7.ES
Parietario judaicae-Phyllitidetum sagittatae		Grassland	8210		H3.7.ES
Cymbalario-Asplenion		**Grassland**	**8210**		**H3.7.ES**
Umbilicetum gaditani		Grassland	8210		H3.7.ES

Com. of *Umbilicus horizontalis and Asplenium majoricum*		Grassland	8210		H3.7.ES
Asplenion marini		**Grassland**	**8210**		**H3.7.ES**
Parietario judaicae-Asplenietum sagittati		Grassland	8210		H3.7.ES
Com. of *Asplenium marinum and Crithmum maritimum*		Grassland	8210		H3.7.ES
Lavaterion maritimae		**Scrub**	**8210**		**H3.7.ES**
Com. of *Ballota hirsuta, Fagonia cretica and Lavatera maritima*		Scrub	8210		H3.7.ES
PEGANO HARMALAESALSOLETEA VERMICULATAE					**F6.82**
Salsolo vermiculatae-Peganetalia harmalae		**Scrub**	**1430**		**F6.82**
Salsolo vermiculatae-Peganion harmalae		**Scrub**	**1430**		**F6.82**
Soncho tenerrimi-Salsoletum vermiculatae		Scrub	1430		F6.82
Carthamo arborescentis-Salsolion oppositifoliae		**Scrub**	**1430**		**F6.82**
Salsolo vermiculatae-Lycietum intricatae		Scrub	1430		F6.82
Medicagini citrinae-Lavaterion arboreae		**Scrub**	**1430**		**F6.8233.ES**
Beto marcosii-Medicaginetum citrinae		Scrub	1430		F6.8233.ES
Lavateretum arboreae		Scrub	1430		F6.8233.ES
Medicagini citrinae-Lavateretum arboreae		Scrub	1430		F6.8233.ES
Com. of *Euphorbia margalidiana and Lavatera arborea*		Scrub	1430		F6.8233.ES
Lycio europaei-Ipomoeion purpureae		**Scrub**	**Others**		**F6.82**
Pharbitidi purpureae-Lycietum europaei		Scrub	Others		F6.82
Nicotiano glaucae-Ricinion communis		**Scrub**	**Others**		**F6.82**
Com. of *Ricinus communis and Nicotiana glauca*		Scrub	Others		F6.82
POLYGONO-POETEA ANNUA					**E1.E**
Polygono sandstri-Poetalia annuae					**E1.E**
Sclerochloo durae-Coronopodion squamati		**Grassland**	**6220***		**E1.E**
Coronopodo procumbentis-Sclerochloetum durae	Pond	Grassland	3170*		
Coronopodo procumbentis-Sclerochloetum durae		Grassland	6220*		E1.E
Polycarpion tetraphylli		**Grassland**	**6220***		**E1.E**
Crepido pusilli-Filaginetum petro-ianii		Grassland	6220*		E1.E
Solivetum stoloniferae		Grassland	6220*		E1.E

STELLARIETEA MEDIAE					**A2.5526.ES**
Chenopodietalia muralis		**-**	**-**		**A2.5526.ES**
Mesembryanthemion cristallini		**Grassland**	**Others**		**A2.5526.ES**
Gasouletum crystallinonodiflori		Grassland	Others		A2.5526.ES
Com. of *Mesembryanthemum crystallinum*		Grassland	Others		A2.5526.ES
Com. of *Aizoon hispanicum*		Grassland	Others		A2.5526.ES
GALIO-URTICETEA					**E5.43**
Alliarietalia petiolatae		**Grassland**	**6430**		**E5.43**
Galio-Alliarion petiolatae		**Grassland**	**6430**	**6430-4**	**E5.43**
Urtico membranaceae-Smyrnietum olusatri		Grassland	6430	6430-4	E5.43
Com. of *Delphinium pictum*		Grassland	6430	6430-4	E5.43
Com. of *Urtica bianorii/Pimpinella bicknellii*		Grassland	6430	6430-4	E5.43
Balloto-Conion maculati		**Grassland**	**Others**		**E5.1**
Pop. Of *Ballota nigra subsp. foetida, Conium maculatum, Dipsacus fullonum, Magydaris panacifolia, Rubia tinctoria* and *Sambucus ebulus*		Grassland	Others		E5.1
Convolvuletalia sepium		**Grassland**	**6430**		**C3.32 / E3.18.ES**
Convolvulion sepium		**Grassland**	**6430**		**C3.32 / E3.18.ES**
Arundini donacis-Convolvuletum sepium		Grassland	6430	6430-1	C3.32
Ipomoeo sagittatae-Cynanchetum acuti		Grassland	6430		?
Com. of *Arundo micrantha*		Grassland	6430	6430-2	C3.32
Com. of *Epilobium hirsutum*		Grassland	6430	6430-3	E3.18.ES
HELIANTHEMETEA GUTTATI					**E1.811**
Helianthemetalia guttati					**E1.811**
Helianthemion guttati		**Grassland**	**6220***		**E1.811**
Linario cirrhosae-Helianthemetum guttati		Grassland	6220*		E1.811
Com. of *Sedum caespitosum*		Grassland	6220*		E1.811
Trachynietalia distachyae		**-**	**-**		**E1.3131**
Trachynion distachyae		**Grassland**	**6220***		**E1.3131**
Airo cupanianae-Chaenorhinetum formenterae		Grassland	6220*		E1.3131
Saxifrago tridactylitae-Sedetum stellati		Grassland	6220*		E1.3131
Stipion retortae		Grassland	6220*		E1.3131
Irido-Stipetum retortae		Grassland	6220*		E1.3131
Com. of *Limonium echioides*		Grassland	6220*		E1.3131
Cutandietalia maritimae		**-**	**-**		**B1.47**
Alkanno-Maresion nanae		**Grassland**	**2230**		**B1.47**
Laguro ovati-Silenetum balearici		Grassland	2230		B1.47

Chaenorhino formenterae-Silenetum cambessedesii		Grassland	2230		B1.47
Malcolmio ramosissimae-Vulpietum membranaceae		Grassland	2230		B1.47
Vulpiello tenuis-Cutandietum maritimae		Grassland	2230		B1.47
Com. of *Chaenorhinum bianori and Maresia nana*		Grassland	2230		B1.47
LYGEO SPARTISTIPETEA TENACISSIMAE		**-**	**-**		**B1.49 / E1.311 / E1.41/ E1.3139.ES /E1.43411.ES / E1.C /E1.2I.ES**
Lygeo sparti-Stipetalia tenacissimae		**-**	**-**		**B1.49 / E1.311 / E1.41/ E1.3139.ES / E1.C /E1.2I.ES**
Thero-Brachypodion ramosi	**Dunes**	**Grassland**	**2240**		**B1.49 / E1.311 /E1.3139.ES / E1.C**
Thero-Brachypodion ramosi		**Grassland**	**6220***		**B1.49 / E1.311 /E1.3139.ES / E1.C**
Allietum chamaemolyos		Grassland	6220*		E1.C / E1.3139.ES
Hypochoerido achyrophorae-Brachypodietum ramosi	Dunes	Grassland	2240		B1.49 (Dunes) / E1.311 (no Dunes)
Hypochoerido achyrophorae-Brachypodietum ramosi		Grassland	6220*		B1.49 (Dunes) / E1.311 (no Dunes)
Poo bulbosae-Phlomidetum italici		Scrub	6220*		E1.C / E1.3139.ES
Com. of*Allium eivissanum and Urginea fugax*		Grassland	6220*		E1.C / E1.3139.ES
Com. of *Scilla obtusifolia*		Grassland	6220*		E1.C / E1.3139.ES
Stipion tenacissimae		**Grassland**	**6220***		**E1.41**
Pop. of *Stipa tenacissima*		Grassland	6220*		E1.41
Stipion parviflorae	**Dunes**	**Grassland**	**2240**		**B1.49**
Stipion parviflorae		**Grassland**	**6220***		**E1.2I.ES**
Salvio verbenacae-Plantaginetum albicantis	Dunes	Grassland	2240		B1.49
Salvio verbenacae-Plantaginetum albicantis		Grassland	6220*		E1.2I.ES
Hyparrhenietalia hirtae		**-**	**-**		**E1.43411.ES**
Hyparrhenion hirtae		**Grassland**	**6220***		**E1.43411.ES**
Andropogonetum hirto-pubescentis		Grassland	6220*		E1.43411.ES
FESTUCO-BROMETEA ERECTI		**-**	**-**		**E1.2A1.ES**
Brachypodietalia phoenicoidis		**-**	**-**		**E1.2A1.ES**
Brachypodion phoenicoidis		**Grassland**	**6220***		**E1.2A1.ES**

Brachypodietum phoenicoidis		Grassland	6220*		E1.2A1.ES
Hyperico perfoliati-Brachypodietum phoenicoidis		Grassland	6220*		E1.2A1.ES
SEDOSCLERANTHETEA		**-**	**-**		**E1.1**
Alyso-Sedetalia		**-**	**-**		**E1.1**
Sedion micranthosediformis		**Grassland**	**6110***		**E1.1**
Sedetum micranthosediformis		Grassland	6110*		E1.1
MOLINIOARRHENATHERETEA		**-**	**-**		**A2.532 / E3.1 / E3.44 /E5.44**
Holoschoenetalia vulgaris	**Dunes**	**Grassland**	**2190**		**A2.532 / E3.1**
Holoschoenetalia vulgaris		**Grassland**	**6420**		**A2.532 / E3.1**
Molinio-Holoschoenion vulgaris	**Dunes**	**Grassland**	**2190**		**A2.532 / E3.1**
Molinio-Holoschoenion vulgaris		**Grassland**	**6420**		**A2.532 / E3.1**
Geranio dissecti-Ranunculetum macrophylli		Grassland	6420	6420-2	E3.1
Hypericetum cambessedesii		Grassland	6420	6420-3	E3.13.ES
Inulo viscosae-Schoenetum nigricantis	Dunes	Grassland	2190		A2.532 (Dunes) /E3.14.ES (no Dunes)
Inulo viscosae-Schoenetum nigricantis		Grassland	6420	6420-1	A2.532 (Dunes) /E3.14.ES (no Dunes)
Crypsio-Paspaletalia distichi			**-**	**-**	**E5.442.ES**
Paspalo distichi-Polypogonion viridis		**Grassland**	**3290**		**E5.442.ES**
Astero squamati-Panicetum repentis		Grassland	3290		E5.442.ES
Cyperetum distachyi		Grassland	3290		E5.442.ES
Lippio nodiflorae-Panicetum repentis		Grassland	3290		E5.442.ES
Paspalo distichi-Agrostietum verticillatae		Grassland	3290		E5.442.ES
Plantaginetalia majoris		**Grassland**	**3290**		**E3.1 / E3.44**
Trifolio fragiferi-Cynodontion		**Grassland**	**3290**		**E3.1 / E3.44**
Com. of*Cotula coronopifolia*		Grassland	3290		E5.44
Com. of*Prunella vulgaris*		Grassland	3290		E5.44
Potentillo reptantis-Agrostietum stoloniferae		Grassland	3290		E5.44
Trifolio fragiferi-Cynodontetum dactyli		Grassland	3290		E5.44
Com. of *Achillea ageratum*		Grassland	6420	6420-4	E3.1
CISTOLAVANDULETEA			**-**		**¿F5.57?**
Lavanduletalia stoechadis			**-**		**¿F5.57?**
Cistion ladaniferi		**Scrub**	**5330**		**¿F5.57?**
Cisto albidi-Genistetum hirsutae					¿F5.57?
ROSMARINETEA OFFICINALIS			**-**		**F5.56B / F6.1 / F7.12 /F7.4 / H2.6J**

Rosmarinetalia officinalis			**-**		**F5.56B / F6.1 / F7.12 /F7.4 / H2.6J**
Rosmarino-Ericion		***Scrub***	***5330***		***F5.56B / F6.1***
Anthyllido cytisoidis-Teucrietum majorici		Scrub	5330		F6.1
Cytiso fontanesii-Genistetum dorycnifoliae		Scrub	5330	5330-9	F5.56B
Loto tetraphylli-Ericetum multiflorae		Scrub	5330		F6.1B
Teucrio piifonti-Corydothymetum capitati		Scrub	5330	5330-8	F6.171.ES
Teucrio dunensis-Helianthemetum capitis-felicis		Scrub	2260		F6.1D
Teucrio dunensis-Thymelaeetum velutinae		Scrub	2260		F6.1F
Helianthemo serrae-Micromerietum microphyllae		Scrub	2260		F6.1D
Hypericion balearici		**Scrub**	**4090**		**F7.12 / F7.4 / H2.6J**
Sandrio bolosi-Euphorbietum maresii		Scrub	8130		H2.6J.ES
Astragalo balearici- Teucrietum mari		Scrub	5320		F7.4472
Genisto fasciculatae-Thymelaeetum velutinae		Scrub	4090		F7.4471
Pastinacetum lucidae		Scrub	8130		H2.6J.ES
Santolino magonicae-Astragaletum balearici		Scrub	5320		F7.12
Santolino magonicae-Anthyllidetum hystricis		Scrub	5320		F7.12
Teucrietum subspinosi		Scrub	4090		F7.4471
RHAMNO-PRUNETEA			**-**		**F3.1126**
Prunetalia spinosae			**-**		**F3.1126**
Pruno-Rubion ulmifolii		**Scrub**	**Others**		**F3.1126**
Rubo ulmifolii-Coriarietum myrtifoliae		Scrub	Others		F3.1126
Rubo ulmifolii-Crataegetum brevispinae		Scrub	Others		F3.1126
Pop. of *Crataegus monogyna*		Scrub	Others		F3.1126
Pop. of *Prunus spinosa*		Scrub	Others		F3.1126
Com. of *Rosa* spp.		Scrub	Others		F3.1126
NERIOTAMARICETEA			**-**		**F9.313**
Tamaricetalia africanae			**-**		**F9.313**
Tamaricion africanae		**Scrub**	**92D0***		**F9.3131**
Tamaricetum gallicae		Scrub	92D0*		F9.3131
Com. of *Tamarix africana vars.* and *T.arborea*		Scrub	92D0*		F9.3131
Tamaricion boveanocanariensis		**Scrub**	**92D0***		**F9.3134**
Com. of *Tamarix canariensis and T.boveana*		Scrub	92D0*		F9.3134

Com. of *Suaeda vera and Tamarix mascatensis*		Scrub	92D0*		F9.3134
Com. of *Limonium gymnesicum and Tamarix canariensis/boveana*		Scrub	92D0*		F9.3134
Rubo ulmifolii-Nerion oleandri		**Scrub**	**92D0***		**F9.31**
Leucoio pulchelli-Viticetum agni-casti		Scrub	92D0*		F9.312
Rubo ulmifolii-Nerietum oleandri		Scrub	92D0*		F9.311
SALICI PURPURAEPOPULETEA NIGRAE					**G1.3**
Populetalia albae					**G1.3**
Populion albae		**Forest**	**92A0***		**G1.3**
Vinco difformis-Populetum albae	*Populus sp.*	Forest	92A0*		G1.3
Vinco difformis-Populetum albae	*Populus sp.*	Scrub with trees	92A0*		G1.3
Vinco difformis-Populetum albae	*Platanus sp.*	Forest	92A0*		G1.3
Vinco difformis-Fraxinetum angustifoliae	*Fraxinus angustifolia*	Scrub with trees	91B0		G1.3
Vinco difformis-Fraxinetum angustifoliae	*Fraxinus angustifolia*	Forest	91B0		G1.3
Hedero helicis-Ulmetum minoris	*ulmus minor*	Scrub with trees	92A0*		G1.3
Hedero helicis-Ulmetum minoris	*ulmus minor*	Forest	92A0*		G1.3
QUERCETEA ILICIS			**-**		
Quercetalia ilicis			**-**		**G2.12**
Quercion ilicis	***Quercus ilex***	**Forest**	**9340**	**9340-1**	**G2.1214**
Cyclamini-Quercetum ilicis	*Quercus ilex*	Forest	9340	9340-1	G2.1214
Cyclamini-Quercetum ilicis	*Quercus ilex*	Scrub	9340	9340-1	
Cyclamini-Quercetum ilicis	*Quercus ilex*	Scrub with trees	9340	9340-1	
Querco rotundifoliae-Oleion sylvestris	***Quercus rotundifolia***	**Forest**	**9340**	**9340-2**	**G2.1246**
Clematido cirrhosae-Quercetum rotundifoliae	*Quercus rotundifolia*	Forest	9340	9340-2	
Clematido cirrhosae-Quercetum rotundifoliae	*Quercus rotundifolia*	Scrub	9340	9340-2	G2.1246
Clematido cirrhosae-Quercetum rotundifoliae	*Quercus rotundifolia*	Scrub with trees	9340	9340-2	
Pistacio lentisci-Rhamnetalia alaterni				**-**	**B2.63 / F5.1 / F5.2 /F5.5 / G2.41 / G3.742/G3.9A**
Oleo sylvestris-Ceratonion siliquae					**B2.63 / F5.1 / F5.2 /F5.5 / G2.41 / G3.742/G3.9A**
Ampelodesmo mauritanici-Arbutetum unedonis	*Ampelodesmos mauritanica*	Grassland	5330	5330-5	F5.1B.ES
Ampelodesmo mauritanici-Arbutetum unedonis		Scrub	5330	5330-1	F5.1B.ES
Ampelodesmo mauritanici-Arbutetum unedonis	*Arbutus unedo*	Scrub	5330	5330-1	F5.1B.ES

Ampelodesmo mauritanici-Arbutetum unedonis	*Pinus halepensis*	Forest	9540		G3.742
Aro picti-Phillyreetum rodriguezii	*Ampelodesmos mauritanica*	Grassland	5330	5330-5	F5.51A1
Aro picti-Phillyreetum rodriguezii	*Juniperus sp.*	Scrub	5210		F5.51A1
Aro picti-Phillyreetum rodriguezii		Scrub	5330	5330-6	F5.51A1
Buxo balearicae-Genistetum majoricae		Scrub	5110		F5.51E
Clematido balearicae-Myrtetum communis		Scrub	5330	5330-2	F5.124
Cneoro tricocci-Ceratonietum siliquae	*Ampelodesmos mauritanica*	Grassland	5330	5330-5	G3.9A
Cneoro tricocci-Ceratonietum siliquae	*Juniperus sp.*	Scrub	5210		G3.9A
Cneoro tricocci-Ceratonietum siliquae		Scrub	5330	5330-6	F5.121
Cneoro tricocci-Ceratonietum siliquae	*Olea europaea*	Scrub	5330	5330-6	G2.41
Cneoro tricocci-Ceratonietum siliquae	*Olea europaea*	Scrub with trees	5330	5330-6	
Cneoro tricocci-Ceratonietum siliquae	*Olea europaea*	Forest	9320		G2.41
Cneoro tricocci-Ceratonietum siliquae	*Pinus halepensis*	Scrub	5330	5330-6	G3.742
Cneoro tricocci-Ceratonietum siliquae	*Pinus halepensis*	Scrub with trees	5330	5330-6	G3.742
Cneoro tricocci-Ceratonietum siliquae	*Pinus halepensis.* Repoblación poco o nada integrada	Scrub with trees	Others		G3.742
Cneoro tricocci-Ceratonietum siliquae	*Pinus halepensis.* Repoblación poco o nada integrada	Forest	Others		G3.742
Cneoro tricocci-Ceratonietum siliquae	*Pinus halepensis*	Forest	9540		G3.742
Cneoro tricocci-Ceratonietum siliquae	*Euphorbia dendroides*	Scrub	5330	5330-4	F5.52
Cneoro tricocci-Rhamnetum bourgeani		Scrub	5330	5330-6	F5.51B1.ES
Cneoro tricocci-Pistacietum lentisci		Scrub	5330	5330-6	G3.9A
Cneoro tricocci-Pistacietum lentisci	*Juniperus sp.*	Scrub	5210		G3.9A
Cneoro tricocci-Pistacietum lentisci		Scrub with trees	5330	5330-6	
Cneoro tricocci-Pistacietum lentisci	*Ampelodesmos mauritanica*	Grassland	5330	5330-5	F5.121
Cneoro tricocci-Pistacietum lentisci	*Pinus halepensis.* Repoblación	Scrub	5330	5330-6	G3.742

	poco o nada integrada				
Cneoro tricocci-Pistacietum lentisci	*Pinus halepensis.* Repoblación poco o nada integrada	Scrub with trees	5330	5330-6	G3.742
Cneoro tricocci-Pistacietum lentisci	*Pinus halepensis*	Forest	9540		G3.742
Prasio-Oleetum sylvestris	*Juniperus sp.*	Scrub with trees	5210		G3.9A
Prasio-Oleetum sylvestris	*Juniperus sp.*	Scrub	5210		G3.9A
Prasio-Oleetum sylvestris	*Pinus halepensis*	Forest	9540		G3.742
Prasio-Oleetum sylvestris		Scrub	5330	5330-6	F5.121
Prasio-Oleetum sylvestris	*Pinus halepensis*	Scrub	5330	5330-6	F5.121
Prasio-Oleetum sylvestris	*Pinus halepensis.* Repoblación poco o nada integrada	Scrub with trees	Others		G3.742
Prasio-Oleetum sylvestris	*Pinus halepensis.* Repoblación poco o nada integrada	Forest	Others		G3.742
Prasio-Oleetum sylvestris	*Pinus halepensis*	Scrub with trees	5330	5330-6	F5.121
Prasio-Oleetum sylvestris	*Ampelodesmos mauritanica*	Grassland	5330	5330-5	G2.41
Prasio-Oleetum sylvestris	*Olea europaea*	Scrub with trees	5330	5330-6	G2.41
Prasio-Oleetum sylvestris	*Olea europaea*	Forest	9320		G2.41
Prasio-Oleetum sylvestris	*Euphorbia dendroides*	Scrub	5330	5330-4	G2.41
Euphorbietum dendroidis		Scrub	5330	5330-4	F5.52
Rhamno ludovicisalvatoris-Juniperetum turbinatae	*Euphorbia dendroides*	Scrub	5330	5330-4	G3.9A
Rhamno ludovicisalvatoris-Juniperetum turbinatae		Scrub	5210		G3.9A
Rhamno ludovicisalvatoris-Juniperetum turbinatae	*Pinus halepensis*	Forest	9540		G3.742
Junipero turbinatae-Pinetum halepensis	*Pinus halepensis*	Scrub with trees	2270*		G3.742
Junipero turbinatae-Pinetum halepensis	*Pinus halepensis*	Forest	2270*		G3.742
Smilaco balearicae-Ampelodesmetum mauritanicae		Scrub	5330	5330-5	F5.53
Smilaco balearicae-Ampelodesmetum mauritanicae	*Ampelodesmos mauritanica*	Grassland	5330	5330-5	F5.53

Com. of *Olea europaea* and *Phillyrea latifolia* prov.		Scrub	5330	5330-6	F5.121
Com. of *Olea europaea* and *Phillyrea latifolia* prov.		Scrub with trees	5330	5330-6	G2.41
Com. of *Olea europaea* and *Phillyrea latifolia* prov.		Forest	9320		G2.41
Juniperion turbinatae		**Scrub**	**2250***		**B1.631 (J. macrocarpa)/ B2.632 (J. turbinata)**
Clematidi balearicae-Juniperetum turbinatae	Juniperus sp.	Scrub with trees	2250*		B2.632
Clematidi balearicae-Juniperetum turbinatae		Scrub	2250*		B2.632
Rubio longifoliae-Juniperetum macrocarpae		Scrub	2250*		B1.631
Rubio longifoliae-Juniperetum macrocarpae	Juniperus sp.	Scrub with trees	2250*		B1.631
Ericion arboreae		Scrub	4030		F5.2
Ampelodesmo mauritanicae-Ericetum scopariae		Scrub	4030		F5.22
Phillyreo rodriguezii-Arbutetum unedonis		Scrub	4030		F5.211
Com. of *Erica arborea* en dolinas		Scrub	5330	5330-7	F5.22
Arbuto unedonis-Laurion nobilis		Scrub	5230*		F5.18
Pop. of *Laurus nobilis*		Scrub	5230*		F5.18
QUERCO-FAGETEA					**G1.7C32 / G3.97B.ES**
Quercetalia pubescentis					**G1.7C32 / G3.97B.ES**
Aceri granatensis-Quercion fagineae			**-**		**G1.7C32 / G3.97B.ES**
Aceri granatensis-Quercion fagineae	***Quercus ilex***	**Forest**	**9330**		**G1.7C32 / G3.97B.ES**
Primulo balearicae-Aceretum granatensis	*Acer granatense*	Forest	9240		G1.7C32
Primulo balearicae-Aceretum granatensis		Scrub with trees	9240		G1.7C32
Primulo balearicae-Aceretum granatensis		Scrub	9240		G1.7C32
Pop. of *Taxus baccata*		Scrub	9580*		G3.97B.ES
OTHERS					
others					
Artificial			Others		
crop			Others		
Mixed (crop -artificial)			Others		
Bare ground			Others		
Ruderal			Others		
Undetermined			Others		
Undetermined		Forest	Others		
Undetermined		Scrub	Others		

Undetermined		Scrub with trees	Others		
Undetermined		Grassland	Others		
Water body			Others		
Water body	Salt water		1150*		
Water body	Fresh water		Others		
Water body	Pond		3170*	3170-2	
Water body	Dunes		2190		