



Strasbourg, 27 June 2012
[PA06e_2012.doc]

T-PVS/PA (2012) 6

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

**Group of Experts on
Protected Areas and Ecological Networks**

4th meeting
18-19 September 2012
Council of Europe, Strasbourg, France

**Extract from the list of decisions and adopted texts
of the 31st meeting of the Standing Committee
of the Bern Convention**

*Document prepared by
the Directorate of Democratic Governance, Culture and Diversity*

*This document will not be distributed at the meeting. Please bring this copy.
Ce document ne sera plus distribué en réunion. Prière de vous munir de cet exemplaire*

Table of Contents

Point 5.5 Habitats	3
Appendix 1 Recommendation No. 157 (2011) of the Standing Committee, adopted on 2 December 2011, on the status of candidate Emerald sites and guidelines on the criteria for their nomination.....	6
Appendix 2 Revised Appendix 1 of Resolution No. 6 (1998): Species requiring specific habitat conservation measures.....	9

[...]

5.5 Habitats

a) Group of Experts on Protected Areas and Ecological Networks: Report

Relevant Document: T-PVS/PA (2011)13 - Report of the meeting of the Group of Experts on Protected Areas and Ecological Networks, Strasbourg, 19-20 September 2011

The Chair of the Group of Experts, Ms Maka Tsereteli, presented the outcomes of the 3rd meeting of the Group. Ms Tsereteli reported on the ongoing work on the setting-up of the Emerald Network in several countries and on the harmonisation of the Emerald and Natura 2000 Networks, as well as on the fruitful discussions held at the meeting on the future strategic development of the Pan-European Ecological Network (PEEN). She concluded that in 2012, the Group of Experts will again devote its work on planning the development of PEEN and on proposing an Action Plan in this relation.

Decision: The Committee took note of the report of the meeting of the Group of Experts.

b) Setting-up of the Emerald Network: strategic development and steps forward

Relevant Documents: T-PVS/PA (2011) 5 - Joint programme funded by the European Union and implemented by the Council of Europe - State of progress as of 30 August 2011
T-PVS/PA (2011) 12 – Draft Recommendation on the status of candidate Emerald sites and guidelines on the criteria for their adoption
T-PVS/PA (2011) 14 – Draft Recommendation on the European 2020 targets on Protected Areas
T-PVS/PA (2011) 6 – Draft List of proposed Emerald Candidate Sites (proposed ASCIs)
T-PVS/PA (2011) 15 – Draft revised Annex I of Resolution No 6 (1998) of the Bern Convention
T-PVS/PA (2011) 9 - The Future of Ecological Networks in Europe, Discussion Paper

The Secretariat informed that 2011 was the first year of implementation of the Emerald Network Calendar 2011-2020, adopted by the Standing Committee at its 30th meeting in 2010. Activities under Phase I of the process concerned seven countries from Central and Eastern Europe and the South Caucasus, targeted since 2009 by a 3-year Joint EU/CoE Programme. The final data delivery from all countries in terms of identification of their potential Emerald sites was expected by the end of November 2011 and the quality check will start in December 2011.

The follow-up to the current Joint Programme, focussing on the implementation of Phase II of the Emerald Network constitution process in the same countries, is currently under negotiation with the European Commission (EC). Possible funding could be allocated as from the second half of 2012, or in 2013 at latest. All countries targeted through the current project have expressed their commitment to participate in the follow-up project.

Furthermore, preparatory work to complete Phase I and initiate Phase II of the setting-up of the Emerald Network in Norway and Switzerland was completed in 2011. Technical seminars took place in both countries, aiming to solve questions linked to the countries' databases on potential Emerald sites. Follow-up activities for both countries are planned to take place in 2012, in compliance with the Emerald Network Calendar 2020.

The Secretariat further informed that in 2011 work on Phase II of the Emerald Network constitution process in 6 West Balkan countries started through a preparatory seminar (Paris, France, 26-27 January 2011) and the first biogeographical Emerald seminar (bar, Montenegro, 1-4 November 2011). The latter were organised in co-operation with the European Environment Agency (EEA) and its European Topic Centre on Biological Diversity (ETC/BD). The biogeographical seminar was of great importance as the first of a kind for the Emerald process in the region: the sufficiency of the proposed Emerald sites was examined species by species and habitat by habitat in each of the targeted countries. The evaluation showed the validity of the sites proposed so far, but still their insufficiency to ensure the long-term survival of some species and habitats. Therefore in 2012 national authorities are expected to work on the scientific conclusions from the seminars to prepare new databases and to identify additional sites.

The Secretariat further reported on co-operation with the EEA and the ETC/BD, which continued to strengthen in 2011, focussing in particular on the harmonisation of the Emerald and Natura 2000 Networks methodologies.

The harmonisation of the list of species included in Resolution No. 6 (1998) of the Bern Convention and Annexes I of the Birds Directive and II of the Habitats Directive was achieved. A similar exercise is planned for 2012 for the lists of habitats in Resolution No. 4 (1996) of the Bern Convention and Annex I of the Habitats Directive. The Secretariat stressed that the involvement of the ETC/BD, in particular in Phase II of the Emerald Network constitution process, has revealed to be vital for the Network implementation.

Regarding the assessment of the sufficiency of Emerald site proposals for threatened bird species, the Group of Experts, in coordination with the EC and the ETC/BD, decided to apply the assessment process built upon the Important Birds Areas, although taking a species by species approach.

The Secretariat and the consultant on the Emerald Network, Mr Marc Roekaerts, further presented the draft list of proposed sites to become official "candidate Emerald sites" after the possible nomination by the Standing Committee. In addition, a draft Recommendation on what the protection of the official "candidate Emerald sites" should entail was presented for possible adoption by the Committee.

The delegates from the European Commission and the Presidency of the EU expressed their appreciation for the important progress achieved on the harmonisation of both Network's methodologies and tools.

The delegate from Albania thanked the Secretariat and the ETC/BD for the successful organisation of the biogeographical seminar. She informed that its scientific conclusions will be used to stress the need for further work at national level on the identification of additional sites. She further informed that Albania has requested financial support from the EU - IPA grants, which would allow them to work both on Emerald and Natura 2000 Networks implementation.

The delegate from Serbia stressed the importance of progress towards the harmonisation of Emerald and Natura 2000 Networks and informed of some difficulties encountered for ensuring the financial support to the Emerald Network constitution process in her country.

The delegates from Morocco and Tunisia expressed their appreciation for the results so far achieved. More particularly, the delegate of Morocco requested the Committee to study the possibility of organising a follow-up Emerald Seminar in Morocco in 2012, in order to build on the outcomes of the pilot-project implemented there in 2009. Moreover, the delegate of Tunisia informed on the readiness and willingness of his country to get involved in the setting-up of the Emerald Network as from 2012.

Decision: The Committee appreciated the efforts of Contracting Parties and Observer States on the setting-up of the Emerald Network and welcomed the very positive outcomes of the first year of implementation of the Emerald Network Calendar (2011-2020). The successful initiation of Phase II of the Emerald Network constitution process in the West Balkans region was particularly appreciated by the Committee.

The Committee examined, amended and adopted the following documents:

- Recommendation No. 157 (2011) on the status of candidate Emerald sites and guidelines on the criteria for their nomination;
- Revised Annex I of Resolution 6 (1998) of the Standing Committee to the Bern Convention.

The Committee officially nominated as "Candidate Emerald sites" the sites listed in the "List of proposed Emerald Candidate Sites" [T-PVS/PA (2011) 6].

The Committee warmly thanked the European Environment Agency and its European Topic Centre on Biological Diversity for their continuous support and cooperation in the setting-up of the Emerald Network; it further encouraged the EEA and its ETC/BD to consider the inclusion of

biodiversity as a priority topic for its 2012-2013 work in the EU neighbourhood area, in the light of the progress made on Phase I of the Emerald Network constitution process in Central and Eastern Europe and the South Caucasus and the plans for follow-up activities on Phase II in the region.

The Committee further thanked the European Union for the financial support it provided for the setting-up of the Emerald Network in Central and Eastern Europe and the South Caucasus in the period 2009 - 2011, through a European Union/Council of Europe Joint Programme.

c) **European Diploma of Protected Areas**

Relevant documents: T-PVS/DE (2011) 16 – Report of the Group of Specialists
T-PVS/DE (2011) 17 – Adopted Resolutions
T-PVS/DE (2011) 12 Revised - Future of the European Diploma for Protected Areas

The Secretariat presented the main conclusions of the meeting of the Group of Specialists on the European Diploma of Protected Areas, held in Strasbourg on 14-15 March 2011.

The Secretariat informed the Committee that 10 Resolutions for the renewal of the European Diploma of Protected Areas were adopted by the Committee of Ministers. It further informed on the on-the-spot appraisals carried-out prior to the renewal of the European Diploma, with a particular focus on the two pending non-renewals for the Belovezhskaya Pushcha National Park (Belarus) and Bialowieza National Park (Poland). With regard to the *Sumava* National Park (Czech Republic), the Secretariat said that the Group had decided to postpone discussion of the report of the on-site visit (July 2010), at the request of the authorities concerned.

The Group also took note of the annual reports and made proposals for improving the monitoring system.

The Group also held a substantial discussion on the future of the European Diploma, and made proposals concerning the institutional aspects, the setting up of an appropriate financial mechanism to secure contributions from the private sector, the visibility of the Diploma and its links with other awards, as well as the role of diploma-holding areas as examples of good management in the implementation of the Aichi targets. At the Bureau's request, a consolidated version of the document had been prepared with a view to fixing a concrete timetable up to 2015 (50th anniversary of the European Diploma). A side event organised during the meeting of the Standing Committee had helped to prepare concrete proposals to be submitted at the Group's next meeting. Furthermore, a consultant had been tasked with updating the database and the map of European Diploma sites, and analysing the different types of habitats and geographical regions already represented in order to identify any gaps and encourage new applications.

Finally, the Secretariat recalled that, in keeping with the principle of rotation, the Group's current membership would be modified: the representatives of Germany, Italy and the Netherlands would leave the Group, while the term of office of the other three specialists (France, the Russian Federation, and the United Kingdom) was renewed for 2 years. The Bureau has proposed the nomination of three new members (Estonia, Slovenia, and Turkey).

Decision: The Committee took note of the report of the meeting of the Group of Specialists and welcomed the proposals for the future of the European Diploma; it decided to submit these proposals to the Group of Specialists for further analysis in 2012.

Appendix 1

Convention on the Conservation
of European Wildlife and Natural Habitats

Standing Committee

Recommendation No. 157 (2011) of the Standing Committee, adopted on 2 December 2011, on the status of candidate Emerald sites and guidelines on the criteria for their nomination

The Standing Committee to the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the Convention;

Considering Articles 3 and 4 of the Convention;

Having regard to Resolution No. 1 (1989) on the provisions relating to the conservation of habitats;

Having regard to its Recommendation No. 14 (1989) on species habitat conservation and on the conservation of endangered natural habitats;

Having regard to its Recommendation No. 16 (1989) on Areas of Special Conservation Interest;

Having regard to its Resolution No. 3 (1996) on the setting-up of a pan-European Ecological Network;

Recalling its Resolution No. 4 (1996) listing endangered natural habitats requiring specific habitat conservation measures;

Recalling its Resolution No. 5 (1998) concerning the rules for the Network of areas of special conservation interest (Emerald Network);

Recalling its Resolution No. 6 (1998) listing the species requiring specific habitat conservation measures;

Recalling the Calendar for the implementation of the Emerald Network of Areas of Special Conservation Interest (2011-2020) adopted in December 2010, committing Contracting Parties and Observer states to the Bern Convention to the completion of the Emerald Network constitution process by 2020;

Recalling the "Bern Declaration on the conservation and sustainable use of biodiversity in Europe: 2010 and beyond" and in particular its principle 6 which urges Parties to pursue the setting up of the Emerald Network of Areas of Special Conservation Interest, in order that it can be completed in Europe by 2020, at the latest, and developed in other regions with Contracting Parties of the Convention, and recalls the positive implications for local development that may be derived;

Welcoming the Strategic Plan for Biodiversity (2011 – 2020) and the 'Aichi 2020 targets' adopted at the 10th COP of the Convention on Biological Diversity and taking note in particular of target 11, committing Parties to conserve at least 17% of terrestrial and inland water and 10% of coastal and marine areas through well managed, ecologically representative and connected protected areas;

Taking note, with appreciation, of the EU 2020 biodiversity Strategy, endorsed by the Council of the European Union in June 2011, and more particularly its target 1, which calls on Member States to fully implement the Birds and Habitats Directives;

Welcoming the efforts of Contracting Parties and Observer states and the support of the European Commission and the European Environment Agency in the development of the Emerald Network, as a contribution to step up averting global biodiversity loss, with regard to the Aichi headline target 11;

Recognising the work of the European Union and its Member States on the development of the Natura 2000 Network and their current efforts on improving the management of the Network and achieving a favourable conservation status for threatened species and habitats;

Welcoming the considerable efforts of Contracting Parties on the implementation of the Calendar for the implementation of the Emerald Network (2011 – 2020) in view of the identification of potential Emerald sites on their territory;

Considering the *Criteria for assessing the National Lists of proposed ASCIs at biogeographical level and procedure for examining and approving Emerald candidate sites* adopted by the Standing Committee to the Bern Convention on 9th December 2010, as well as the official “candidate Emerald site” status it provides for;

Conscious that the ecological quality of proposed Emerald sites should be preserved as soon as they are officially nominated as ‘candidate Emerald sites’ by the Standing Committee to the Bern Convention;

Recommends that Contracting Parties:

1. Take the necessary protection and conservation measures in order to maintain the ecological characteristics of the candidate Emerald sites;
2. Ensure that, if and when appropriate, these measures include administrative, management or development plans corresponding to the ecological requirements for the long term survival of species and habitats present in the proposed Emerald sites, in particular those of the Bern Convention Resolutions No. 4 (1996) and No. 6 (1998) or specified by Recommendation 16 (1989) and that these are set in place at the latest once ASCIs have officially been adopted by the Standing Committee to the Bern Convention;
3. Ensure that the site proposals submitted to the Standing Committee to the Bern Convention for official nomination as candidate Emerald sites comply with the minimum criteria proposed in the guidance set out in Appendix 1 to the present Recommendation.

Invites Contracting Parties, the European Commission and the European Environment Agency to consider listing biodiversity among the programme priorities for the neighbourhood policy.

APPENDIX I

Guidance

This guidance draws on the discussions of the Group of Experts on Protected Areas and Ecological Networks at its 3rd meeting (2011) as well as on the expert opinion of the European Topic Centre on Biological Diversity. It complements the provisions of the *Criteria for assessing the National Lists of proposed ASCIs at biogeographical level and procedure for examining and approving Emerald candidate sites*, adopted by the Standing Committee to the Bern Convention at its 30th meeting in 2010.

National sites' proposals can be submitted to the Standing Committee to the Bern Convention for official nomination as Emerald candidate sites once they fulfil the following minimum criteria:

- a. Are described according to the Emerald standard data form (Appendix I to resolution No. 5 (1998) of the Standing Committee to the Bern Convention);
- b. Contain at least one habitat and/or species listed in the Revised Annex I of Resolution No. 4 (1996) of the Standing Committee to the Bern Convention and/or in Resolution No. 6 (1998) of the Standing Committee to the Bern Convention and/or specified by Recommendation No. 16 (1989);
- c. Provide information on site name, site code and site area, together with the site boundary in an agreed GIS format (in the case of an individual cave, the central coordinate of the cave entrance should be provided).

Appendix 2

REVISED APPENDIX 1: SPECIES REQUIRING SPECIFIC HABITAT CONSERVATION MEASURES

ANNEXE 1 REVISÉE: ESPÈCES NÉCESSITANT DES MESURES SPÉCIFIQUES DE CONSERVATION DE L'HABITAT

PLANTS / PLANTES

PTERIDOPHYTA

ASPLENIACEAE

- Asplenium adulterinum* Milde
- Asplenium jahandiezii* (Litard.) Rouy

BLECHNACEAE

- Woodwardia radicans* (L.) Sm.

DICKSONIACEAE

- Culcita macrocarpa* C. Presl

DRYOPTERIDACEAE

- Diplazium sibiricum* (Turcz. ex Kunze) Kurata
- Dryopteris corleyi* Fraser-Jenk.
- Dryopteris fragans* (L.) Schott

HYMENOPHYLLACEAE

- Trichomanes speciosum* Willd.

ISOETACEAE

- Isoetes boryana* Durieu
- Isoetes malinverniana* Ces. & De Not.

MARSILEACEAE

- Marsilea batardae* Launert
- Marsilea quadrifolia* L.
- Marsilea strigosa* Willd.

OPHIOGLOSSACEAE

- Botrychium simplex* Hitchc.
- Ophioglossum polyphyllum* A. Braun

GYMNOSPERMAE

PINACEAE

- Abies nebrodensis* (Lojac.) Mattei

ANGIOSPERMAE

ALISMATACEAE

- Alisma wahlenbergii* (Holmberg) Juz.

Caldesia parnassifolia (L.) Parl.
Luronium natans (L.) Raf.

AMARYLLIDACEAE

Leucojum nicaeense Ard.
Narcissus angustifolius Curt.
Narcissus asturiensis (Jordan) Pugsley
Narcissus calcicola Mendonça
Narcissus cyclamineus DC.
Narcissus fernandesii G. Pedro
Narcissus humilis (Cav.) Traub
Narcissus nevadensis Pugsley
Narcissus pseudonarcissus L. subsp. *nobilis* (Haw.) A. Fernandes
Narcissus scaberulus Henriq.
Narcissus triandrus L. subsp. *capax* (Salisb.) D. A. Webb.
Narcissus viridiflorus Schousboe
Sternbergia candida B.

ARISTOLOCHIACEAE

Aristolochia samsunensis Davis

ASCLEPIADACEAE

Vincetoxicum pannonicum (Borhidi) Holub

BORAGINACEAE

Anchusa crispa Viv.
Echium russicum J.F.Gemlin
Lithodora nitida (H. Ern) R. Fernandes
Myosotis lusitanica Schuster
Myosotis rehsteineri Wartm.
Myosotis retusifolia R. Afonso
Onosma halophilum Boiss. & Heldr.
Onosma polyphylla Lebed.
Onosma proponticum Aznav.
Onosma tornensis Javorka
Omphalodes kuzinskyanae Willk.
Omphalodes littoralis Lehm.
Solenanthes albanicus (Degen & al.) Degen & Baldacci
Symphytum cycladense Pawl.

CAMPANULACEAE

Adenophora lilifolia (L.) Ledeb
Asyneuma giganteum (Boiss.) Bornm.
Campanula bohemica Hruby
Campanula damboldtiana
Campanula gelida Kovanda
Campanula lycica
Campanula romanica Savul.
Campanula sabatia De Not.
Campanula serrata (Kit.) Hendrych
Campanula zoysii Wulfen
Jasione crispa (Pourret) Samp. subsp. *serpentinica* Pinto da Silva

Jasione lusitanica A. DC.

CARYOPHYLLACEAE

Arenaria ciliata L. ssp. *pseudofrigida* Ostenf. & O.C. Dahl
Arenaria humifusa Wahlenberg
Arenaria nevadensis Boiss. & Reuter
Arenaria provincialis Chater & Halliday
Cerastium alsinifolium Tausch
Cerastium dinaricum G.Beck & Szysz.
Dianthus arenarius L. subsp. *arenarius*
Dianthus arenarius subsp. *bohemicus* (Novak) O.Schwarz
Dianthus cintranus Boiss. & Reuter subsp. *cintranus* Boiss. & Reuter
Dianthus diutinus Kit.
Dianthus hypanicus Andr.
Dianthus lumnitzeri Wiesb.
Dianthus marizii (Samp.) Samp.
Dianthus moravicus Kovanda
Dianthus nitidus Waldst. et Kit.
Dianthus plumarius subsp. *regis-stephani* (Rapcs.) Baksay
Dianthus rupicola Biv.
Dianthus serotinus Waldst. et Kit.
Dianthus urumoffii Stoj. et Acht.
Gypsophila papillosa P. Porta
Herniaria algarvica Chaudhri
Herniaria latifolia Lapeyr. subsp. *litardierei* Gamis
Herniaria lusitanica (Chaudhri) subsp. *berlengiana* Chaudhri
Herniaria maritima Link
Minuartia smejkalii Dvorakova
Moehringia hypanica Grynj. et Klok.
Moehringia jankae Griseb. ex Janka
Moehringia lateriflora (L.) Fenzl.
Moehringia tommasinii Marches.
Moehringia villosa (Wulfen) Fenzl
Petrocoptis grandiflora Rothm.
Petrocoptis montsicciana O. Bolos & Rivas Mart.
Petrocoptis pseudoviscosa Fernandez Casas
Saponaria halophila
Silene cretacea Fisch. ex Spreng.
Silene furcata Rafin. ssp. *angustiflora* (Rupr.) Walters
Silene hicesiae Brullo & Signorello
Silene hifacensis Rouy ex Willk.
Silene holzmanii Heldr. ex Boiss.
Silene longicilia (Brot.) Otth.
Silene mariana Pau
Silene orphanidis Boiss.
Silene rothmaleri Pinto da Silva
Silene salsuginae Hub.-Mor.
Silene sangaria Coode & Cullen
Silene velutina Pourret ex Loisel.

CHENOPODIACEAE

Bassia (*Kochia*) *saxicola* (Guss.) A. J. Scott

Beta trojana Pamuk. apud Aellen
 Cremnophyton lanfrancoi Brullo et Pavone
 Microcnemum coralloides subsp. anaticum
 Suaeda cucullata Aellen
 Salicornia veneta Pignatti & Lausi

CISTACEAE

Cistus palhinhae Ingram
 Halimium verticillatum (Brot.) Sennen
 Helianthemum arcticum (Grosser) Janch.
 Helianthemum alypoides Losa & Rivas Goday
 Helianthemum caput-felis Boiss.
 Tuberaria major (Willk.) Pinto da Silva & Rozeira

COMPOSITAE

Achillea glaberrima Klok.
 Achillea thracica Velen.
 Anacyclus latealatus Hub.-Mor.
 Andryala levitomentosa (E. I. Nayardy) P. D. Sell
 Anthemis glaberrima (Rech. f.) Greuter
 Anthemis halophila Boiss. & Bal.
 Artemisia campestris L. subsp. bottnica A.N. Lundström ex Kindb.
 Artemisia granatensis Boiss.
 Artemisia laciniata Willd.
 Artemisia oelandica (Besser) Komaror
 Artemisia pancicii (Janka) Ronn.
 Aster pyrenaeus Desf. ex DC
 Aster sorrentinii (Tod) Lojac.
 Carduus myriacanthus Salzm. ex DC.
 Carlina onopordifolia Besser
 Centaurea akamantis Th Georgiades & G Chatzikyriakou
 Centaurea alba L. subsp. heldreichii (Halacsy) Dostal
 Centaurea alba L. subsp. princeps (Boiss. & Heldr.) Gugler
 Centaurea attica Nyman subsp. megarensis (Halacsy & Hayek) Dostal
 Centaurea balearica J. D. Rodriguez
 Centaurea borjae Valdes-Berm. & Rivas Goday
 Centaurea citricolor Font Quer
 Centaurea corymbosa Pourret
 Centaurea dubjanskyi Iljin.
 Centaurea gadorensis G. Blanca
 Centaurea hermannii F. Hermann
 Centaurea horrida Badaro
 Centaurea immanuelis-loewii Degen
 Centaurea jankae Brandza
 Centaurea kalambakensis Freyn & Sint.
 Centaurea kartschiana Scop.
 Centaurea lactiflora Halacsy
 Centaurea micrantha Hoffmanns. & Link subsp. herminii (Rouy) Dostál
 Centaurea niederi Heldr.
 Centaurea peucedanifolia Boiss. & Orph.
 Centaurea pinnata Pau
 Centaurea pineticola Iljin.

Centaurea pontica Prodan & E. I. Nayardy
Centaurea pseudoleucolepis Kleop
Centaurea pulvinata (G. Blanca) G. Blanca
Centaurea rothmalerana (Arènes) Dostál
Centaurea tchihatcheffii Fich. & Mey
Centaurea vicentina Mariz
Cirsium brachycephalum Juratzka
Crepis crocifolia Boiss. & Heldr.
Crepis granatensis (Willk.) B. Blanca & M. Cueto
Crepis pusilla (Sommier) Merxmüller
Crepis tectorum L. subsp. *nigrescens*
Dendranthema zawadskyi (Herb.) Tzvel.
Erigeron frigidus Boiss. ex DC.
Helichrysum melitense (Pignatti) Brullo et al
Hymenostemma pseudanthesis (Kunze) Willd.
Hyoseris frutescens Brullo et Pavone
Jurinea cyanoides (L.) Reichenb.
Jurinea fontqueri Cuatrec.
Lagoseris purpurea (Willd.) Boiss.
Lamyropsis microcephala (Moris) Dittrich & Greuter
Leontodon microcephalus (Boiss. ex DC.) Boiss.
Leontodon boryi Boiss.
Leontodon siculus (Guss.) Finch & Sell
Leuzea longifolia Hoffmanns. & Link
Ligularia sibirica (L.) Cass.
Palaeocyanus crassifolius (Bertoloni) Dostal

Santolina impressa Hoffmanns. & Link
Santolina semidentata Hoffmanns. & Link
Saussurea alpina subsp. *esthonica* (Baer ex Rupr) Kupffer
Senecio elodes Boiss. ex DC.
Senecio jacobea L. subsp. *gotlandicus* (Neuman) Sterner
Senecio nevadensis Boiss. & Reuter
Serratula lycopifolia (Vill.) A.Kern
Serratula tanaitica P. Smirn.
Sonchus erzincanicus Matthews
Tephrosia longifolia (Jacq.) Griseb et Schenk subsp. *moravica*

CONVOLVULACEAE

Convolvulus argyrothamnus Greuter
Convolvulus fernandesii Pinto da Silva & Teles
Convolvulus pulvinatus Sa'ad

CRUCIFERAE

Alyssum pyrenaicum Lapeyr.
Arabis kennedyae Meikle
Arabis sadina (Samp.) P. Cout.
Arabis scopoliana Boiss
Armoracia macrocarpa (Waldst. & Kit.) Kit. ex Baumg
Biscutella neustriaca Bonnet
Biscutella vinentina (Samp.) Rothm.
Boleum asperum (Pers.) Desvaux

Brassica glabrescens Poldini
Brassica hilarionis Post
Brassica insularis Moris
Brassica macrocarpa Guss.
Brassica sylvestris (L.) Mill. subsp. taurica Tzvel.
Braya linearis Rouy
Cochlearia polonica Frohlich
Cochlearia tatarae Borbas
Coincya rupestris Rouy
Coronopus navasii Pau
Crambe koktebelica (Junge) N. Busch.
Crambe litwinowii K. Gross.
Crambe tataria Sebeok
Diplotaxis ibicensis (Pau) Gomez-Campo
Diplotaxis siettiana Maire
Diplotaxis vicentina (P. Cout.) Rothm.
Draba cacuminum Elis Ekman
Draba cinerea Adams
Draba dorneri Heuffel.
Erucastrum palustre (Pirona) Vis.
Erysimum pienicum (Zapal.) Pawl.
Iberis arbuscula Runemark
Iberis procumbens Lange subsp. microcarpa Franco & Pinto da Silva
Jonopsidium acaule (Desf.) Reichenb.
Jonopsidium savianum (Caruel) Ball ex Arcang.
Lepidium turczaninowii Lipsky.
Rhynchosinapis erucastrum (L.) Dandy ex Clapham subsp. cintrana (Coutinho)
Franco & P. Silva (Coincya cintrana (P. Cout.) Pinto da Silva)
Schivereckia podolica (Besser) Andrz.
Sisymbrium cavanillesianum Valdes & Castroviejo
Sisymbrium supinum L.
Thlaspi cariense
Thlaspi jankae A.Kern.

CYPERACEAE

Carex holostoma Drejer
Carex panormitana Guss.
Eleocharis carniolica Koch

DIOSCOREACEAE

Borderea chouardii (Gaussen) Heslot

DIPSACACEAE

Dipsacus cephalarioides

DROSERACEAE

Aldrovanda vesiculosa L.

ELATINACEAE

Elatine gussonei (Sommier) Brullo *et al.*

ERICACEAE

Rhododendron luteum Sweet
Vaccinium arctostaphylos L.

EUPHORBIACEAE

Euphorbia margalidiana Kuhbier & Lewejohann
Euphorbia transtagana Boiss.

GENTIANACEAE

Centaurium rigualii Esteve
Centaurium somedanum Lainz
Gentianella bohemica Skalicky
Gentiana ligustica R. de Vilm. & Chopinet
Gentianella anglica (Pugsley) E. F. Warburg

GERANIACEAE

Erodium astragaloides Boiss. & Reuter
Erodium paularense Fernandez-Gonzalez & Izco
Erodium rupicola Boiss.

GLOBULARIACEAE

Globularia stygia Orph. ex Boiss.

GRAMINEAE

Arctagrostis latifolia (R. Br.) Griseb.
Arctophila fulva (Trin.) N. J. Anderson
Avenula hackelii (Henriq.) Holub
Bromus grossus Desf. ex DC.
Bromus psammophilus
Calamagrostis chalybaea (Laest.) Fries
Cinna latifolia (Trev.) Griseb.
Coleanthus subtilis (Tratt.) Seidl
Eremopoa mardinensis
Festuca brigantina (Markgr.-Dannenb.) Markgr.-Dannenb.
Festuca duriotagana Franco & R. Afonso
Festuca elegans Boiss.
Festuca henriquesii Hack.
Festuca summilusitana Franco & R. Afonso
Gaudinia hispanica Stace & Tutin
Holcus setigulumis Boiss. & Reuter subsp. *duriensis* Pinto da Silva
Micropyropsis tuberosa Romero - Zarco & Cabezudo
Poa granitica Br. - Bl.
Poa riphaea (Ascherson et Graebner) Fritsch
Pseudarrhenatherum pallens (Link) J. Holub
Puccinellia phryganodes (Trin.) Scribner + Merr.
Puccinellia pungens (Pau) Paunero
Stipa austroitalica Martinovsky
Stipa bavarica Martinovsky & H. Scholz
Stipa danubialis Dihoru & Roman
Stipa styriaca Martinovsky
Stipa syreistschikowii P. Smirn.
Stipa veneta Moraldo
Stipa zalesskii Wilensky

Trisetum subalpestre (Hartman) Neuman

GROSSULARIACEAE

Ribes sardoum Martelli

HIPPURIDACEAE

Hippuris tetraphylla L. Fil.

HYPERICACEAE

Hypericum aciferum (Greuter) N.K.B. Robson

Hypericum salsugineum

IRIDACEAE

Crocus abantensis

Crocus cyprius Boiss. et Kotschy

Crocus hartmannianus Holmboe

Gladiolus palustris Gaud.

Iris aphylla L. subsp. *hungarica* Hegi

Iris humilis Georgi subsp. *arenaria* (Waldst. et Kit.) A. et D. Löve

JUNACEAE

Juncus valvatus Link

Luzula arctica Blytt #

LABIATAE

Dracocephalum austriacum L.

Micromeria taygetea P. H. Davis

Nepeta dirphyia (Boiss.) Heldr. ex Halacsy

Nepeta sphaciotica P. H. Davis

Origanum dictamnus L.

Phlomis brevibracteata Turrit

Phlomis cypria Post

Salvia veneris Hedge

Sideritis cypria Post

Sideritis incana subsp. *glauca* (Cav.) Malagarriga

Sideritis javalambrensis Pau

Sideritis serrata Cav. ex Lag.

Teucrium lepicephalum Pau

Teucrium turredanum Losa & Rivas Goday

Thymus camphoratus Hoffmanns. & Link

Thymus carnosus Boiss.

Thymus lotocephalus G. López & R. Morales (*Thymus cephalotos* L.)

LEGUMINOSAE

Anthyllis hystrix Cardona, Contandr. & E. Sierra

Astragalus aitosensis Ivanisch.

Astragalus algarbiensis Coss. ex Bunge

Astragalus aquilanus Anzalone

Astragalus centralpinus Braun-Blanquet

Astragalus kungurensis Boriss.

Astragalus macrocarpus DC. subsp. *lefkarensis*

Astragalus maritimus Moris

Astragalus peterfii Jav.
Astragalus physocalyx Fischer
Astragalus tremolsianus Pau
Astragalus setosulus Gontsch.
Astragalus tanaiticus C. Koch.
Astragalus verrucosus Moris
Cytisus aeolicus Guss. ex Lindl.
Genista dorycnifolia Font Quer
Genista holopetala (Fleischm. ex Koch) Baldacci
Genista tetragona Bess.
Glycyrrhiza iconica
Hedysarum razoumovianum Fisch. et Helm.
Melilotus segetalis (Brot.) Ser. subsp. *fallax* Franco
Ononis hackelii Lange
Sphaerophysa kotschyana
Thermopsis turcica
Trifolium banaticum (Heuffel) Majovsky
Trifolium pachycalyx
Trifolium saxatile All.
Trigonella arenicola
Trigonella halophila
Trigonella polycarpa
Vicia bifoliolata J.D. Rodriguez

LENTIBULARIACEAE

Pinguicula crystallina Sm.
Pinguicula nevadensis (Lindb.) Casper

LILIACEAE

Allium grosii Font Quer
Allium regelianum A. Beck.
Allium vuralii
Androcymbium rechingeri Greuter
Asparagus lycaonicus
Asphodelus bento-rainhae P. Silva
Chionodoxa lochiaie Meikle in Kew Bull.
Chionodoxa luciliae
Colchicum arenarium Waldst. et Kit.
Colchicum davidovii Stef.
Colchicum fominii Bordz.
Colchicum micranthum
Fritillaria montana Hoppe.
Hyacinthoides vicentina (Hoffmans. & Link) Rothm.
Lilium jankae A. Kerner
Lilium rhodopaeum Delip.
Muscari gussonei (Parl.) Tod.
Scilla litardierei Breist.
Scilla morrisii Meikle
Tulipa cypria Stapf
Tulipa hungarica Borbas

LINACEAE

Linum dolomiticum Borbas
Linum muelleri Moris (*Linum maritimum muelleri*)

LYTHRACEAE

Lythrum flexuosum Lag.

MALVACEAE

Kosteletzkya pentacarpos (L.) Ledeb.

NAJADACEAE

Najas flexilis (Willd.) Rostk. & W.L. Schmidt
Najas tenuissima (A. Braun) Magnus

OLEACEAE

Syringa josikaea Jacq. fil.

ORCHIDACEAE

Anacamptis urvilleana Sommier et Caruana Gatto
Calypso bulbosa L.
Cephalanthera cucullata Boiss. & Heldr.
Cypripedium calceolus L.
Dactylorhiza chuhensis
Dactylorhiza kalopissii E.Nelson
Gymnigritella runei Teppner & Klein
Himantoglossum adriaticum Baumann
Himantoglossum caprinum (Bieb.) V.Koch
Liparis loeselii (L.) Rich.
Ophrys isaura
Ophrys kotschyi H.Fleischm. et Soo
Ophrys lunulata Parl.
Ophrys lycia
Ophrys melitensis (Salkowski) J et P Devillers-Terschuren
Platanthera obtusata (Pursh) subsp. *oligantha* (Turez.) Hulten
Stevaniella satyrioides (Stev.) Schlechter.

OROBANCHACEAE

Orobanche densiflora Salzm. ex Reut.

PAEONIACEAE

Paeonia cambessedesii (Willk.) Willk.
Paeonia clusii F.C. Stern subsp. *rhodia* (Stearn) Tzanoudakis
Paeonia parnassica Tzanoudakis
Paeonia officinalis L. subsp. *banatica* (Rachel) Soo
Paeonia tenuifolia L.

PALMAE

Phoenix theophrasti Greuter

PAPAVERACEAE

Corydalis gotlandica Lidén
Papaver laestadianum (Nordh.) Nordh.
Papaver radicum Rottb. subsp. *hyperboreum* Nordh.

PLANTAGINACEAE

- Plantago algarbiensis* Sampaio (*Plantago bracteosa* (Willk.) G. Sampaio)
- Plantago almogravensis* Franco

PLUMBAGINACEAE

- Armeria berlengensis* Daveau
- Armeria helodes* Martini & Pold
- Armeria neglecta* Girard
- Armeria pseudarmeria* (Murray) Mansfeld
- Armeria rouyana* Daveau
- Armeria soleirolii* (Duby) Godron
- Armeria velutina* Welw. ex Boiss. & Reuter
- Limonium anatolicum*
- Limonium dodartii* (Girard) O. Kuntze subsp. *lusitanicum* (Daveau) Franco
- Limonium insulare* (Beg. & Landi) Arrig. & Diana
- Limonium lanceolatum* (Hoffmans. & Link) Franco
- Limonium multiflorum* Erben
- Limonium pseudolaetum* Arrig. & Diana
- Limonium strictissimum* (Salzmann) Arrig.
- Limonium tamaricoides*

POLYGONACEAE

- Persicaria foliosa* (H. Lindb.) Kitag.
- Polygonum praelongum* Coode & Cullen
- Rheum rhaponticum* L
- Rumex rupestris* Le Gall

PRIMULACEAE

- Androsace mathildae* Levier
- Androsace pyrenaica* Lam.
- Cyclamen fatrense* Halda et Sojak
- Cyclamen kuznetzovii* Kotov et Czernova
- Cyclamen mirabile*
- Primula apennina* Widmer
- Primula carniolica* Jacq.
- Primula nutans* Georgi
- Primula palinuri* Petagna
- Primula scandinavica* Bruun #
- Soldanella villosa* Darracq.

RANUNCULACEAE

- Aconitum corsicum* Gayer (*Aconitum napellus* subsp. *corsicum*)
- Aconitum flerovii* Steinb.
- Aconitum firmum* (Reichenb.) Neilr subsp. *moravicum* Skalicky
- Adonis distorta* Ten.
- Anemone uralensis* Nevski.
- Aquilegia bertolonii* Schott
- Aquilegia kitaibelii* Schott
- Aquilegia pyrenaica* D.C. subsp. *cazorlensis* (Heywood) Galiano
- Consolida samia* P.H. Davis
- Delphinium caseyi* B.L.Burt

Pulsatilla grandis Wend. (*Pulsatilla halleri* (All.) Willd. subsp. *grandis* (Wend.) Meikle)
Pulsatilla patens (L.) Miller
Pulsatilla pratensis (L.) Miller subsp. *hungarica* Soo
Pulsatilla slavica G.Reuss.
Pulsatilla subslavica Futak ex Goliasova
Pulsatilla vulgaris Hill. subsp. *gotlandica* (Johanss.) Zaemelis & Paegle
Ranunculus kykkoensis Meikle
Ranunculus lapponicus L.
Ranunculus weyleri Mares

RESEDACEAE

Reseda decursiva Forssk.

ROSACEAE

Agrimonia pilosa Ledebour
Potentilla emilii-popii E. I. Nayardy
Potentilla delphinensis Gren. & Godron
Potentilla silesiaca Uechtr.
Pyrus anatolica
Pyrus magyarica Terpo
Sorbus teodori Liljefors

RUBIACEAE

Galium cracoviense Ehrend.
Galium globuliferum
Galium litorale Guss.
Galium moldavicum (Dobrescu) Franco
Galium sudeticum Tausch
Galium viridiflorum Boiss. & Reuter

SALICACEAE

Salix salvifolia Brot. subsp. *australis* Franco

SANTALACEAE

Thesium ebracteatum Hayne

SAXIFRAGACEAE

Saxifraga berica (Beguinot) D.A. Webb
Saxifraga florulenta Moretti
Saxifraga hirculus L. #
Saxifraga osloënsis Knaben
Saxifraga tombeanensis Boiss. ex Engl.

SCROPHULARIACEAE

Antirrhinum charidemi Lange
Chaenorrhinum serpyllifolium (Lange) Lange subsp. *lusitanicum* R. Fernandes
Euphrasia genargentea (Feoli) Diana
Euphrasia marchesettii Wettst. ex Marches.
Linaria algarviana Chav.
Linaria coutinhoi Valdés
Linaria ficalhoana Rouy
Linaria flava (Poiret) Desf.

Linaria hellenica Turrill
Linaria loeselii Schweigger
Linaria pseudolaxiflora Lojacono
Linaria ricardoi Cout.
Linaria tursica B. Valdes & Cabezudo
Linaria tonzigii Lona
Odontites granatensis Boiss.
Pedicularis sudetica Willd.
Rhinanthus oesilensis (Ronniger & Saarsoo) Vassilez
Tozzia carpathica Wol.
Verbascum basivelatum
Verbascum degenii
Verbascum litigiosum Samp.
Verbascum purpureum (Janka) Huber-Morath
Verbascum stepporum
Veronica micrantha Hoffmanns. & Link
Veronica euxina Turrill
Veronica oetaea L.-A. Gustavsson
Veronica turrilliana Stoj. et Stef.

SOLANACEAE

Atropa baetica Willk.

THYMELAEACEAE

Daphne arbuscula Celak
Daphne petraea Leybold
Daphne rodriguezii Texidor

ULMACEAE

Zelkova abelicea (Lam.) Boiss.

UMBELLIFERAE

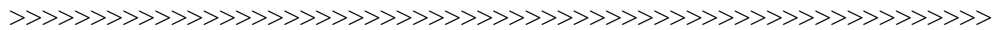
Angelica heterocarpa Lloyd
Angelica palustris (Besser) Hoffm.
Apium bermejoi Llorens
Apium repens (Jacq.) Lag.
Athamanta cortiana Ferrarini
Bupleurum capillare Boiss. & Heldr.
Bupleurum kakiskalae Greuter
Eryngium alpinum L.
Eryngium viviparum Gay
Ferula halophila
Ferula sadleriana Lebed.
Hladnikia pastinacifolia Reichenb.
Laserpitium longiradium Boiss.
Naufraga balearica Constans & Cannon
Oenanthe conioides Lange
Petagnia saniculifolia Guss.
Rouya polygama (Desf.) Coincy
Seseli intricatum Boiss.
Seseli leucospermum Waldst. et Kit
Thorella verticillatinundata (Thore) Briq.

VALERIANACEAE

- Centranthus kellereri (Stoj. Stef. et Georg.) Stoj. et Stef.
- Centranthus trinervis (Viv.) Beguinot

VIOLACEAE

- Viola delphinantha Boiss.
- Viola hispida Lam.
- Viola jaubertiana Mares & Vigineix
- Viola rupestris F.W. Schmidt subsp. relicta Jalas



BRYOPHYTA

- Bruchia vogesiaca Schwaegr.
- Bryhnia novae-angliae (Sull & Lesq.) Grout
- Bryoerythrophyllum campylocarpum (C. Müll.) Crum.
- (Bryoerythrophyllum machadoanum (Sergio) M.O. Hill)
- Buxbaumia viridis (Moug.) Moug. & Nestl.
- Cephalozia macounii (Aust.) Aust.
- Cynodontium suecicum (H. Arn. & C. Jens.) I. Hag.
- Dichelyma capillaceum (Dicks) Myr.
- Dicranum viride (Sull. & Lesq.) Lindb.
- Distichophyllum carinatum Dix. & Nich.
- Drepanocladus (Hamatocaulis) vernicosus (Mitt.) Warnst.
- Encalypta mutica (I. Hagen)
- Hamatocaulis lapponicus (Norrl.) Hedenäs
- Herzogiella turfacea (Lindb.) I. Wats.
- Hygrohypnum montanum (Lindb.) Broth.
- Jungermannia handelii (Schiffn.) Amak.
- Mannia triandra (Scop.) Grolle
- Marsupella profunda Lindb.
- Meesia longiseta Hedw.
- Nothothylas orbicularis (Schwein.) Sull.
- Ochyraea tatrensis Vana
- Orthothecium lapponicum (Schimp.) C. Hartm.
- Orthotrichum rogeri Brid.
- Petalophyllum ralfsii (Wils.) Nees & Gott.
- Plagiomnium drummondii (Bruch & Schimp.) T. Kop.
- Riccia breidleri Jur.
- Riella helicophylla (Bory & Mont.) Mont.
- Scapania massolongi (K. Müll.) K. Müll.
- Sphagnum pylaisii Brid.
- Tayloria rudolphiana (Garov) B. & S.
- Tortella rigens (N. Alberts)

SPECIES FROM THE MACARONESIAN REGION

ESPÈCES DE LA REGION MACARONÉSIENNE

PTERIDOPHYTA

HYMENOPHYLLACEAE

Hymenophyllum maderensis Gibby & Lovis

DRYOPTERIDACEAE

Polystichum drepanum (Sw.) C. Presl.

ISOETACEAE

Isoetes azorica Durieu & Paiva ex Milde

MARSILEACEAE

Marsilea azorica Launert & Paiva

ANGIOSPERMAE

ASCLEPIADACEAE

Caralluma burchardii N. E. Brown

Ceropegia chrysantha Svent.

BORAGINACEAE

Echium candicans L. fil.

Echium gentianoides Webb & Coincy

Myosotis azorica H. C. Watson

Myosotis maritima Hochst. in Seub.

CAMPANULACEAE

Azorina vidalii (H. C. Watson) Feer

Musschia aurea (L. f.) DC.

Musschia wollastonii Lowe

CAPRIFOLIACEAE

Sambucus palmensis Link

CARYOPHYLLACEAE

Spergularia azorica (Kindb.) Lebel

CELASTRACEAE

Maytenus umbellata (R. Br.) Mabb.

CHENOPODIACEAE

Beta patula Ait.

CISTACEAE

Cistus chinamadensis Bañares & Romero

Helianthemum bystropogophyllum Svent.

COMPOSITAE

Andryala crithmifolia Ait.
Argyranthemum lidii Humphries
Argyranthemum thalassophyllum (Svent.) Hump.
Argyranthemum winterii (Svent.) Humphries
Atractylis arbuscula Svent. & Michaelis
Atractylis preauxiana Schultz.
Calendula maderensis DC.
Cheirolophus duranii (Burchard) Holub
Cheirolophus ghomerytus (Svent.) Holub
Cheirolophus junonianus (Svent.) Holub
Cheirolophus massonianus (Lowe) Hansen & Sund.
Cirsium latifolium Lowe
Helichrysum gossypinum Webb
Helichrysum monogynum Burt & Sund.
Hypochoeris oligocephala (Svent. & Bramw.) Lack
Lactuca watsoniana Trel.
Onopordum nogalesii Svent.
Onopordum carduelinum Bolle
Pericallis hadrosoma (Svent.) B. Nord.
Phagnalon benettii Lowe
Stemmacantha cynaroides (Chr. Son. in Buch) Ditt
Sventenia bupleuroides Font Quer
Tanacetum ptarmiciflorum Webb & Berth

CONVOLVULACEAE

Convolvulus caput-medusae Lowe
Convolvulus lopez-socasii Svent.
Convolvulus massonii A. Dietr.

CRASSULACEAE

Aeonium gomeraense Praeger
Aeonium saundersii Bolle
Aichryson dumosum (Lowe) Praeg.
Monanthes wildpretii Banares & Scholz
Sedum brissemoretii Raymond-Hamet

CRUCIFERAE

Crambe arborea Webb ex Christ
Crambe laevigata DC. ex Christ
Crambe sventenii R. Petters ex Bramwell & Sund.
Parolinia schizogynoides Svent.
Sinapidendron rupestre (Ait.) Lowe

CYPERACEAE

Carex malato-belizii Raymond

DIPSACACEAE

Scabiosa nitens Roemer & J. A. Schultes

ERICACEAE

Erica scoparia L. subsp. *azorica* (Hochst.) D. A. Webb

EUPHORBIACEAE

- Euphorbia handiensis Burchard
- Euphorbia lambii Svent.
- Euphorbia stygiana H. C. Watson

GERANIACEAE

- Geranium maderense P. F. Yeo

GRAMINEAE

- Deschampsia maderensis (Haeck. & Born.) Buschm.
- Phalaris maderensis (Menezes) Menezes

GLOBULARIACEAE

- Globularia ascanii D. Bramwell & Kunkel
- Globularia sarcophylla Svent.

LABIATAE

- Sideritis cystosiphon Svent.
- Sideritis discolor (Webb ex de Noe) Bolle
- Sideritis infernalis Bolle
- Sideritis marmorea Bolle
- Teucrium abutiloides L'Hér.
- Teucrium betonicum L'Hér.

LEGUMINOSAE

- Anagyris latifolia Brouss. ex. Willd.
- Anthyllis lemanniana Lowe
- Dorycnium spectabile Webb & Berthel
- Lotus azoricus P. W. Ball
- Lotus callis-viridis D. Bramwell & D. H. Davis
- Lotus kunkelii (E. Chueca) D. Bramwell & al.
- Teline rosmarinifolia Webb & Berthel.
- Teline salsoloides Arco & Acebes.
- Vicia dennesiana H. C. Watson

LILIACEAE

- Androcymbium psammophilum Svent.
- Scilla maderensis Menezes
- Semele maderensis Costa

LORANTHACEAE

- Arceuthobium azoricum Wiens & Hawksw.

MYRICACEAE

- Myrica rivas-martinezii Santos.

OLEACEAE

- Jasminum azoricum L.
- Picconia azorica (Tutin) Knobl.

ORCHIDACEAE

- Goodyera macrophylla Lowe

PITTOSPORACEAE

Pittosporum coriaceum Dryand. ex. Ait.

PLANTAGINACEAE

Plantago malato-belizii Lawalree

PLUMBAGINACEAE

Limonium arborescens (Brouss.) Kuntze

Limonium dendroides Svent.

Limonium spectabile (Svent.) Kunkel & Sunding

Limonium sventenii Santos & Fernandez Galvan

POLYGONACEAE

Rumex azoricus Rech. fil.

RHAMNACEAE

Frangula azorica Tutin

ROSACEAE

Bencomia brachystachya Svent.

Bencomia sphaerocarpa Svent.

Chamaemeles coriacea Lindl.

Dendriopoterium pulidoi Svent.

Marcetella maderensis (Born.) Svent.

Prunus lusitanica L. subsp. *azorica* (Mouillef.) Franco

Sorbus maderensis (Lowe) Dode

SANTALACEAE

Kunkeliella subsucculenta Kammer

SCROPHULARIACEAE

Euphrasia azorica H.C. Watson

Euphrasia grandiflora Hochst. in Seub.

Isoplexis chalcantha Svent. & O'Shanahan

Isoplexis isabelliana (Webb & Berthel.) Masferrer

Odontites holliana (Lowe) Benth.

Sibthorpia peregrina L.

SOLANACEAE

Solanum lidii Sunding

UMBELLIFERAE

Ammi trifoliatum (H. C. Watson) Trelease

Bupleurum handiense (Bolle) Kunkel

Chaerophyllum azoricum Trelease

Ferula latipinna Santos

Melanoselinum decipiens (Schrader & Wendl.) Hoffm.

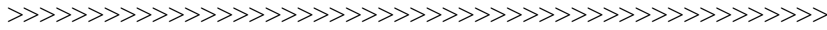
Monizia edulis Lowe

Oenanthe divaricata (R. Br.) Mabb.

Sanicula azorica Guthnick ex Seub.

VIOLACEAE

Viola paradoxa Lowe



BRYOPHYTA

Echinodium spinosum (Mitt.) Jur.

Thamnobryum fernandesii Sergio

VERTEBRATES/VERTÉBRÉS

Mammals/Mammifères

INSECTIVORA

Talpidae

Desmana moschata

Galemys pyrenaicus

CHIROPTERA

Pteropidae

Rousettus aegyptiacus

Rhinolophidae

Rhinolophus blasii

Rhinolophus euryale

Rhinolophus ferrumequinum

Rhinolophus hipposideros

Rhinolophus mehelyi

Vespertilionidae

Barbastella barbastellus

Eptesicus bottae

Miniopterus schreibersi

Myotis bechsteini

Myotis blythii

Myotis capaccinii

Myotis dasycneme

Myotis emarginatus

Myotis myotis

RODENTIA

Castoridae

Castor fiber # ^{1, 2}

Cricetidae

Mesocricetus newtoni

Gliridae

Myomimus roachi (*Myomimus bulgaricus*)

Microtidae

Microtus cabrerai

Microtus oeconomus arenicola # ²

Microtus tatricus

Spalax graecus

Muridae

Microtus oeconomus mehelyi

Sciuridae

Marmota marmota latirostris
Pteromys volans (Sciuropterus ruscicus)#

Spermophilus citellus (Citellus citellus)#
Spermophilus suslicus (Citellus suslicus) #

Zapodidae

Sicista subtilis

CARNIVORA

Canidae

Alopex lagopus #
Canis lupus #¹
Cuon alpinus

Ursidae

Ursus arctos #¹
Ursus maritimus

Mustelidae

Gulo gulo #
Lutra lutra #
Mustela eversmanii
Mustela lutreola
Vormela peregusna

Felidae

Caracal caracal
Lynx lynx #¹
Lynx pardinus
Panthera pardus

Odobenidae

Odobenus rosmarus

Phocidae

Halichoerus grypus #²
Monachus monachus
Phoca hispida bottnica²
Phoca hispida saimensis
Phoca hispida ladogensis
Phoca vitulina #²

ARTIODACTYLA

Cervidae

Cervus elaphus corsicanus
Rangifer tarandus fennicus²

Bovidae

Bison bonasus²
Capra aegagrus (natural populations/populations naturelles)
Capra pyrenaica pyrenaica
Gazella subgutturosa
Gazella dorcas
Ovis gmelini musimon (Ovis ammon musimon) (natural populations - Corsica and Sardinia / populations naturelles - Corse et Sardaigne)²
Ovis orientalis ophion (Ovis gmelini ophion)
Rupicapra pyrenaica ornata (Rupicapra rupicapra ornata)

Rupicapra rupicapra balcanica²
Rupicapra rupicapra tatrica

CETACEA

Delphinidae

Tursiops truncatus #

Phocoenidae

Phocoena phocoena #

Birds/Oiseaux

GAVIIFORMES

Gaviidae

Gavia adamsii

Gavia arctica

Gavia immer

Gavia stellata

PODICIPEDIFORMES

Podicipedidae

Podiceps auritus

PROCELLARIIFORMES

Hydrobatidae

Hydrobates pelagicus #

Oceanodroma castro

Oceanodroma leucorhoa #

Pelagodroma marina

Procellariidae

Bulweria bulwerii

Calonectris diomedea (Procellaria diomedea)

Puffinus assimilis

Puffinus puffinus mauretanicus (Puffinus mauretanicus)

Puffinus yelkouan

Pterodroma feae

Pterodroma madeira

PELECANIFORMES

Phalacrocoracidae

Phalacrocorax aristotelis desmarestii²

Phalacrocorax pygmaeus

Pelecanidae

Pelecanus crispus

Pelecanus onocrotalus

CICONIIFORMES

Ardeidae

Ardea purpurea

Ardeola ralloides

Botaurus stellaris

Casmerodius albus (Egretta alba)

Egretta garzetta
Ixobrychus minutus
Nycticorax nycticorax
Ciconiidae
Ciconia nigra
Ciconia ciconia
Threskiornithidae
Plegadis falcinellus
Platalea leucorodia
Phoenicopteridae
Phoenicopterus ruber

ANSERIFORMES

Anatidae
Anser albifrons flavirostris ²
Anser erythropus
Aythya nyroca ²
Branta leucopsis
Branta ruficollis
Bucephala islandica
Cygnus bewickii (Cygnus columbianus bewickii) #
Cygnus cygnus #
Histrionicus histrionicus
Marmaronetta angustirostris (Anas angustirostris)
Mergus albellus
Oxyura leucocephala
Polysticta stelleri
Tadorna ferruginea

FALCONIFORMES

Accipitridae
Accipiter brevipes
Accipiter gentilis arrigonii
Accipiter nisus granti
Aegypius monachus
Aquila adalberti
Aquila chrysaetos
Aquila clanga
Aquila heliaca
Aquila nipalensis
Aquila pomarina
Buteo rufinus
Circaetus gallicus
Circus aeruginosus
Circus cyaneus
Circus macrourus
Circus pygargus
Elanus caeruleus
Gypaetus barbatus
Gyps fulvus
Haliaeetus albicilla
Hieraaetus fasciatus

Hieraaetus pennatus
Milvus migrans
Milvus milvus
Neophron percnopterus
Pernis apivorus

Pandionidae

Pandion haliaetus

Falconidae

Falco biarmicus
Falco cherrug
Falco columbarius #
Falco eleonora
Falco naumanni
Falco peregrinus
Falco rusticolus
Falco vespertinus

GALLIFORMES

Tetraonidae

Bonasa bonasia ²
Lagopus mutus helveticus ²
Lagopus mutus pyrenaicus ²
Tetrao tetrix tetrix ²
Tetrao urogallus ² (only T.u. cantabricus in App II / seulement T.u.cantabricus est à l'annexe II)

Phasianidae

Alectoris barbara ²
Alectoris graeca
Perdix perdix hispaniolensis ²
Perdix perdix italica ²

GRUIFORMES

Turnicidae

Turnix sylvatica

Rallidae

Crex crex
Fulica cristata
Porphyrio porphyrio
Porzana parva
Porzana porzana
Porzana pusilla

Gruidae

Grus grus

Otididae

Chlamydotis undulata
Otis tarda
Tetrax tetrax

CHARADRIIFORMES

Charadriidae

Charadrius alexandrinus
Charadrius asiaticus ²
Charadrius leschenaultii

Charadrius morinellus (Eudromias morinellus)

Chettusia gregaria ²

Hoplopterus spinosus

Pluvialis apricaria # ²

Scolopacidae

Calidris alpina schinzii

Gallinago media

Limosa lapponica

Numenius tenuirostris

Philomachus pugnax ²

Tringa glareola

Xenus cinereus (Tringa cinereus) ²

Recurvirostridae

Himantopus himantopus

Recurvirostra avosetta

Phalaropodidae

Phalaropus fulicarius

Phalaropus lobatus

Burhinidae

Burhinus oedicephalus

Glareolidae

Cursorius cursor

Glareola nordmanni

Glareola pratincola

Laridae

Chlidonias hybridus

Chlidonias leucopterus

Chlidonias niger

Gelochelidon nilotica

Larus audouinii

Larus genei

Larus melanocephalus

Larus minutus

Pagophila eburnea

Sterna albifrons

Sterna caspia (Hydroprogne caspia)

Sterna dougallii

Sterna hirundo

Sterna paradisaea (macrura)

Sterna sandvicensis

Alcidae

Uria aalge ibericus ²

COLUMBIFORMES

Pteroclididae

Pterocles alchata

Pterocles orientalis

Columbidae

Columba bollii

Columba junoniae

Columba palumbus azorica ²

*Columba trocaz*²

STRIGIFORMES

Strigidae

Aegolius funereus
Asio flammeus
Bubo bubo
Glaucidium passerinum
Ketupa zeylonensis
Nyctea scandiaca
Strix nebulosa
Strix uralensis
Surnia ulula

CAPRIMULGIFORMES

Caprimulgidae

Caprimulgus europaeus

APODIFORMES

Apodidae

Apus caffer

CORACIIFORMES

Alcedinidae

Alcedo atthis
Halcyon smyrnensis

Coraciidae

Coracias garrulus

PICIFORMES

Picidae

Dendrocopos leucotos
Dendrocopos major canariensis
Dendrocopos major thanneri
Dendrocopos medius
Dendrocopos syriacus
Dryocopus martius
Picoides tridactylus
Picus canus

PASSERIFORMES

Alaudidae

Calandrella brachydactyla
Chersophilus duponti
Galerida theklae
*Lullula arborea*²
Melanocorypha calandra
Melanocorypha yeltoniensis

Certhiidae

Certhia brachydactyla dorotheae

Motacillidae

Anthus campestris

Laniidae

Lanius collurio
 Lanius minor
 Lanius nubicus

Paridae

Parus ater cypriotes

Troglodytidae

Troglodytes troglodytes fridariensis

Muscicapidae Turdinae

Luscinia svecica (Cyanosylvia svecica)
 Oenanthe cypriaca (Oenanthe pleschanka cypriaca)
 Oenanthe pleschanka
 Oenanthe leucura
 Saxicola dacotiae

Sylviinae

Acrocephalus melanopogon
 Acrocephalus paludicola
 Hippolais olivetorum
 Sylvia melanothorax
 Sylvia nisoria
 Sylvia rueppelli
 Sylvia sarda
 Sylvia undata

Muscicapinae

Ficedula albicollis
 Ficedula parva
 Ficedula semitorquata

Sittidae

Sitta krueperi
 Sitta whiteheadi

Emberizidae

Emberiza caesia
 Emberiza cineracea
 Emberiza hortulana ²

Fringillidae

Bucanetes githagineus (Rhodopechys githaginea)
 Fringilla coelebs ombrosa ²
 Fringilla teydea
 Loxia scotica
 Pyrrhula murina ²

Corvidae

Pyrrhocorax pyrrhocorax

Reptiles

CHELONIA (TESTUDINES)

Testudinidae

Testudo graeca
 Testudo hermanni
 Testudo marginata

Cheloniidae

Caretta caretta

Chelonia mydas
Emydidae
Emys orbicularis
Mauremys caspica
Mauremys leprosa
Tryonichidae
Rafetus euphraticus
Tryonix triunguis

SAURIA

Lacertidae
Gallotia galloti insulanagae
Gallotia simonyi
Lacerta bonnali (Lacerta monticola)
Lacerta clarkorum
Lacerta monticola (Archaeolacerta monticola)
Lacerta schreiberi
Podarcis lilfordi
Podarcis pityusensis
Scincidae
Chalcides simonyi (Chalcides occidentalis)
Gekkonidae
Phyllodactylus europaeus

OPHIDIA (SERPENTES)

Colubridae
Coluber cypriensis
Elaphe quatuorlineata #
Elaphe situla #
Natrix natrix cypriaca
Viperidae
Macrovipera schweizeri (Vipera lebetina schweizeri)
Vipera albizona
Vipera barani
Vipera kaznakovi
Vipera pontica
Vipera ursinii
Vipera wagneri

Amphibians/Amphibiens

CAUDATA

Salamandridae
Chioglossa lusitanica
Mertensiella luschani (Salamandra luschani)
Salamandra atra aurorae²
Salamandrina terdigitata
Triturus carnifex (Triturus cristatus carnifex)
Triturus cristatus (Triturus cristatus cristatus)#
Triturus dobrogicus (Triturus cristatus dobrogicus)
Triturus karelinii (Triturus cristatus karelinii)#
Triturus montandoni

Triturus vulgaris ampelensis

Proteidae

Proteus anguinus

Plethodontidae

Hydromantes ambrosii (*Speleomantes ambrosii*)²

Hydromantes flavus (*Speleomantes flavus*)

Hydromantes genei (*Speleomantes genei*)

Hydromantes imperialis (*Speleomantes imperialis*)

Hydromantes strinatii (*Speleomantes strinatii*)²

Hydromantes supramontes (*Speleomantes supramontes*)

ANURA

Discoglossidae

Alytes muletensis

Bombina bombina#

Bombina variegata#

Discoglossus galganoi (incl. *Discoglossus jeanneae*)

Discoglossus montalentii

Discoglossus sardus

Neurergus crocatus

Neurergus strauchi

Ranidae

Rana holtzi

Rana latastei

Pelobatidae

Pelobates fuscus insubricus

Fish/Poissons

OSTEICHTHYES

PETROMYZONIFORMES

Petromyzonidae

Eudontomyzon spp.²

Lampetra fluviatilis^{1,2} #

Lampetra planeri^{1,2} #

Lethenteron zanandreai (*Lampetra zanandreai*)

Petromyzon marinus^{1,2} #

ACIPENSERIFORMES

Acipenseridae

Acipenser naccarii

Acipenser sturio

SALMONIFORMES

Salmonidae

Hucho hucho (natural polulations/populations naturelles)²

*Salmo macrostigma*²

*Salmo marmoratus*²

Salmo salar (only in freshwater/uniquement en eau douce) #^{1,2}

Coregonidae

Coregonus oxyrhynchus ¹ #
Umbridae
Umbra krameri

CYPRINIFORMES

Cyprinidae

Alburnus albidus (Alburnus vulturius) ²
Anaecypris hispanica ²
Aspius aspius # ^{1, 2}
Barbus capito
Barbus comiza ²
Barbus meridionalis ²
Barbus plebejus ²
Chalcalburnus chalcoides ²
Chondrostoma genei ²
Chondrostoma lusitanicum ²
Chondrostoma polylepis ^{1, 2}
Chondrostoma soetta ²
Chondrostoma toxostoma ²
Gobio albipinnatus ²
Gobio kessleri
Gobio uranoscopus ²
Iberocypris palaciosi ²
Ladigesocypris ghigii ²
Leuciscus lucumonis ²
Leuciscus souffia ²
Pelecus cultratus
Phoxinellus spp. ²
Phoxinus phoxinurus
Rhodeus sericeus amarus # ²
Rutilus alburnoides ²
Rutilus arcasii ²
Rutilus frisii meidingeri ²
Rutilus lemmingii ² (Chondrostoma lemingi)
Rutilus macrolepidotus ²
Rutilus pigus ²
Rutilus rubilio ²
Scardinius graecus ²

Cobitidae

Cobitis elongata
Cobitis taenia ^{1, 2} #
Cobitis trichonica ²
Misgurnus fossilis ²
Sabanejewia aurata ² (Cobitis aurata)
Sabanejewia larvata (Cobitis larvata et Cobitis conspersa) ²

SILURIFORMES

Siluridae

Silurus aristotelis ²

ATHERINIFORMES

Cyprinodontidae

Aphanius iberus
 Aphanius fasciatus
 Valencia hispanica
 Valencia letourneuxi

SCORPAENIFORMES

Cottidae

Cottus gobio^{1,2} #
 Cottus petiti

PERCIFORMES

Percidae

Gymnocephalus baloni
 Gymnocephalus schraetzer²
 Romanichthys valsanicola² (proposed for Appendix II/proposition pour l'Annexe II)
 Zingel spp.²

Gobiidae

Knipowitschia panizzae (Padogobius panizzae)²
 Padogobius nigricans²
 Pomatoschistus canestrini²

CLUPEIFORMES

Clupeidae

Alosa spp. #²

INVERTEBRATES/INVERTEBRES

Arthropods/Arthropodes

INSECTA

Mantodea

Apteromantis aptera

Odonata

Coenagrion hylas (Coenagrion freyi)
 Coenagrion mercuriale
 Coenagrion ornatum
 Cordulegaster heros
 Cordulegaster trinacriae
 Gomphus graslinii
 Leucorrhinia pectoralis
 Lindenia tetraphylla
 Macromia splendens
 Ophiogomphus cecilia
 Oxygastra curtisii

Orthoptera

Baetica ustulata
 Brachytrupes megacephalus
 Isophya costata
 Isophya harzi
 Isophya stysi
 Myrmecophilus baronii

Odontopodisma rubripes
Paracaloptenus caloptenoides
Pholidoptera transsylvanica
Stenobothrus (Stenobothrodes) eurasius

Coleoptera

Agathidium pulchellum
Bolbelasmus unicornis
Boros schneideri
Buprestis splendens
Carabus hampei
Carabus hungaricus
Carabus menetriesi pacholei²
Carabus olympiae
Carabus variolosus
Carabus zawadzskii
Cerambyx cerdo
Corticaria planula²
Cucujus cinnaberinus
Dorcadion fulvum cervae
Duvalius gebhardti
Duvalius hungaricus
Dytiscus latissimus
Graphoderus bilineatus
Leptodirus hochenwarti
Limoniscus violaceus²
Lucanus cervus²
Macropsea pubipennis²
Mesosa myops²
Morimus funereus²
Osmoderma eremita
Oxyporus mannerheimii²
Phryganophilus ruficollis
Pilemia tigrina
Probaticus subrugosus
Propomacrus cypriacus
Pseudogaurotina excellens
Pseudoseriscius cameroni
Pytho kolwensis²
Rosalia alpina
Rhysodes sulcatus
Stephanopachys linearis²
Stephanopachys substriatus²
Xyletinus tremulicola²

Hemiptera

Aradus angularis²

Lepidoptera

Agriades glandon aquilo²
Arytrura musculus
Callimorpha (Euplagia, Panaxia) quadripunctaria #²
Catopta thrips
Chondrosoma fiduciarium
Clossiana improba²

Coenonympha oedippus
 Colias myrmidone
 Cucullia mixta
 Dioszeghyana schmidtii
 Erannis ankeraria
 Erebia calcaria
 Erebia christi
 Erebia medusa polaris ²
 Eriogaster catax
 Euphydryas (Eurodryas, Hypodryas) aurinia
 Glyphipterix loricatella
 Gortyna borelii lunata
 Graellsia isabellae ²
 Hesperia comma catena ²
 Hypodryas maturna
 Leptidea morsei
 Lignyopectera fumidaria
 Lycaena dispar
 Lycaena helle
 Maculinea nausithous
 Maculinea teleius
 Melanargia arge
 Nymphalis vaualbum
 Papilio hospiton
 Phyllometra culminaria
 Plebicula golgus
 Polymixis rufocincta isolata
 Polyommatus eroides
 Pseudophilotes bavius
 Xestia borealis ²
 Xestia brunneopicta ²
 Xylomoia strix

CRUSTACEA

Decapoda

Austropotamobius pallipes ²
 Austropotamobius torrentium

Isopoda

Armadillidium ghardalamensis

ARACHNIDA

Pseudoscorpiones

Anthrenochernes stellae ²

Molluscs/Mollusques

GASTROPODA

Cycloneritimorpha

Theodoxus transversalis

Dyotocardia

Gibbula nivosa (Med.)

Hygrophila

Anisus vorticulus

Mesogastropoda

Paladilhia hungarica

Sadleriana pannonica

Stylommatophora

Caseolus calculus

Caseolus commixta

Caseolus sphaerula

Chilostoma banaticum

Discus guerinianus

Discula leacockiana

Discula tabellata

Elona quimperiana

Geomalacus maculosus

Geomitra moniziana

Helicopsis striata austriaca ²

Hygromia kovacsi

Idiomela (Helix) subplicata ²

Lampedusa imitatrix

Lampedusa melitensis

Leiostyla abbreviata

Leiostyla cassida

Leiostyla corneocostata

Leiostyla gibba

Leiostyla lamellosa

Vertigo angustior ²

Vertigo genesii ²

Vertigo geyeri ²

Vertigo moulinsiana ²

BIVALVIA

Unionoida

Margaritifera durrovensis (Margaritifera margaritifera) ²

Margaritifera margaritifera ²

Unio crassus

Dreissenidae

Congeria kusceri

LIST OF SPECIES IDENTIFIED AS CANDIDATES BY THE STANDING COMMITTEE FOR POTENTIAL AMENDMENT OF ANNEX I OF RESOLUTION 6, OR, OF APPENDICES I OR II OF THE BERN CONVENTION IF NEED BE

LISTE D'ESPÈCES IDENTIFIÉES PAR LE COMITÉ PERMANENT EN TANT QUE CANDIDATES ÉVENTUELLES POUR L'AMENDEMENT DE L'ANNEXE 1 DE SA RÉOLUTION n°6, OU, LE CAS ÉCHÉANT, DES ANNEXES I OU II DE LA CONVENTION

VERTEBRATES/VERTÉBRÉS

Mammals/Mammifères

RODENTIA

Gliridae

Dryomis laniger

CETACEA

Balaenopteridae

Balaenoptera physalus (Med.)

Physeteridae

Physeter macrocephalus (Med.)

Birds/Oiseaux

PASSERIFORMES

Alaudidae

Melanocorypha bimaculata

Sylvidae

Sylvia mystacea

Hippolais languida

Phylloscopus lorenzii

Fringillidae

Serinus pusillus

Turdidae

Irania gutturalis

Oenanthe finschii

Prunellidae

Prunella atrogularis

Prunella ocularis

CORACIFORMES

Alcedinidae

Ceryle rudis

Reptiles

SAURIA

Chamaeleonidae

Chamaeleo chamaeleon

Lacertidae

Lacerta dugesii

Lacerta parva

Lacerta princeps
Podarcis filfolensis

OPHIDIA

Colubridae

Coluber gyarosensis

Viperidae

Vipera darevski

Amphibians/Amphibiens

CAUDATA

Salamandridae

Euproctus platycephalus

ANURA

Discoglossidae

Alytes dickhilleni

Fish/Poissons

OSTEICHTHYES

ACIPENSERIFORMES

Acipenseridae

Acipenser nudiventris

SALMONIFORMES

Salmonidae

Salmothymus ohridanus

CYPRINIFORMES

Cyprinidae

Aulopyge hugeli

Chondrostoma kneri

Chondrostoma lemingi

Chondrostoma phoxinus²

Leucaspius stymphalicus

Leuciscus illyricus

Leuciscus microlepis

Leuciscus polylepis

Leuciscus svallize

Leuciscus turskyi

Leuciscus ukliva

Pachychilon pictum

Pomatoschistus tortonesei (Med.)

Pseudophoxinus marathonicus (Leucaspius marathonicus)

Pseudophoxinus stymphalicus (Leucaspius stymphalicus)

Rutilus macedonicus

Rutilus racovitzai

Cobitidae

Cobitis aurata

Cobitis caspia

Cobitis caucasia

Cobitis hassi
Cobitis paludicola
Cobitis romanica
Sabanejewia calderoni

SCORPAENIFORMES

Cottidae

Cottus ferruginosus

PERCIFORMES

Percidae

Gymnocephalus acerina

Percarina demidoffi

Gobiidae

Caspiosoma caspium

INVERTEBRATES/INVERTÉBRÉS

Arthropods/Arthropodes

ARACHNIDA

Araneae

Macrothele calpeiana

Molluscs/Mollusques

GASTROPODA

Dyotocardia

Patella ferruginea (Med.)

BIVALVIA

Unionoida

Margaritifera auricularia