

# **Index Balearicum: An annotated check-list of the vascular plants described from the Balearic Islands**

JOSEP A. ROSELLÓ (1) & LLORENÇ SÁEZ (2)

## **ABSTRACT**

J. A. ROSELLÓ & L. SÁEZ (2000) Index Balearicum: An annotated check-list of the vascular plants described from the Balearic Islands. Collect. Bot. (Barcelona) 25 (1): 3-203

A check-list of vascular plant is presented, the type material of which is of Balearic origin, or presumed to be as such. For each name a list of its nomenclatural synonyms, together with the location of the type specimens and miscellaneous comments about its taxonomy, chorology or nomenclature is provided. 176 names have been typified and three nomenclatural changes are proposed: *Arenaria bolosii* (Küpfer) comb. nov., *Coristospermum huteri* (Porta) comb. nov. and *Dactylis glomerata* subsp. *ibicensis* (Gand.) comb. nov.

Keywords: Nomenclature of vascular plants, Taxonomy, Balearic Islands.

## **RESUM**

J. A. ROSELLÓ & L. SÁEZ (2000) Index Balearicum: An annotated check-list of the vascular plants described from the Balearic Islands. Collect. Bot. (Barcelona) 25 (1): 3-203

Es presenta una *check-list* dels noms de plantes vasculars el material tipus de les quals es originari, si més no pressumiblement, de les illes Balears. Per a cada nom s'indiquen els sinònims nomenclaturals, juntament amb la localització dels materials tipus així com comentaris de caire taxonòmic, corològic o nomenclatural. Es tipifiquen 176 noms i es proposen tres canvis nomenclaturals: *Arenaria bolosii* (Küpfer) comb. nov., *Coristospermum huteri* (Porta) comb. nov. i *Dactylis glomerata* subsp. *ibicensis* (Gand.) comb. nov.

## **RESUMEN**

J. A. ROSELLÓ & L. SÁEZ (2000) Index Balearicum: An annotated check-list of the vascular plants described from the Balearic Islands. Collect. Bot. (Barcelona) 25 (1): 3-203.

---

(1) Jardí Botànic, Universitat de València, C/ Quart 80, E-46008 València (Spain).

(2) Institut Botànic de Barcelona (centre mixte CSIC-Ajuntament de Barcelona), Av. Muntanyans s/n. E-08038 Barcelona (Spain). Current address: Unitat de Botànica, Departament de Biologia Animal, Vegetal i Ecologia, Facultat de Ciències, Universitat Autònoma de Barcelona, E-08193, Bellaterra. Barcelona (Spain). Corresponding author, e-mail: llorens.saez@uab.es

Se presenta una *check-list* de nombres de plantas vasculares basadas sobre material originario, o presumiblemente originario, de las islas Baleares. Para cada nombre se indican los sinónimos nomenclaturales, la localización de los materiales tipo, así como comentarios de carácter taxonómico, corológico o nomenclatural. Se tipifican 176 nombres y se proponen tres cambios nomenclaturales: *Arenaria bolosii* (Küpfer) comb. nov., *Coristospermum huteri* (Porta) comb. nov. y *Dactylis glomerata* subsp. *ibicensis* (Gand.) comb. nov.

## INTRODUCTION

The Balearic Islands are one of the most studied European territories from a floristic point of view. In fact, the beginnings of their botanical exploration dates back to, at least, the 17<sup>th</sup> century (BARCELÓ i COMBIS, 1880-1881). Joan Salvador i Riera (1683-1725) was the first who made a botanical exploration of the Balearic Islands (Mallorca and Menorca). The material collected by J. Salvador is now helded at the *Institut Botànic de Barcelona*. Some of these plants were studied and became the basis of few publications and descriptions (CAMARASA, 1988). Then some conspicuous Balearic endemics were already known to pre-linnean botanists through their cultivation (and later seed exchange) at several prominent botanical gardens like Paris, Leiden and Montpellier. A compilation of the botanical literature concerning the Balearic archipelago approaches two thousand titles (ROSSELLÓ & MUS, unpublished), supporting the view that its flora has received a long and extensive history of research.

Concomitant to this exploration and ancillary research has been the description of many new taxa based on specimens collected in the Balearic Islands. Some of these names have been retained in the current taxonomic literature and have a long history of use (e.g. *Lotus tetraphyllus* Murray, one of the few Balearic taxa in current use having no nomenclatural synonyms after more than 200 years of botanical research). Many others have been obscurely published, and therefore neglected, or misinterpreted for a long time (e.g. *Digitalis minor* L.; see HINZ, 1987b). However, the bulk of the published names of Balearic origin refers to morphological variants of wider distributed species, whose genetic basis has not been proven. They have no taxonomic value, at least in the light of the current perception of the patterns and processes involved in microevolutionary dynamics. In this context, the contribution of two prolific botanists, M. Gandoger and F. Sennen, to the inflation of poorly defined taxa is noteworthy.

Some taxa, like *Cucubalus mollisimus* L., *Digitalis minor* L., *Gnaphalium crassifolium* L., *Lobelia minima* Sims, *Ononis crispia* L., *Phlomis italicica* L., *Sibthorpia africana* L. and *Teucrium asiaticum* L. were allied to non-Balearic localities in their protologues. However, subsequent work has proven that all of them refer to Balearic plants. By contrast, the Balearic locations given for *Amelanchier ovalis* var. *baleariaca* Briq., *Bromus palmensis* Gand., *Opuntia balearica* L. and *Rubia lucida* L. are erroneous, and these names confidentially apply to plants not growing in these islands. Further, the attribution of a Balearic origin for some ancient names, like *Geranium parvulum* Scop. or *Helleborus trifolius* Mill., for which a type is not avail-

lable, remains a matter of speculation. Accordingly, these have not been included in this check-list.

To our knowledge no previous effort to compile the names of vascular plants described from the Balearic Islands has been made. This is unfortunate, given the nature of the current (*Med-Check*, *Flora iberica*) or planned (*Flora Mediterranea*) floristic research projects involving the flora of the archipelago. We think this annotated check-list will be useful to most colleagues engaged in taxonomic revisions world wide, but it should certainly be consulted by those who wish to work on the Flora of the Balearic archipelago.

The scope of this research is inevitably prone to omissions, and the handling of thousands of references may have produced some involuntary mistakes which are difficult to trace and correct. Therefore, we would be very grateful to receive any kind of amendments to improve future versions of this check-list.

This work has benefited from the help of many people. Our friends C. Benedí, S. Cafferty, G. López González, R. Morales and F. Muñoz Garmendia offered valuable advice on some nomenclatural problems. The bibliographic assistance provided by J.A. Devesa, M.A. García, B.E. Leuenberger, V. Montes and S. Valentin is highly appreciated. L. Sáez has received financial support from a grant (EPO) of the Spanish Scientific Research Council (CSIC)-Institut Cultura de Barcelona (ICUB); and a partial support from the research project PB96-0849 and from the Training and Mobility of Researchers (TMR) Programme of the European Commision, which partially supported the visit to the Museum National d'Histoire Naturelle du Paris. We thank the curators of the visited herbaria for the extensive facilities provided. Special acknowledgements are due to A. Charpin and J. Paiva for their help during our stay at the herbaria of Geneve and Coimbra. Lastly, we are indebted to J.M.Montserrat for his unconditional support during this work.

## MATERIAL AND METHODS

We have included all validly published names available to us whose type material is of Balearic origin, or presumed to be as such. Valid names directly linked to a type (i.e. the basyonyme) are denoted in bold. The names of the authors have been abbreviated according to BRUMMITT & POWELL (1992), and the journals are cited, with some exceptions, according to the suggestions of LAWRENCE & al. (1968). The work of STAFLEU & COWAN (1976-1988) has been followed for the citation of autonomous works.

We have scrutinized the nomenclatural validity of each name according to the provisions of the International Code of Botanical Nomenclature (hereafter, the Code). No remarkable difficulties of importance have been found through this research, but the nomenclature surrounding some taxa (e.g. *Limonium virgatum* subsp. *pseudodyctiocladon* or *Plantago purpurascens*) is somewhat controversial and prone to debatable interpretations. Therefore the interpretation here provided may not be the last word on the subject. In this context it should be noted that among the myriads of names published by the French botanist M. Gandoger only those occurring in his *Flora Europaea* (GANDOGER, 1883-1891) are not validly published as provided by several

articles of the Code (MEYER, 1969). By contrast, the nomenclatural combinations appearing in his *Novus Conspectus* (GANDOGER, 1910) that were based on earlier valid names are by no means rejectable and should be accepted as validly published names. Some of these have priority over later combinations which are currently in use, especially at the subspecific level. However, no dramatic nomenclatural consequences have been resulted from the resurrection of these names: only one new combination has been necessary to accommodate the taxonomic and nomenclatural framework of a restricted endemic (see under *Dactylis ibicensis* Gand.).

We have also compiled all other names of Balearic origin whose publication was not effective in accordance with the Code. No effort has been devoted to including invalid names printed on herbarium labels. Invalid, illegitimate, and superfluous names have been identified by in italics.

For each taxon entry an ordered list (by date) of the nomenclatural synonyms available is also provided. Unless otherwise stated (n.v.= not seen) all literature citations have been checked by the authors.

A safe interpretation of the taxa is necessarily provided by examination of the type specimens. Therefore, we have reported the relevant portions of the protologue where the type or the original material was cited (*Ind. loc.*) to help further researchers to trace authentic materials. If known, the herbarium location of the type material has been cited. Unfortunately, we have not been able to see all the types of the names included in this check-list. Some relevant collections were not on loan and financial constraints precluded their consultation. Nevertheless, we have visited the following institutional herbaria: BC, BCC, BCF, COI, G, MA, MAF, MPU, P, and VAB (abbreviations according to HOLMGREN & al., 1990). The private herbaria of F. Bianor (Pont d'Inca and Palma; PH-BIANOR), J. Orell (Sóller; PH-ORELL), J.J. Rodríguez (Maó; PH-RODR) and L. Sáez (Barcelona; PH-SÁEZ) were also personally checked. Lastly, other herbaria were available through microfiches or xerocopies of the sheets (Desfontaines, Linne, Lamark) and for some types a photograph could be examined. Where the type material was seen, this is stated by printing the acronym of the herbarium in bold. Also, we have specified what kind of nomenclatural type has been reported for each taxon. The references to previous published lectotypifications were included and for a large number of taxa we have selected a suitable lectotype or neotype. We precluded the lectotypification of some problematic taxa due to the presence of heterogeneous material in the protologue or in the herbarium sheets. Despite intensive efforts to trace them some types have been unavailable to us. This is partly due to the loan of several specimens on a long term basis to a couple of botanists working on the *Flora iberica* project. However, some types could be irretrievably lost. The possibility that some untraced material in large herbaria could eventually be found due to poorly curatorial procedures is not excluded.

When possible, comments concerning the taxonomic status or other relevant information concerning each validly published taxon have been provided. The names that are in current use in taxonomic revisions, relevant check-lists, or floras, are indicated in the remarks section.

**CHECK-LIST****Aizoaceae**

*Mesembryanthemum balearicum* Gand., Fl. Eur. 9: 144 (1886), nom. inval.

***Mesembryanthemum nodiflorum* f. *major*** Gand. in Bull. Soc. Bot. France 47: 141 (1900)

Ind. loc.: “Dans l’îlot nommé Ahorcados”

Type material: To be searched at LY.

Remarks: This taxon does not appear in recent regional treatments of the genus (GREUTER & al., 1984; GONÇALVES, 1990), and judging from the original diagnosis it could simply be a growth variant devoid of any systematic recognition.

**Alliaceae**

***Allium aestivale*** J.J. Rodr. ex Gand. in Bull. Soc. Bot. France 47: 143 (1900); J.J. Rodr., Fl. Menorca: 180 (1904); ≡ *A. rotundum* subsp. *aestivale* (J.J. Rodr.) Gand., Nov. Consp. Fl. Eur.: 451 (1910); ≡ *A. polyanthum* var. *aestivale* (J.J. Rodr. ex Gand.) Pau in Butll. Inst. Catalana Hist. Nat. 14: 140 (1914); ≡ *A. polyanthum* subsp. *aestivale* (J.J. Rodr. ex Gand.) Pau ex Colom, Biogeografia Baleares ed. 2, 1: 191 (1978), comb. inval.

Ind. loc.: “Hab. in glareosis maritimis prope Mahon”

Type material: Not traced.

Remarks: No type material of this taxon was found by PASTOR & VALDÉS (1983). Furthermore, no specimens are to be found at the Rodríguez herbarium in Menorca. According to PASTOR & VALDÉS (1983) *Allium aestivale* should be included in the synonymy of *A. commutatum* Guss.

***Allium antonii-bolosii*** P. Palau in Anales Inst. Bot. Cavanilles 11: 485 (1954)

Ind. loc.: “Habitat in fisuris angustissimis rupestribus calcareis ad N vel ad W orientatis”

Type material: BC (holotype), MA (syntype).

Remarks: PALAU (1976: 31) remarked that the type was held at BC. Accordingly, the later lectotypification (MA 147149) of PASTOR & VALDÉS (1983) is superfluous.

Remarks: Name in current use (ROSELLÓ & al., 1993); endemic to the Eastern Balearics. The original spelling of this taxon was *Allium a-bolosii*. Later authors developed the initial in the same way as was done for several Linnean symbols. Closely related to *Allium eivissanum* Garbari & Miceli, to which it is mainly related on morphological, anatomical and karyological grounds (ROSELLÓ & al., 1993).

*Allium cupani* var. *minoricensis* L. Llorens in Mediterranea 3: 101 (1979), nom. inval.

**Allium ebusitanum** Font Quer in Butll. Inst. Catalana Hist. Nat. 24: 145 (1924); ≡ A. sphaerocephalon subsp. ebusitanum (Font Quer) Rosselló, Mus & N. Torres in Candollea 48: 598 (1993)

Ind. loc.: "Hab. in Ebuso, l. «Cala de les Torretes» dicto, pr. Sta. Agnès, ubi GROS d. 13 junii 1918; legit"

Type material: BC 62229 (lectotype; PASTOR & VALDÉS, 1983), SEV (isolectotype).

Remarks: Name in current use (PASTOR & VALDÉS, 1983; ROSELLÓ & al., 1993); endemic to the Western Balearics. Closely related to *Allium sphaerocephalon* L., but differing in several morphological features. Earlier claims suggesting taxonomic affinities with *A. vineale* L. (STEARNS, 1980) have proven to be unreliable (STEARNS, 1984).

**Allium eivissanum** Garbari & Miceli in Willdenowia 16: 383 (1987); ≡ A. antonii-bolosii subsp. eivissanum (Garbari & Miceli) N. Torres & Rosselló in Boll. Soc. Hist. Nat. Balears 32: 154 (1991) [«1989»]

Ind. loc.: "Spain, Baleares, Eivissa, Jesús, Can Gomez, 7.4.1984, Garbari, Torres & Del Prete"

Type material: "Typus: Garbari, Torres & Del Prete s. n. (holotype: PI)"

Remarks: Name in current use (ROSELLÓ & al., 1993); endemic to the Western Balearics. See comments under *Allium antonii-bolosii*.

**Allium grosii** Font Quer in Butll. Inst. Catalana Hist. Nat. 24: 145 (1924)

Ind. loc.: "Hab. in Ebuso, in saxosis calcareis l. «Cala d'Aubarca» dicto, ubi GROS; invenit."

Type material: MA (lectotype; PASTOR & VALDÉS 1983)

Remarks: Name in current use (STEARNS, 1980; 1984); endemic to the Western Balearics (Eivissa). BRULLO & al. (1992) provided comments on the taxonomic and karyological relationships of this polyploid.

**Allium roseum** var. **lanceolatum** Font Quer in Butll. Inst. Catalana Hist. Nat. 17: 51 (1917)

Ind. loc.: "Hab. Binisarmenia, pr. Mahó"

Type material: Not traced.

Remarks: No type material of this taxon was found by PASTOR & VALDÉS (1983), and our search in the Font Quer herbarium (BC) has been unsuccessful. This taxon should probably be included within *Allium roseum* L. without any taxonomic recognition.

**Allium roseum** f. **maxima** Knoche, Fl. Balear. 1: 373 (1921)

Ind. loc.: "Herb. Knoche 2890 [Eivissa]"

Type material: Atalaya, 31-III-1908, Knoche 2890 (**MPU-Knoche**). **Lectotype here designated** (single specimen).

Remarks: No singular morphological features could be detected in this taxon, and the lectotype clearly belongs to typical *Allium roseum* L.

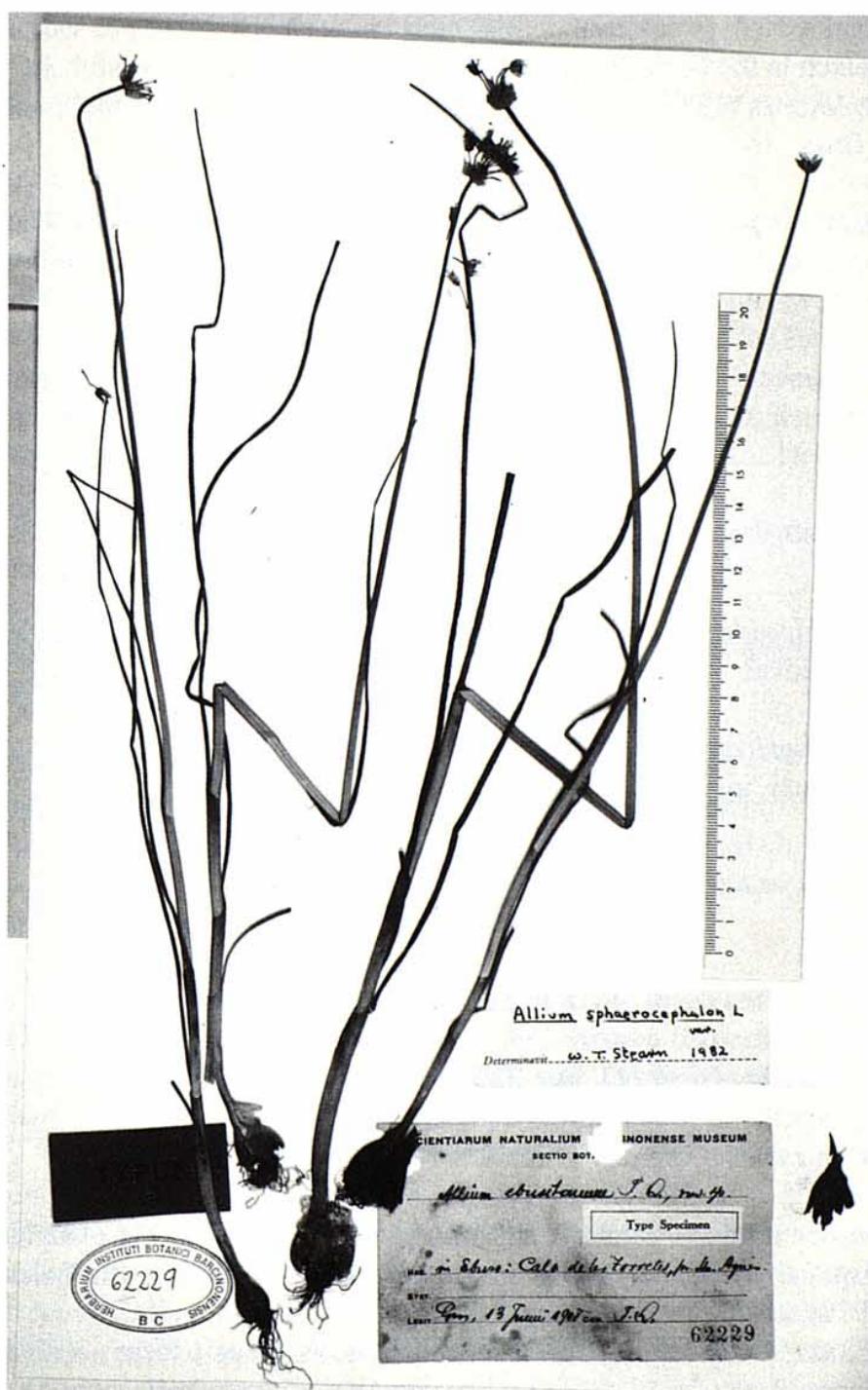


Fig. 1. Holotype of *Allium ebusitanum* Font Quer (BC).

***Allium scopulicolum*** Font Quer in Butll. Inst. Catalana Hist. Nat. 24: 144 (1924)

Ind. loc.: Hab. in scopolu 'Espardell del Frare de l Espartar" dicto, et alibi, in saxosis calcareis maritimis Ebusii

Type material: Not traced.

Remarks: No type material of this taxon was found by PASTOR & VALDÉS (1983), and our search in the Font Quer herbarium (BC) has been unsuccessful. According to PASTOR & VALDÉS (1983) *Allium scopulicolum* is a taxonomic synonym of *A. commutatum* Guss.

*Allium vineale* var. *compactum* Bianor in Butll. Inst. Catalana Hist. Nat 17: 140 (1917), nom. nud.; ≡ *A. vineale* f. *compactum* (Bianor) Knoche, Fl. Balear. 1: 373 (1921), nom. inval.

*Saturnia balearica* Gand., Fl. Eur. 22: 106 (1890), nom. inval.; ≡ *Allium chamaemoly* subsp. *balearica* (Gand.) Gand., Nov. Consp. Fl. Eur.: 451 (1910), nom. inval.

### Amaranthaceae

*Amaranthus blitoides* var. *ascendens* P. Palau in Anales Inst. Bot. Cavanilles 11: 502 (1954), nom. inval.

*Amaranthus muricatus* var. *lanceolatus* P. Palau in Anales Inst. Bot. Cavanilles 12: 297 (1955), nom. inval.

### Amaryllidaceae

*Hermione balearica* Gand., Fl. Eur. 22: 55 (1890), nom. inval.

*Hermione majorica* Gand., Fl. Eur. 22: 57 (1890), nom. inval.

*Leucojum balearicum* Gand., Fl. Eur. 22: 48 (1890), nom. inval.

**Leucojum hernandezii** Cambess. in Mém. Mus. Hist. Nat. 14: 315 (1827); ≡ *L. aestivum* subsp. *hernandezii* (Cambess.) Nyman ex Colom, Biogeografía Baleares ed. 2, 1: 219 (1978), comb. inval.

Ind. loc.: "Crescit in montibus insulae Majoris prope Lluch; necnon in insulâ Minore (Hern.)"

Type material: In Montibus insulae majoris (...) a Monasterio Lluch, ad Montem Puig Major, 21-IV-1825 (Cambessedès) (**MPU-Knoche**). **Lectotype here designated** (left specimen).

Remarks: *Leucojum hernandezii* has been subsumed under *L. aestivum* L. subsp. *pulchellum* (Salisb.) Briq. (WEBB, 1980). However, the taxonomic independence of the latter from *L. aestivum* subsp. *aestivum* seems rather questionable (CHIAPPINI & SCRUGLI, 1970).

*Leucojum latifolium* Gand., Fl. Eur. 22: 48 (1890), nom. inval.

## Apiaceae

*Ammi balearicum* Gand., Fl. Eur. 10: 6 (1886), nom. inval.

**Apium bermejoi** L. Llorens in Folia Bot. Misc. 3: 28 (1982)

Ind. loc.: "Typus: Ins. Minorica: Maó; in maritimis humidis prope Cap Negre. BC 637411"

Type material: BC (holotype).

Remarks: Name in current use (LLORENS, 1982); endemic to the Balearic Islands (Menorca).

**Athamanta balearica** Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 17 (1911)

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: Not traced at BC and MA.

Remarks: The only reference regarding this taxon is that of KNOCHE (1922) who includes it under *Laserpitium gallicum* L.

**Bulbocastanum balearicum** Sennen in Bol. Soc. Ibér. Ci. Nat. 27: 138 (1928); ≡ Conopodium balearicum (Sennen) M. Hiroe, Umbelliferae World: 1003 (1979); ≡ Bunium bulbocastanum [subsp. macuca] var. balearicum (Sennen) O. Bolòs & Vigo, Fl. Països Catalans 2: 408 (1990); ≡ B. balearicum (Sennen) Mateo & S. López in Anales Jard. Bot. Madrid 57: 229 (1999)

Ind. loc.: "Baléares: Pont d'Inca, champs. Leg. F. Bianor"

Type material: Baléares: Pont d'Inca, champs, V et VI-1916, Bianor (BC-Sennen 836352). **Lectotype here designated; BC-Sennen (isolectotype)**

Remarks: Name in current use (MATEO & LÓPEZ, 1999). According to these authors *Bunium balearicum* also occurs in some parts of the E of the Iberian peninsula.

**Bupleurum barceloi** Coss. ex Willk. in Linnaea 40: 83 (1876); ≡ B. dianthifolium subsp. barceloi (Coss.) Gand., Nov. Consp. Fl. Eur.: 221 (1910); ≡ B. fruticescens var. barceloi (Coss. ex Willk.) Knoche, Fl. Balear. 2: 232 (1922); ≡ B. *dianthifolium* subsp. *barceloi* (Coss. ex Willk.) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 83 (1974), comb. superfl.; ≡ B. *fruticescens* subsp. *barceloi* (Coss. ex Willk.) Knoche ex Colom, Biogeografía Baleares ed. 2, 1: 208 (1978), comb. inval.

Ind. loc.: "Mallorca: in fissuris rupium calcar. regionis submontanae in tractu Sierra passim (hucusque non nisi supra pagum Fornalutx pr. Sóller et pr. S'Escrop, ubi cl. Barceló d. 7. Sept. 1870 hanc plantam primus legit)"

Type material: Montes de Fornalutx, 7-X-1870, F. Barceló, E. Bourg. Plant. Exsicc. 1869 (**COI-Willkomm**). **Lectotype here designated** (right specimen).

Remarks: Name in current use (CAUWET, 1979); endemic to the Balearic Islands.

**Caucalis arvensis** var. **simplex** Cambess. in Mém. Mus. Hist. Nat. 14: 254 (1827)

Ind. loc.: "In umbrosis montium circa Esporlas in insulâ Majore"

Type material: In montibus porpè Esporlas, 18-V-1825, Cambessedès (**MPU-Knoche**). **Lectotype here designated.**

Remarks: The lectotype is by no means distinguishable from *Torilis arvensis* (Huds.) Link.

*Conium balearicum* Gand., Fl. Eur. 10: 84 (1886), nom. inval.

**Conium maculatum** var. **barceloi** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 83 (1974)

Ind. loc.: "Typus: Menorca, leg. Pons Guerau, 9-V-1903, BC 26073"

Type material: **BC** (holotype).

Remarks: The features used to describe this variety are unreliable and do not allow the maintenance of this taxon as distinct from *Conium maculatum* L.

*Daucus maximus* f. *leptophylla* Willk. in Linnaea 40: 80 (1875), nom. nud.

**Daucus gummifer** var. **leptophylla** Willk. ex Barceló, Fl. Baleares: 191 (1880);  $\equiv$  *D. carota* [subsp. *hispanicus*] var. *leptophylla* (Willk. ex Barceló) Bonafè, Fl. Mallorca 3: 277 (1979), comb. inval.

Ind. loc.: "Mallorca: Génova, Andraitx, Puig de Ternellas y de Formentor! Puerto de Sóller, (Bourg.)- Ibiza: murallas de la ciudad! (V[ista]. V[iva].)"

Type material: Not traced at COI-Willk.

Remarks: No confident identification of this taxon can be made with the diagnosis alone. The name is not in current use.

**Ferula communis** subsp. **cardonae** Sánchez-Cuxart & Bernal in Acta Bot. Barcinon. 45: 237 (1998)

Ind. loc.: "Holotypus: Cala Blanes (Ciutadella, Menorca), 31SEE72, 10 m.s.m., camps abandonats, 13-VI-1993, A. Sánchez-Cuxart, BCC-Corm. 5003"

Type material: **BCC** (holotype).

Remarks: A poorly known taxon requiring further study. The morphological characters used to distinguish it from *Ferula communis* L. are few, and further study may prove that they are not constant enough to be discriminant.

**Ferula communis** var. **paucivittata** Willk. in Linnaea 40: 81 (1875)

Ind. loc.: "Menorca: Monte de Toro, in solo pingui glareosisque haud rara, d. 31 Mart. c. flor. Fructus mecum communicavit cl. Rodriguez [sic], qui eandem plantam d. 18 Junii ad Binisegné [sic] in ditione opp. Mercadal legit."

Type material: Menorca: Monte de Toro, in loco pingui rarisque glareosis. Legi d. 31 Mart. 1873, Willkomm, Herb. Balear n. 79 (**COI-Willkomm**). **Lectotype here designated** (single specimen).

Remarks: This taxon and *Ferula communis* subsp. *cardonae* refers to the same entity. See further comments under the later.

**Kundmannia sicula** var. **huetiorum** Willk. in Linnaea 40: 81 (1875); ≡ K. insulana Gand. in Bull. Soc. Bot. France 47: 122 (1900); ≡ K. sicula subsp. insulana (Gand.) Gand., Nov. Consp. Fl. Eur.: 212 (1910); ≡ K. sicula f. huetiorum (Willk.) Knoche, Fl. Balear. 2: 244 (1922)

Ind. loc.: "Eandem stirpem in Sicilia (prope Mazzara) legerunt frates E. et A. Huet de Pavillon anno 1855 d. 30 Apr. Mallorca: ad agrorum margines prope praed. Casa de Morai in ditione oppidi Artá, raro. Die 23 April. cum flor."

Type material: Mallorca: ad agrorum marginis prope villam, Casa de Morai in ditione oppidi Artá. Legi d. 23-IV-1873, Willkomm, Herb. balear. n. 321 (**COI-Willkomm**). **Lectotype here designated** (single specimen).

Remarks: The taxonomic distinction of the Balearic (and Sicilian) populations of *Kundmannia sicula* (L.) DC. has not been further supported by later authors (TUTIN, 1968a).

*Kundmannia sicula* f. *valdemuzana* Bonafé, Fl. Mallorca 3: 248 (1979), nom. inval.

**Laserpitium gallicum** subsp. **majoricum** Romo, Fl. Silvestres Baleares: 196 (1994)

Ind. loc.: "Holotypus: Coma de N'Arbona (Sóller), peñascos, leg. Rodríguez, 16 junio 1877, BC 24256"

Type material: **BC** (holotype).

Remarks: The alleged discriminant features to characterize the Balearic populations of *Laserpitium gallicum* L. are unreliable and do not have a sound basis. They should be adscribed to typical *L. gallicum* without taxonomic recognition.

**Ligisticum balearicum** L., Mant. Pl.: 218 (1771)

Ind. loc.: "Habitat in Balearibus; Romae"

Type material: **LINN 353.8. Lectotype here designated**.

Remarks: The detailed description of this taxon made by Linné applies very well to the sheet chosen as lectotype, especially on some foliar (number of folioles) and reproductive (number of rays of the umbel) features. The lectotype belongs in fact to *Kundmannia sicula* (L.) DC., a statement already reported by KNOCHE (1922).

**Ligisticum huteri** Porta in Nuovo Giorn. Bot. Ital. 19: 306 (1887); ≡ *L. pyrenaicum* f. *huteri* (Porta) Rouy & Camus, Fl. France 7: 285 (1901) ≡ *L. pyrenaeum* subsp. *huteri* (Porta) Gand., Nov. Consp. Fl. Eur.: 213 (1910); ≡ *L. pyrenaicum* var. *huteri* (Porta) Knoche, Fl. Balear. 2: 246 (1922); ≡ *L. lucidum* subsp. *huteri* (Porta) O. Bolòs in Publ. Junta Ci. Nat. Barcelona 27: 54 (1958); ≡ *L. pyrenaicum* f. *huteri* (Porta) Knoche ex Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), comb. inval.; ≡ *Coristospermum lucidum* subsp. *huteri* (Porta) Reduron, Charpin & Pimenov in J. Bot. Soc. Bot. France 1: 98 (1997); ≡ *Coristospermum huteri* (Porta) L. Sáez & Rosselló, **comb. nov.**

Ind. loc.: "M[ajorca]. In rupestribus et glareosis circa la casa de la neu, latere boreali in m. Puig major de Torrella. 29 Jul."

Type material: W (lectotype; LEUTE, 1970).

Remarks: Name in current use (LEUTE, 1970; REDURON & al., 1997), endemic to the Balearic Islands (Mallorca).

*Magydaris balearica* Gand., Fl. Eur. 10: 152 (1886), nom. inval.

**Magydaris pastinacea** subsp. **femeniesii** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 83 (1974)

Ind. loc.: "Typus: Minorica, Cala Mesquida, leg. P. Font i Quer, 21-V-1913, BC 24946"

Type material: **BC** (holotype).

Remarks: A doubtful taxon requiring further study. Plants from the Balearic Islands (Menorca) have been identified both with *Magydaris pastinacea* (Lam.) Paol. in Fiori & Paol. and *M. panacifolia* (Vahl) Lange in Willk. & Lange, the two European taxa of the genus. Apparently, the specimens from Menorca show intermediate features linking both species, but they have no morphological features of their own.

*Magydaris proxima* Gand., Fl. Eur. 10: 152 (1886), nom. inval.

**Naufraga balearica** Constance & Cannon in Feddes Repert. 74: 3 (1967)

Ind. loc.: "Pollensa, Mallorca, Baleares. Cala San Vicente, falaise maritime, fissures ombrages et humides: colonisation de dépôts de tuf calcaire, 22.7.1962, J. DUVIGNEAUD"

Type material: **BM** (holotype).

Remarks: Name in current use (TUTIN, 1968b); endemic to the Balearic Islands (Mallorca). Morphological observations have suggested the inclusion of *Naufraga balearica* within the subfamily Hydrocotyloideae as an isolated genus (CONSTANCE & CANNON, 1967; FROEBE, 1979). However, recent molecular work using nuclear ITS sequences (DOWNIE & al., 2000) has shown that it is closely related to some members of Apioideae, in particular to *Apium graveolens* L. *Naufraga balearica* has also been reported from Corsica where it is thought to be extinct.

*Oenanthe balearica* Gand., Fl. Eur. 10: 165 (1886), nom. inval.

*Oenanthe conocarpa* Gand., Fl. Eur. 10: 165 (1886), nom. inval.

**Orlaya platycarpos** f. **glaberrima** Gand. in Bull. Soc. Bot. France 47: 124 (1900)

Ind. loc.: "Barranco de Soller, Pla de Cuba et Gorch Blau (alt. 800-1200 mètres)"

Type material: To be traced at LY.

Remarks: According to KNOCHE (1922: 256) this taxon should be included within typical *Orlaya platycarpos* Koch.

*Pastinaca insularis* Gand., Fl. Eur. 10: 176 (1886), nom. inval.

**Pastinaca lucida** L., Mant. Pl.: 58 (1767)

Ind. loc.: "Habitat in Europa australi"

Type material: LINN 369.1 (syntype)

Remarks: Name in current use (TUTIN, 1968c); endemic to Eastern Balearic Islands. HIROE (1979) erroneously reported *Thysselinum lucidum* (L.) Moench, Suppl.: 31-32 (1802) as a nomenclatural synonym of *P. lucida*.

*Paua balearica* Gand., Fl. Eur. 10: 244 (1886), nom. inval.

*Petroselinum balearicum* Gand., Fl. Eur. 10: 177 (1886), nom. inval.

**Pimpinella bicknellii** Briq. in Bull. Herb. Boissier 6: 85 (1898); in Annaire Conserv. Jard. Bot. Genève 2: 289 (1898);  $\equiv$  Apium bicknellii (Briq.) Calestani in Webbia 1: 178 (1905);  $\equiv$  Spiroceratum bicknellii (Briq.) Wolff in Repert. Spec. Nov. Regni Veg. 17: 45 (1921);  $\equiv$  Adariantia bicknellii (Briq.) Knoche, Fl. Balear. 2: 241 (1922)

Ind. loc.: "Serra ad N.E. insulae Majorque balearicae, in petraeis inter Pollenza et Lluch (leg. ill. Cl. Bicknell)."

Type material: G (holotype).

Remarks: Name in current use (TUTIN, 1968d); endemic to the Balearic Islands (Mallorca).

**Pimpinella tragium** var. **balearica** Knoche, Fl. Balear. 2: 239 (1922);  $\equiv$  *P. tragium* subsp. *balearica* (Knoche) Malag., Subsp. Var. Geogr.: 13 (1973);  $\equiv$  *P. tragium* subsp. *balearica* (Knoche) L. Llorens in Pla & al., Aprox. Catàleg Flora Illes Balears: 57 (1992), comb. superfl.;  $\equiv$  *P. tragium* subsp. *balearica* (Knoche) Romo, Fl. Silvestres Baleares: 183 (1994), comb. superfl.

Ind. loc.: "MAJORQUE: au Puig Major, 1200-1420 mètres, au Puig de Randa et Puig de Morey 530 mètres"

Type material: Puig Major, 1040 m, rochers, 26-VIII-1907, Knoche 2544 (**MPU-Knoche**). **Lectotype here designated** (single specimen).

Remarks: As far as the morphology is concerned this variety should not be recognized as distinct from *Pimpinella tragium* Vill. subsp. *tragium*.

**Thapsia gymnesica** Rosselló & Pujadas in Candollea 46: 66 (1991);  $\equiv$  *T. gorganica* subsp. *gymnesica* (Rosselló & Pujadas) Romo, Fl. Silvestres Baleares: 197 (1994)

Ind. loc.: "Islas Baleares, Mallorca: entre Cala Sant Vicenç y la Punta de Ses Coves Blanques (31SEE0419), 80 msm, 17.8.1989, leg. A. Pujadas COA"

Type material: COA (holotype).

Remarks: Name in current use (PUJADAS & al., 1991; ALOMAR & al., 1997); endemic to the Eastern Balearics.

**Torilis nodosa** f. **pedunculata** Pau in Bol. Soc. Esp. Hist. Nat. 1: 210 (1901)

Ind. loc.: "Canasia"

Type material: Not traced at MA.

Remarks: Judging from the diagnosis we are confident that this form has no taxonomic value, but a conclusive adscription awaits the finding of the type material.

### Aquifoliaceae

***Ilex aquifolium*** var. ***balearica*** Lam., Encycl. 3: 145 (1789)

Ind. loc.: "La variété γ est originaire de l'Ile minorque"

Type material: **P-Lamark** (holotype).

Remarks: Not growing on Menorca. The cultivated specimens from which the description was devised were probably collected on Mallorca. Taxonomically not worthy separation from *Ilex aquifolium* L. (BENEDÍ, 1997).

***Ilex balearica*** Desf., Hist. Arbr. France 2: 362 (1809);  $\equiv$  *I. aquifolium f. balearica* (Desf.) Laguna, Fl. Forest. Espaň. 2 part: 355 (1890), nom. inval.;  $\equiv$  *I. aquifolium* subsp. *balearica* (Desf.) Gand., Nov. Consp. Fl. Eur.: 325 (1910), nom. inval.;  $\equiv$  *I. aquifolium* var. *balearica* (Desf.) O. Bolòs & Molinier in Collect. Bot. (Barcelona) 5: 740 (1958), comb. inval.

Ind. loc.: "Mahon"

Type material: Not traced.

Remarks: See comments under *Ilex aquifolium* var. *balearica* Lam.

*Ilex dubia* Gand., Fl. Eur. 15: 193 (1888), nom. inval.

*Ilex vagans* Gand., Fl. Eur. 15: 193 (1888), nom. inval.

### Apocynaceae

*Vinca balearica* Gand., Fl. Eur. 15: 321 (1888), nom. inval.

*Vinca breviuscula* Gand., Fl. Eur. 15: 321 (1888), nom. inval.

*Vinca obscura* Gand., Fl. Eur. 15: 321 (1888), nom. inval.

### Araceae

*Arum balearicum* Buc'hoz, Hist. Univ. 8: t. 2 (1775), nom. nud. [n.v.] (cf. BOYCE, 1993: 171)

*Arum lucanum* Bonafé, Fl. Mallorca 1: 259 (1977), nom. inval.;  $\equiv$  *A. majoricense* subsp. *lucanum* (Bonafé) Romo, Fl. Silvestres Baleares: 391 (1994), nom. inval.

***Arum majoricense*** L. Chodat in Bull. Soc. Bot. Genève 15: 194 (1924); Contributions à la Géo-Botanique de Majorque: 46 (1924);  $\equiv$  *A. italicum* f. *majoricense* (L. Chodat) Mus, Pericás & Rosselló in Candollea 42: 397 (1987);  $\equiv$  *A. italicum* subsp. *majoricense* (L. Chodat) O. Bolòs, Masalles & Vigo in Collect. Bot. (Barcelona) 17: 96 (1987)

Ind. loc.: "Ad septentrionem urbis Arta, inter culturas opuntarium et simul cum *Aro italicico* vigens."

Type material: Not found at G, where the collections of the Chodat family are located.

Remarks: A variant of *Arum italicum* Mill. with spotted leaves of very limited taxonomic value. Not treated by BOYCE (1993) in his monograph of the genus. Further information can be found in PERICÁS & al. (1987) and ROSELLÓ & SÁEZ (1997a).

*Arum minoricense* Gand., Fl. Eur. 22: 40 (1890), nom. inval.  $\equiv$  *A. pictum* subsp. *minoricense* (Gand.) Gand., Nov. Consp. Fl. Eur.: 436 (1910), nom. inval.

**Arum pictum** subsp. **sagittifolium** Rosselló & L. Sáez in Acta Bot. Barcinon. 44: 170 (1997)

Ind. loc.: "Typus: Insulae Baleares, Majorica, ubi loco dicto Marina de Llucmajor, 31S DD76, 120 m alt., 14.XI.1995, J.A. Rosselló et L. Sáez legerunt (VAB 971600 holotypus; herb. L. Sáez isotypus)"

Type material: **VAB** (holotype); **PH-SÁEZ** (isotype).

Remarks: Name in current use (ROSELLÓ & SÁEZ, 1997a); endemic to the Eastern Balearics.

**Dracunculus muscivorum** var. **caprariense** Romo, Fl. Silvestres Baleares: 393 (1994)

Ind. loc.: "Holotypus: Cabrera, L'Enciola, Hort del Far, leg. A. Marcos, 29-IV-1933, BC 87551"

Type material: **BC** (holotype).

Remarks: Not recognized as a separate taxon from typical *Helicodiceros muscivorus* (L. fil.) Engl. by ROSELLÓ & SÁEZ (1997a).

*Gymnomesium minoricense* Gand., Fl. Eur. 22: 40 (1890), nom. inval.

### Aristolochiaceae

**Aristolochia bianorii** Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 19 (1911);  $\equiv$  *A. bianorii* var. *typica* L. Chodat in Bull. Soc. Bot. Genève 15: 202 (1924), nom. inval.

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: **MA** (lectotype; NARDI, 1984).

Remarks: Name in current use (NARDI, 1984; CASTROVIEJO, 1986); endemic to the Eastern Balearics.

**Aristolochia bianorii** var. **knochiana** L. Chodat in Bull. Soc. Bot. Genève 15: 202 (1924);  $\equiv$  *A. bianorii* var. *knochiana* (L. Chodat) Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), comb. inval.

Ind. loc.: "M.R. Chodat et ses élèves ont trouvé dans la garigue du versant oriental de la Muleta près Soller, une Aristoloche du même type, croissant dans les anfractuosités des rochers à l'ombre "

Type material: **G** (lectotype; NARDI, 1984).

Remarks: Not worthy of separation from typical *Aristolochia bianorii* (NARDI, 1984).

### Asclepiadaceae

*Vincetoxicum balearicum* Gand., Fl. Eur. 15: 332 (1888), nom. inval.

*Vincetoxicum insulare* Gand., Fl. Eur. 15: 327 (1888), nom. inval.

*Vincetoxicum undulare* Gand., Fl. Eur. 15: 332 (1888), nom. inval.

**Vincetoxicum hirundinaria** var. **balearicum** O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 90 (1983)

Ind. loc.: "Typus: Menorca: Pou d'En Carles, ubi leg. Rodríguez Femenias, 5-V-1867, BC 41072"

Type material: **BC** (holotype).

Remarks: A poorly known taxon requiring further study.

### Asparagaceae

*Asparagus balearicus* Gand., Fl. Eur. 22: 4 (1890), nom. inval.

*Asparagus acutifolius* var. *mitis* P. Palau in Anales Inst. Bot. Cavanilles 11: 501 (1954), nom. inval.

**Asparagus acutifolius** var. **mitis** P. Palau in Treb. Inst. Catalana Hist. Nat. 7: 32 (1976);  $\equiv$  *A. acutifolius* subsp. *mitis* (P. Palau) Colom, Biogeografía Baleares ed. 2, 1: 199 (1978), comb. inval.

Ind. loc.: "Majorica. Gènova, leg. P. Palau BC 123603"

Type material: **BC** (holotype).

Remarks: None of the morphological characters used to describe this taxon appear to be constant. In addition, it also lacks ecological and geographical distinction, and for these reasons is better to treat it as a mere variant of *Asparagus acutifolius* L. devoid of any taxonomic recognition.

### Aspidiaceae

**Aspidium pallidum** var. **balearicum** Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 19 (1911);  $\equiv$  *A. pallidum* subsp. *balearicum* (Sennen & Pau) Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), comb. inval.

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: Baléares, Sóller, lieux ombragés, V-VI-1910, F. Bianor, Pl. Espagne-F. Sennen n.º 1093 (MA 324). **Lectotype here designated** (upper specimen); **MAF** (isolectotype), **P** (isolectotype).

Remarks: FRASER-JENKINS (1977; 1982) lists this taxon as *Aspidium pallidum* var. *balearicum* (Litard.) Sennen & Pau (1912). However, two pieces of evidences show that Sennen and Pau's name (PAU, 1911) is not a nomenclatural combination of Litardière's plant. First, the name was published in January 1911, the same month as the publication of the Litardière work; and second, there is not any direct or indirect reference in the protologue to the Litardière paper. This taxon is a heterotypic synonym of *Dryopteris rigida* var. *balearica* Litard. and *Dryopteris villarii* subsp. *balearica* Malag.

**Dryopteris rigida** [subsp. *australis*] var. **balearica** Litard. in Bull. Géogr. Bot. 21: 23 (1911); ≡ *D. balearica* (Litard.) Nardi in Webbia 30: 28 (1976); ≡ *D. pallida* subsp. *balearica* (Litard.) Fraser-Jenkins in Candollea 32: 314 (1977); ≡ *D. villarii* subsp. *balearica* (Litard.) O. Bolòs & Vigo, Fl. Països Catalans 1: 172 (1984), nom. illeg.

Ind. loc: "Hab. in Balearibus: Majorca, prope Soller, leg. F. Bianor, avril 1910"

Type material: The holotype has been reported to be held (and seen) at P by FRASER-JENKINS (1982: 241) but no further details about the herbarium sheet are provided. At P there is not any specimen matching the protologue and labelled as typus by Fraser-Jenkins (G.G. Aymonin, in litt.). The only specimen collected by Bianor in 1910 is dated May-June (erroneously referred to as 5 June by FRASER-JENKINS, 1982: 241) and therefore it cannot be technically chosen as the type. A search for any duplicate herbarium sheet collected by Bianor in April of that year was unsuccessful, even in Bianor's herbarium in Mallorca.

Remarks: Name in current use (FRASER-JENKINS, 1977; 1982), endemic of the Balearic Islands (Mallorca). This taxon is a heterotypic synonym of *Aspidium pallidum* var. *balearicum* Sennen & Pau and *Dryopteris villarii* subsp. *balearica* Malag.

**Dryopteris villarii** subsp. **balearica** Malag., H. Bianor Educador Botánico Baleares: 128 (1971)

Ind. loc.: "Typo in n, 1093 Pl. d'Espagne-F. Sennen in Barcinonensi Botanico Instituto"

Type material: Baléares: Sóller, barrancos, 22-IX-1910, Bianor, Pl. Espagne-F. Sennen n.º 1093 (**BC-Sennen**). **Lectotype here designated**.

Remarks: This taxon is a heterotypic synonym of *Aspidium pallidum* var. *balearicum* Sennen & Pau and *Dryopteris rigida* var. *balearica* Litard. Records of this plant from continental Spain (BOLÒS & VIGO, 1984) have proven to be misidentifications of *Dryopteris submontana* (Fraser-Jenkins & Jermy) Fraser-Jenkins (SÁEZ & VICENS, 1990).

*Polypodium rigidum* Gand., Fl. Eur. 27: 176 (1891), nom. inval.

*Polystichum balearicum* Gand., Fl. Eur. 27: 176 (1891), nom. inval.; ≡ *P. pallidum* subsp. *balearicum* (Gand.) Gand., Nov. Consp. Fl. Eur.: 519 (1910), nom. inval.

## Aspleniaceae

**Asplenium × artanense** Rosselló, Cubas, Gradaille & Sastre in Fern Gaz. 13: 354 (1990)

Ind. loc.: "Spain, Mallorca, Artà, Puig d'En Xiroi, 15.5.1989, 200 m alt., in a limestone crevice, J.L. Gradaille & al."

Type material: **MAF** (holotype).

Remarks: Name in current use (ROSELLÓ & al., 1990). This diploid hybrid ( $2n=72$ ) originated from a cross between *A. trichomanes* L. subsp. *inexpectans* Lovis and *A. sagittatum* (DC.) Bange (ROSELLÓ & al., 1990).

**Asplenium azomanes** Rosselló, Cubas & Rebassa in Rivasgodaya 6: 116 (1991)

Ind. loc.: "Holotypus: Spain, Balearic Islands, Mallorca, near Sóller (Ses Tres Creus), in stone-walls crevices, 20.9.1989, leg. M. Mayol & J.A. Rosselló, MAF 131691"

Type material: **MAF** (holotype).

Remarks: Name in current use (ROSELLÓ & al., 1991). *Asplenium azomanes* is tetraploid ( $2n=144$ ), belongs to the *A. trichomanes* complex and shares unexpected taxonomic affinities with some Macaronesian species. It was described from the Balearic Islands, but it has also been recorded from SE Iberian Peninsula (PEREZ CARRO & FERNÁNDEZ ARECES, 1996). The meiotic behaviour of a wild hybrid with *A. trichomanes* subsp. *quadrivalens* suggests that *A. azomanes* is a segmental allopolyploid (ROSELLÓ & al., 1991), a hypothesis also supported by isozyme data (BENNERT & FISCHER, 1993). *Asplenium azomanes* is a taxonomic synonym of *A. trichomanes* subsp. *coriaceifolium* H. Rasbach, K. Rasbach, Reichst. & W. Bennert.

*Asplenium balearicum* Gand., Fl. Eur. 27: 98 (1891), nom. inval.; ≡ *A. adiantum-nigrum* subsp. *balearicum* (Gand.) Gand., Nov. Consp. Fl. Eur.: 518 (1910), nom. inval.

**Asplenium balearicum** Shivas in Brit. Fern Gaz. 10: 75 (1969)

Ind. loc.: "Plant cultivated at Newcastle upon Tyne, raised from spores on plant collected in Balaeric [sic] Islands (without precise locality) by Miss E.A. O'Nians, 1952"

Type material: **BM** (holotype).

Remarks: Name in current use (NOGUEIRA & ORMONDE, 1986). *Asplenium balearicum* is an allotetraploid species having *A. onopteris* L. and *A. obovatum* Viv. as likely parents (LOVIS & al., 1972). It was described from specimens most likely collected in Menorca, the single Balearic island where the species has been found (ROSELLÓ & SERRA, 1987). *Asplenium balearicum* has also been recorded from several Western Mediterranean islands (NARDI, 1983; PICHI SERMOLLI, 1986).

**Asplenium × litardierei** Bennert & D.E. Meyer in Ber. Deutsch. Bot. Ges. 87: 22 (1974); ≡ *A. × nieschalkii* nothosubsp. *litardierei* (Bennert & D.E. Meyer) Muñoz Garmendia in Anales Jard. Bot. Madrid 42: 257 (1985)

Ind. loc.: "Mallorca, östlich Biniaraix (etwa 2, 5 km ostordöstlich von Soller [sic]), oberhalb des Fusswegs am Flüsschen Barranc, an Kalksteinmauer in einem

alten Oliverhain, etwa 150 m über dem Meer, zusammen mit *Asplenium majoricum*, *A. petrarchae* und *A. trichomanes*; leg. CARMEN BENNERT un WILDFRED BENNERT, 10. April 1971.”

Type material: B (holotype, paratype), BM (isotype), P (isotype).

Remarks: Name in current use. This is the wild triploid hybrid between *A. petrarchae* (Guérin) DC. subsp. *petrarchae* and *A. trichomanes* subsp. *inexpectans* Lovis.

**Asplenium majoricum** Litard. in Bull. Géogr. Bot. 21 (255): 28 (1911);  $\equiv$  *A. petrarchae* var. *majoricum* (Litard.) Malag., H. Bianor Educador Botánico Baleares: 137 (1971), comb. inval.;  $\equiv$  *A. petrarchae* subsp. *majoricum* (Litard.) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 64 (1974)

Ind. loc.: “Hab. in Balearibus: Majorca, muris prope urbem Soller”

Type material: To be searched for at G.

Remarks: Name in current use (SLEEP, 1983; NOGUEIRA & ORMONDE, 1986).

*Asplenium valentinum* Pau (PAU, 1895) is probably conspecific with *A. majoricum*, but this cannot be substantiated until original material of Pau can be found. *Asplenium majoricum* is a tetraploid species having *A. petrarchae* (Guérin) DC. subsp. *petrarchae* and *A. fontanum* (L.) Bernh. as putative parents (SLEEP, 1967, 1983). It was first described from the Balearic Islands but it has been further recorded from the Eastern Iberian Peninsula (PEREZ CARRO & FERNÁNDEZ ARECES, 1992; PANGUA & al., 1992).

**Asplenium × orellii** Lovis & Reichst. in Ber. Schweiz. Bot. Ges. 79: 339 (1970)

Ind. loc.: “Barranc stlich Biniaraix (ca. 2, 5 km ostnordstlich von Soller), Mallorca, zirka 150 m auf Sdostseite des Baches in Kalkstein Trockenmauer N-exponiert”

Type material: BM (holotype).

Remarks: Name in current use (NOGUEIRA & ORMONDE, 1986). This is the tetraploid wild hybrid between *A. majoricum* and *A. trichomanes* L. subsp. *quadrivalens* D.E. Meyer (LOVIS & REICHSTEIN, 1970).

**Asplenium × reichstenii** Bennert & H. Rasbach in Fern Gaz. 13: 134 (1987)

Ind. loc.: “On a limestone wall above Biniaraix near Sóller, Mallorca, Balearic Islands, Spain; c. 180 m alt; with *A. majoricum*, *A. petrarchae*, *A. trichomanes* and *Ceterach officinarum* growing in the near vicinity; leg. H.W. Bennert et V. Peters, 17 April 1986; WBSP 43/86.”

Type material: B (holotype).

Remarks: Name in current use (NOGUEIRA & ORMONDE, 1986). This is the triploid hybrid between *A. fontanum* and *A. majoricum* (BENNERT & al., 1987). Also recorded from Eastern Spain by PÉREZ CARRO & FERNÁNDEZ ARECES (1996).

**Asplenium × rosselloi** Bennert, H. Rasbach & Reichst. in Willdenowia 17: 186 (1988)

Ind. loc.: “Among shrubs on a gentle slope above the gravel road at the outskirts of the village named Cala Mesquida (on the way to the bay «Cala Mezquida»), northeast of Mahón, Menorca, Balearic Islands, Spain, 10 m alt, with *Asplenium balearicum*

cum and A. onopteris growing in the near vicinity, 15 October 1986; H. W. Bennert, H. Rasbach & K. Rasbach. A single plant was found, collected living and since then cultivated in Basel under reference number TR-6544; whole plant pressed on 6.9.1987; holotype B”

Type material: B (holotype), G (isotype).

Remarks: This name is a later synonym of *Asplenium × tyrrhenicum* Cubas, Pangua and Rosselló. See further comments under this species.

**Asplenium × sollerense** Lovis, Sleep & Reichst. in Ber. Schweiz. Bot. Ges. 79: 370 (1970)

Ind. loc.: “Kalkfelsen stlich des Fussweges «Sa Torrantera» (sic) auf der Sdostseite des Barranc stlich Biniaraix (ca. 2, 5 km stlich Soller (sic)), Mallorca, bei 150 m zwischen A.petrarchae und (ca. 2 m entfernt) A. majoricum.”

Type material: BM (holotype).

Remarks: Name in current use. This tetraploid taxon originated from a cross between *Asplenium majoricum* Litard. and *A. petrarchae* (Guérin) DC. subsp. *petrarchae*. Also recorded from Eastern Spain by PÉREZ CARRO & FERNÁNDEZ ARECES (1996).

*Asplenium temerarium* Gand., Fl. Eur. 27: 95 (1891), nom. inval.

**Asplenium trichomanes** nothosubsp. **barreraense** H. Rasbach, K. Rasbach, Reichst. & W. Bennert in Willdenowia 19: 473 (1990)

Ind. loc.: “Island of Mallorca (Baleares, Spain), in dry limestone walls and crevices of limestone rocks S of Sóller, on the uphill side of the trail beginning above the churchyard and leading to the nearby hill called «Puig d’En Barrera» (also named «Ses Tres Creus»), 160 m; a single plant among the parents”

Type material: B (holotype).

Remarks: Name in current use (NOGUEIRA & ORMONDE, 1986). This is the wild hybrid between *Asplenium trichomanes* subsp. *coriaceifolium* H. Rasbach, K. Rasbach, Reichst. & W. Bennert (= *A. azomanes* Rosselló, Cubas & Rebassa) and *A. trichomanes* subsp. *quadrivalens*. *Asplenium trichomanes* nothosubsp. *barreraense* is a taxonomic synonym of *A. × tubalense* Rosselló, Cubas & Rebassa.

**Asplenium trichomanes** subsp. **coriaceifolium** H. Rasbach, K. Rasbach, Reichst. & W. Bennert in Willdenowia 19: 471 (1990)

Ind. loc.: “Island of Mallorca (Baleares, Spain), in dry limestone walls and crevices of limestone rocks S of Sóller, on both sides of the trail that begins above the churchyard and leads to the nearby hill called «Puig d’En Barrera» (also named «Ses Tres Creus»), in open situation and partly shaded by trees, ca. 130-170 m “

Type material: B (holotype), BM (isotype), FI (isotype), Z (isotype).

Remarks: See comments under *Asplenium azomanes* Cubas, Rosselló & Rebassa.

**Asplenium trichomanes** nothosubsp. **lucanum** Cubas, Rosselló & Pangua in Candollea 44: 182 (1989)

Ind. loc: Spain, Balearic Islands, Mallorca, near Caimari (Cami dels Horts), 30 Jan. 1987, 230 m alt., on limestone rocks, leg. P. Cubas, E. Pangua, J.A. Rosselló & J. Vicens (PEP 45), MAF 129333”

Type material: **MAF** (holotype).

Remarks: Name in current use (CUBAS & al., 1989). This taxon includes the hybrids between *Asplenium trichomanes* subsp. *inexpectans* and *A. trichomanes* subsp. *quadrivalens*, and has been recorded from many sites in Europe (cf. CUBAS & al., 1989). *Asplenium trichomanes* nothosubsp. *lucanum* has priority over *A. trichomanes* nothosubsp. *melzeri* Lovis, H. Rasbach & Reichst. (LOVIS & al. 1989).

**Asplenium × tubalense** Rosselló, Cubas & Rebassa in Rivasgodaya 6: 120 (1991)

Ind. loc.: “Holotypus: Spain, Balearic Islands, Mallorca, near Sóller (Ca'n Gomila), 23.2.1988, growing among its parents, leg. P. Cubas, J.A. Rosselló, A. Rebassa & R. Oyarzun, PRP-231 (MAF 131695)”

Type material: **MAF** (holotype).

Remarks: Name in current use (ROSELLÓ & al., 1991). The name applies to the tetraploid hybrids between *Asplenium azomanes* and *A. trichomanes* subsp. *quadrivalens* (ROSELLÓ & al., 1991). *Asplenium × tubalense* is a heterotypic synonym of *A. trichomanes* nothosubsp. *barreraense* H. Rasbach, K. Rasbach, Reichst. & W. Bennert.

**Asplenium × tyrrhenicum** Cubas, Pangua & Rosselló in Anales Jard. Bot. Madrid 44: 534 (1987)

Ind. loc.: “Holotypus: Menorca: Mongofre Nou, al pie de grandes paredes de areniscas en sitios resguardados, sobre suelo profundo, 31SFE0427, 31-I-1987, P. Cubas, E. Pangua & J.A. Rosselló, MAF 127162”

Type material: **MAF** (holotype).

Remarks: Name in current use (CUBAS & al., 1987; 1988). *Asplenium × tyrrhenicum* is a triploid taxon originated from a cross between *A. balearicum* Shivas and *A. onopteris*. *Asplenium × tyrrhenicum* has priority over *A. × rosselloi*.

**×Asplenoceterach barrancense** Bennert & D.E. Meyer in Willdenowia 6: 463 (1972); ≡ *Asplenium × barrancense* (Bennert & D.E. Meyer) Pericás & Rosselló in Acta Bot. Malacitana 11: 297 (1986)

Ind. loc.: “Specimen unicum in muro oliveti apud Biniaraix prope Soller, Mallorca, habitat inter parentes” [...] “leg. Wilfried Bennert, 13.4.1971, Holotypus in Herb. Mus. Bot. Berol.”

Type material: B (holotype).

Remarks: Name in current use (NOGUEIRA & ORMONDE, 1986). This tetraploid taxon originated from a cross between *Asplenium ceterach* L. subsp. *ceterach* (= *Ceterach officinarum* Willd.) and *A. majoricum* (BENNERT & MEYER, 1972).

## Asteraceae

**Achillea millefolium** subsp. **balearica** Sennen in Bol. Soc. Ibér. Ci. Nat. 27: 215 (1928)

Ind. loc.: "Baléares: Pont d'Inca. Colitur. Leg. F. Bianor"

Type material: Not traced at BC-Sennen.

Remarks: The plant has not been refound again and recent regional floras have not mentioned it. It was probably a garden or a naturalized specimen devoid of any taxonomic value.

**Aetheorhiza montana** Willk. in Oesterr. Bot. Z. 25: 110 (1875);  $\equiv$  *Crepis montana* (Willk.) Marès & Vigin., Cat. Pl. Vasc. Baleáres: 176 (1880), nom. illeg.;  $\equiv$  *C. willkommii* Burnat & Barbey, Notes Voy. Bot.: 56 (1882);  $\equiv$  *A. bulbosa* subsp. *montana* (Willk.) Gand., Nov. Consp. Fl. Eur.: 308 (1910);  $\equiv$  *C. bulbosa* f. *willkommii* (Burnat & Barbey) Knoche, Fl. Balear. 2: 521 (1922);  $\equiv$  *A. bulbosa* subsp. *montana* (Willk.) O. Bolòs & Molinier in Collect. Bot. (Barcelona) 5: tab. 7 (1958), comb. inval.;  $\equiv$  *A. bulbosa* subsp. *willkommii* (Burnat & Barbey) Rech. fil. in Phyton (Horn) 16: 219 (1974), nom. superfl.

Ind. loc.: "Mallorca: in glareosis calcareis aridis regionis montanae ad alt. 700-1200 met., d. 17. et 23. Apr. c. flor. et fruct."

Type material: Mallorca: in glareosis calcareis rupium que diffusis, sub dumetis in declivitate austr. montis Galatzó ad alt. 2000-3500'. 17-IV-1873, Willkomm, Herb. balear. n. 266 (**COI-Willkomm**). **Lectotype here designated** (bottom right specimen).

Remarks: Name in current use (RECHINGER, 1974; SELL, 1976b), but see BABCOCK & STEBBINS (1943) for an opposite view. Recent taxonomic revisions of the genus *Aetheorhiza* have suggested that the best accommodation of the Balearic plant is under *A. montana* at the subspecific level (RECHINGER, 1974). If this view is followed then the earlier available name at this rank is *Aetheorhiza bulbosa* subsp. *montana* (Willk.) Gand., which predates the later combination *A. bulbosa* subsp. *willkommii* (Burnat & Barbey) Rech. fil.

**Andryala lyrata** f. *sordida* Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 157 (1920)

Ind. loc.: "Ibiza: Cala Molins, Gros, 24-V-18"

Type material: Cala Molins, 24-V-1918, Gros (**BC** 36082). **Lectotype here designated** (left specimen).

Remarks: The study of the type material shows that it belongs to typical *Andryala ragusina* L.

**Arctium chabertii** subsp. **balearicum** Arènes in Bull. J. Bot. l'Etat 20: 122 (1950);  $\equiv$  *A. tomentosum* var. *balearicum* (Arènes) Bonafè, Fl. Mallorca 4: 274 (1980), comb. inval.

Ind. loc.: "Baleares: Majorque, lieux herbeux Soller [sic] (Bianor)"

Type material: G (holotype), **BC** (isotype), BM (isotype).

Remarks: A doubtful and little known taxon deserving further study. Neither the Balearic plant nor *Arctium chabertii* Briq. & Cavillier itself have been given any recognition in the European account of the genus (PERRING, 1976; DUISTERMAAT, 1996). Only some recent regional floras (BOLÒS & VIGO, 1996) support its distinction as a Balearic endemic element.

**Aster tripolium** var. **minoricense** J.J. Rodr. ex Willk. in Oesterr. Bot. Z. 41: 1 (1891);  $\equiv$  *A. tripolium* subsp. *minoricense* (J.J. Rodr. ex Willk.) Gand., Nov. Conspl. Fl. Eur.: 279 (1910)

Ind. loc.: “[...] am 28.October 1872 an den Ufern des Strandsees Albufera, nahe bei Mahon [sic], woselbst sie auf feuchtem Sandboden wächst”

Type material: Albufera (Mahon), sitios arenosos húmedos, 28-X-1872, J.J. Rodríguez s.n. (**COI-Willkomm**). **Lectotype here designated** (left specimen).

Remarks: The Minorcan variant of *Aster tripolium* L. seems better included within *A. tripolium* subsp. *pannonicus* (Jacq.) Soó without any formal taxonomic recognition (BOLÒS & VIGO, 1996).

*Aster tripolium* subsp. *minoricense* Romo, Fl. Silvestres Baleares: 294 (1994), nom. illeg.

*Asteriscus pycnocladius* Gand., Fl. Eur. 13: 110 (1887), nom. inval.

*Aurellum balearicum* Gand., Fl. Eur. 14: 147 (1888), nom. inval.

**Barkausia balearica** Costa, Index Sem. Hort. Univ. Barcinonensis: 6 (1861);  $\equiv$  *Crepis balearica* (Costa), Fl. Cataluña: 153 (1864);  $\equiv$  *C. balearica* (Costa) Texidor in Restaurador Farmacéutico 28: 61 (1872), comb. superfl.  $\equiv$  *Triasia balearica* (Costa) Gand., Fl. Eur. 14: 56 (1888), nom. inval.

Ind. loc.: “In montibus Valldemossa propè Palma Insulae majoris Balearium florentem et fructigeram legit cl. Barceló Junio 1860”

Type material: In montibus. Valldemossa, florebat Junio, 1860, Barceló (**BC** 836257). **Lectotype here designated** (right specimen).

Remarks: This plant is a heterotypic synonym of *Crepis triasii* (Cambess.) Fries (BABCOK, 1947).

*Barkhausia balearica* Gand., Fl. Eur. 14: 19 (1888), nom. inval.

**Bellis annua** var. **balearica** Sennen in Bol. Soc. Aragonesa Ci. Nat. 11: 195 (1912);  $\equiv$  *B. balearica* (Sennen) Sennen, Campagn. Bot.: 117 (1936) Ind. loc.: “Baléares: Majorque autour de Sóller -Fre. Bianor”

Type material: Baléares: Pélouses, talus à Sóller, 7-III-1911, Bianor, Pl. Espagne-F. Sennen n.º 1263 (**BC-Sennen** 836609). **Lectotype here designated**.

Remarks: No sound information concerning this taxon is available. It is not listed as taxonomically distinct in recent regional and local floras (WEBB, 1976; BOLÒS & VIGO, 1996) and probably has very limited systematic value.

*Bellis balearica* Gand., Fl. Eur. 13: 115 (1887), nom. inval.

**Bellis majoricensis** Gand. in Bull. Soc. Bot. France 47: 121 (1900);  $\equiv$  *B. annua* subsp. *majoricensis* (Gand.) Gand., Nov. Conspl. Fl. Eur.: 281 (1910)

Ind. loc.: “Alcudia... Ad vias umbrosas copiose”

Type material: To be searched for at LY.

Remarks: No sound information concerning this taxon is available. It is not listed as taxonomically distinct in recent regional and local floras (WEBB, 1976; BOLÒS & VIGO, 1996) and probably has very limited systematic value. *Bellis annua* var. *balearica* and *B. majoricensis* refer to the same entity.

*Bellium balearicum* Gand., Fl. Eur. 13: 124 (1887), nom. inval.

*Bellium majoricum* Gand., Fl. Eur. 13: 124 (1887), nom. inval.

*Bellium bellidioides* var. *villosum* Porta in Nuovo Giorn. Bot. Ital. 19: 308 (1887), nom. nud.

Remarks: PERICÀS & al. (1987) stated that hairy plants of *Bellium bellidioides* L. from Majorcan mountains, to which the Porta name would be applicable, revert in culture and did not merit any taxonomic recognition.

***Bellium minoricensis*** R. Hernandez in Ann. Clin. Montp. 42: 82 (1817) [n.v.]

Ind. loc.: "Cette plante se trouve [...] dans les endroits sablonneux et marécageux de l'île de Minorque"

Type material: Unknown, probably lost. No plants belonging to this taxon were available to RODRÍGUEZ (1904).

Remarks: According to CAMBESSEDESS (1827), RODRÍGUEZ (1904) and KNOCHE (1922) *Bellium minoricensis* should be included within *Bellium bellidioides* L., a common plant in Minorca.

*Calcitrapa balearica* Gand., Fl. Eur. 12: 126 (1887), nom. inval.

***Calendula arvensis* f. *pterocarpa*** Pau in Actas Soc. Esp. Hist. Nat. 29: 65 (1890)

Ind. loc.: "Ciudad [Ibiza]"

Type material: Ibiza (Baleares) inter segetes loco «cerro de los molinos» IV-1899, Pau (MA 130899). **Lectotype here designated** (right specimen).

Remarks: GALLEGU & TALAVERA (1983) identified the specimen collected by Pau as *Calendula arvensis* L. subsp. *macroptera* Rouy, a western Mediterranean taxon.

***Carduus bourgeanii* subsp. *ibizensis*** Devesa & Talavera in Lagascalia 10: 61 (1981); ≡ *C. bourgeanii* var. *devesae* O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 91 (1987)

Ind. loc.: "Camino de Cala Llonga (Ibiza), 14.V.1919, Font Quer (MA 131863, holotypus)"

Type material: **MA** (holotype)

Remarks: Name in current use (DEVEZA & TALAVERA, 1981); endemic to the Western Balearics (Eivissa). ROMO (1994) made the combination *Carduus bourgeanii* subsp. *ibizensis* (Devesa & Talavera) Romo, Fl. Silvestres Baleares: 313 (1994)

erroneously reporting the basionym as «*C. pteranthus* subsp. *ibicensis* Devesa & Talavera in *Lagascalia* 10: 61 (1981)».

*Carlina balearica* Sennen in *Bol. Soc. Ibér. Ci. Nat.* 28: 75 (1929), nom. nud.

*Centaurea aspera* var. *conica* P. Palau in *Anales Inst. Bot. Cavanilles* 12: 258 (1955), nom. inval.

**Centaurea balearica** J.J. Rodr. in *Bull. Soc. Bot. France* 16: 237 (1869); ≡ *Acrolophus balearicus* (J.J. Rodr.) Gand., *Fl. Eur.* 12: 111 (1887), nom. inval.; ≡ *Acosta balearica* (J.J. Rodr.) Holub in *Preslia, Praha* 46: 226 (1974); ≡ *Femeniasia balearica* (J.J. Rodr.) Susanna in *Collect. Bot. (Barcelona)* 17: 84 (1987)

Ind. loc.: “Hab. Capifort, dans l’île de Minorque.- Fl. Mai-juin”

Type material: Capifort, Mahón, coteaux maritimes, 3-VII-1869, J.J. Rodríguez (**MPU-Knoche**). **Lectotype here designated** (bottom specimen).

Remarks: Name in current use (SUSANNA, 1987); endemic to the Eastern Balearics (Menorca). Despite old claims this plant does not occur on Mallorca. Molecular studies within the tribe Cardueae based on ITS sequences (SUSANNA & al., 1995; VILATERSANA & al., 2000) did not support the segregation of *Centaurea balearica* within a monotypic *Femeniasia*. By contrast, the phylogenetic analysis of morphological data led PETIT (1997) to recognize *Femeniasia* as a monophyletic assemblage in which *Carthamus fruticosus* Maire was detected as a sister taxon of *F. balearica*. SUSANNA (1987) stated that WILLKOMM (1876) subsumed *Centaurea balearica* as a variety under *C. horrida* Badaro, but this is a misinterpretation of the Willkomm text.

**Centaurea intybacea** var. **grandiflora** Font Quer in *Bol. Soc. Esp. Hist. Nat.* 20: 153 (1920); ≡ *Cheirolophus grandiflorus* (Font Quer) Stübing, Peris, Olivares & Martín in *Anales Jard. Bot. Madrid* 55: 171 (1997)

Ind. loc.: “Hab. in rupestribus maritimis, umbrosis. [sic] l.d. La Mola, ins. Frumentaria, ubí [sic], Gros, d. 11 majii 1918 legit”

Type material: La Mola, 11-V-1918, Gros (**BC** 34516). **Lectotype here designated** (single specimen).

Remarks: Molecular studies using molecular markers (GARNATGE & al., 1998; SUSANNA & al., 1999) do not support the recognition of the Pytiusic plant as a taxonomic segregate from *Cheirolophus intybaceus* (Lam.) Dostál. This supports earlier views based on morphological observations (SUSANNA, 1989).

**Chrysanthemum merinoanum** Pau in *Actas Soc. Esp. Hist. Nat.* 28: 215 (1899); ≡ *C. coronarium* f. *merinoanum* (Pau) Knoche, *Fl. Balear.* 2: 477 (1922)

Ind. loc.: “Campos de la isla [Ibiza] frecuente”

Type material: Ibiza (Baleares) in campis, IV-1899, Pau (**MA** 128240). **Lectotype here designated** (upper specimen).

Remarks: The type material is indistinguishable from other Balearic and Spanish accessions of *Chrysanthemum coronarium* L.

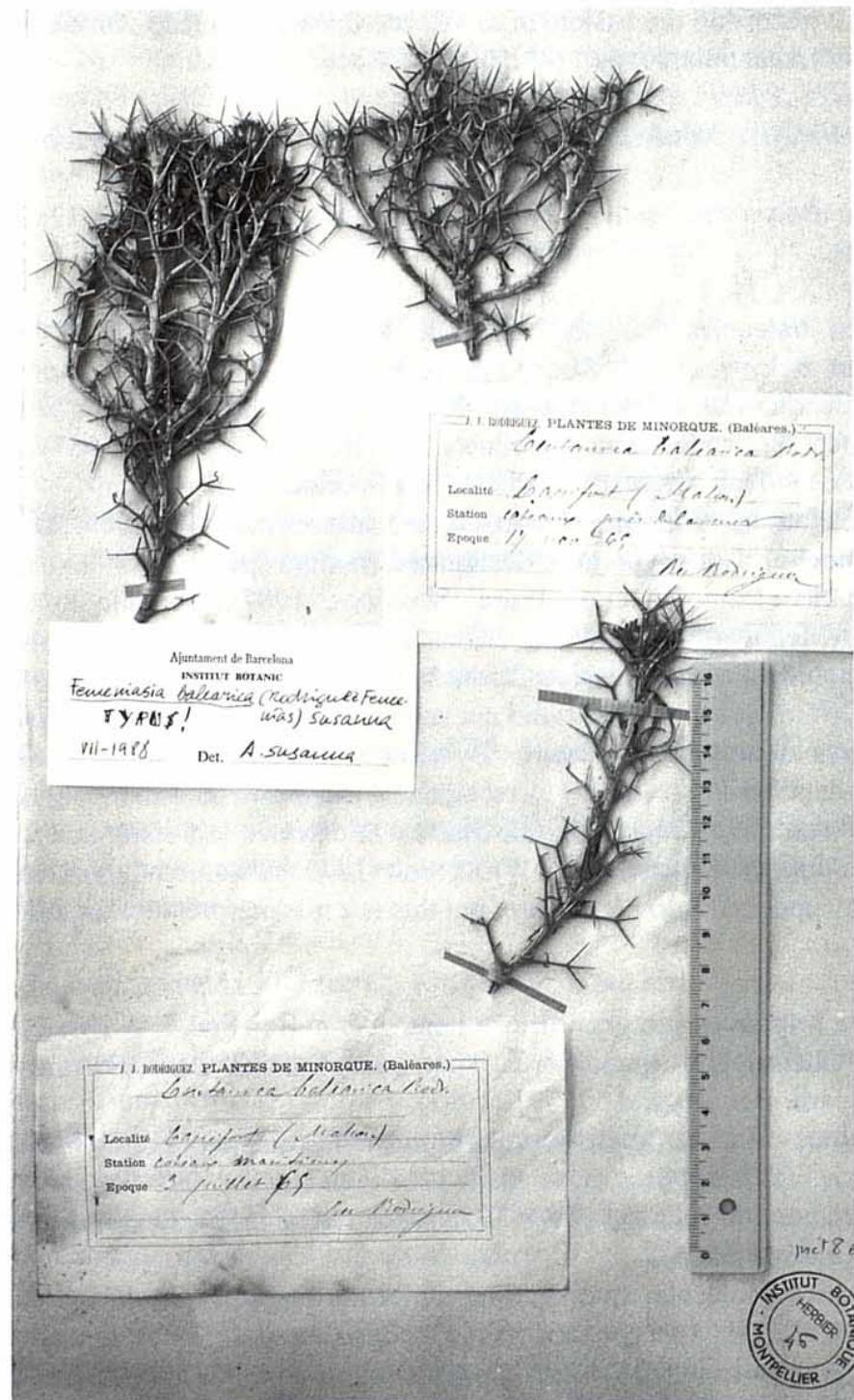


Fig. 2. Lectotype of *Centaurea balearica* J.J. Rodr. (MPU-Knoche).

**Cichorium balearicum** Porta in Nuovo Giorn. Bot. Ital. 19: 311 (1887);  $\equiv$  C. intybus subsp. balearicum (Porta) Gand., Nov. Conspp. Fl. Eur.: 314 (1910);  $\equiv$  C. intybus f. balearicum (Porta) Knoche, Fl. Balear. 2: 505 (1922)

Ind. loc.: M[ajorca]. In pascuis praedii Plan de Cuba. 31 Jul.

Type material: To be searched for at FI; not traced at BC, MA, MAF and G.

Remarks: No information concerning this taxon has been made available to us. It is not listed as taxonomically distinct in recent regional and local floras (SELL, 1976a; BOLÒS & VIGO, 1996). It probably has very limited systematic value and we are confident that it will be identified with *Cichorium intybus* L. subsp. *glabratum* (C. Presl.) Wagenitz & Bedarff or *C. endivia* L. subsp. *divaricatum* (Schousb.) P.D. Sell, the two wild taxa of *Cichorium* growing in the Balearic Islands (WAGENITZ & BEDARFF, 1989).

*Cichorium intybus* f. *glabratum* Knoche, Fl. Balear. 2: 505 (1922), nom. nud.

**Cirsium crinitum** var. **balearicum** Willk., Ill. Fl. Hispan. 2: 20 (1886); ≡ *C. balearicum* (Willk.) Porta in Nuovo Giorn. Bot. Ital. 19: 309 (1887); ≡ *C. crinitum* subsp. *balearicum* (Willk.) Gand., Nov. Consp. Fl. Eur.: 244 (1910); ≡ *C. lanceolatum* f. *balearicum* (Willk.) Knoche, Fl. Balear. 2: 490 (1922)

Ind. loc.: "...planta bastante extendida por Mallorca, pero que habita en la región inferior de esa isla."

Type material: Not traced at COI-Willk.

Remarks: TALAVERA & VALDÉS (1976) included *Cirsium crinitum* var. *balearicum* within the circumscription of *C. vulgare* (Savi) Ten.

**Cirsium willkommianum** Porta & Rigo ex Willk., Ill. Fl. Hispan. 2: 19 (1886); Porta in Nuovo Giorn. Bot. Ital. 19: 309 (1887); ≡ *C. echinatum* var. *willkommianum* (Porta & Rigo) Bonafè, Fl. Mallorca 4: 277 (1980), comb. inval.; ≡ *C. echinatum* var. *willkommianum* (Porta & Rigo) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 91 (1987)

Ind. loc.: "Hab. in insula Balearium majore, ubi in pascuis, rupestribus glareosisque regionis montanae frequenter provenit (WILLK.; in monte Puig Mayor de Torella [sic] ad alt. 3-4000 ped., PORTA et RIGO!)."

Type material: G (isotype); duplicated specimens may be found elsewhere.

Remarks: Not worthy of taxonomic recognition from *Cirsium echinatum* (Desf.) DC. in Lam. & DC. (TALAVERA & VALDÉS, 1976).

**Crepis bulbosa** var. **gigantea** Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 158 (1920)

Ind. loc.: "Islote del Vedrà, Gros, 19-V-18"

Type material: Illa del Vedrà, pr. Eivissa, 19-V-1918, Gros (BC 104951).

**Lectotype here designated** (left specimen).

Remarks: This taxon is a robust variation of *Aethorhiza bulbosa* (L.) Cass. subsp. *bulbosa* devoid of any taxonomic recognition.

**Crepis triasii** var. **vidali** Pau in Brotéria Ci. Nat. 3: 176 (1934)

Ind. loc.: "Puig de Randa"

Type material: Puig de Randa, cultivada de raíces. Sitios sombríos d. los peñascos. IX-1933. floreció en casa en Mayo y Junio de 1934, Pau (MA 140731).

**Lectotype here designated** (upper left specimen).

Remarks: The leaf morphology exhibited by the lectotype is not present in the wild samples growing at Randa. Since *Crepis triasii* var. *vidali* was described from

cultivated individuals it is speculated that this variation might be environmentally induced. In Mallorca *Crepis triasii* is morphologically plastic but no clear discontinuities have been detected to support the recognition of discrete variants.

***Crepis willkommii*** Burnat & Barbey, see ***Aetheorrhiza montana*** Willk.

***Crepis willkommii*** var. **ramosissima** Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 158 (1920);  $\equiv$  *Aetheorrhiza bulbosa* var. *ramossissima* (Font Quer) Bonafè, Fl. Mallorca 4: 332 (1980), comb. inval.

Ind. loc.: "Islote de la Cunillera, Gros, 25-V-18"

Type material: Islote de la Cunillera, 25-V-1918, Gros (**BC** 104961). **Lectotype here designated** (single specimen).

Remarks: This variety should be included within the variation of *Aetheorrhiza bulbosa* subsp. *willkommii* without taxonomic recognition.

***Crupina matae*** P. Palau in Bol. Soc. Esp. Hist. Nat. 45: 365 (1947);  $\equiv$  *C. crupinastrum* var. *matae* (P. Palau) Font Quer ex O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 89 (1987)

Ind. loc.: "La planta que tengo es de Bellver, donde abunda en gran manera; y del Arenal"

Type material: **BC** (lectotype; BOLÒS & VIGO, 1996: 946); **BC** (isolectotype).

Remarks: This taxon has not been recognized in the European account of the genus (AMARAL FRANCO, 1976) and is probably not worthy of recognition from *Crupina crupinastrum* (Moris) Vis.

***Cupularia graveolens*** var. **rubriflora** Sennen in Bol. Soc. Ibér. Ci. Nat. 28: 72 (1929)

Ind. loc.: "Baléares: Pont d'Inca, champs. F. Bianor"

Type material:

Type material: Baléares: Pont d'Inca, champs, 7-IX-1918, Bianor, Pl. Espagne-F. Sennen n.<sup>o</sup> 3963 (**BC** 7861). **Lectotype here designated**.

Remarks: This plant is not worthy of recognition from typical *Dittrichia graveolens* (L.) Greuter.

*Cynara cardunculus* var. *albiflora* Garcias Font in Collect. Bot. 3: 362 (1953), nom. nud.

*Evax balearica* Gand., Fl. Eur. 13: 205 (1887), nom. inval.

***Filago bianorii*** Sennen & Pau in Sennen in Bull. Géogr. Bot. 23: 42 (1913);  $\equiv$  *Gifola bianorii* (Sennen & Pau in Sennen) Chrtek & Holub in Preslia 35: 6 (1963)

Ind. loc.: "Baléares: sables maritimes du Molinar, près Palma (F. Bianor)"

Type material: Baléares: Sables maritimes de Molinar à Palma, VII-1911, Bianor, Pl. d'Espagne-F. Sennen n.<sup>o</sup> 1261 (**BC** 31263). **Lectotype here designated** (middle specimen).

Remarks: The lectotype of *Filago bianorii* should be adscribed to the earlier *F. congesta* Guss. ex DC.

*Filago gallica* f. *longebracteata* Knoche, Fl. Balear. 2: 452 (1922), nom. nud.

*Filago germanica* [var. *spathulata*] f. *erecta* Knoche, Fl. Balear. 2: 451 (1922), nom. nud.

***Filago germanica* var. *frumentarica*** Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 147 (1920); ≡ *F. germanica* [var. *spathulata*] f. *frumentarica* (Font Quer) Knoche, Fl. Balear. 2: 452 (1922)

Ind. loc.: "Formentera: Playa del Migjorn, Gros, 13-V-18"

Type material: Formentera: Platja del Migjorn, 13-V-1918, Gros (BC 31180).

**Lectotype here designated.**

Remarks: This taxon belongs to the *Filago pyramidata* L. group, but a finer identification will only be possible after a thorough revision of the complex.

***Filago petro-ianii*** Rita & Dittrich in Kit Tan (ed.), The Davis & Hedge Festschrift: 1, Edimburgh (1989); ≡ *Evax petro-ianii* (Rita & Dittrich in Kit Tan) J. Holub in Preslia 70: 104 (1998)

Ind. loc.: "Mallorca, Llucmajor, Acantilados del Pas de sa senyora (DD85), 80 m, 12 iv 1987, Rita"

Type material: **G** (holotype); **UIB** (isotype).

Remarks: Name in current use (DITTRICH & RITA, 1989; BOLÒS & VIGO, 1996). A recently described species from south Mallorca showing taxonomic relationships with the Sardinian endemic *Filago tyrrhenica* Chrtek & Holub (= *Evax rotundata* Moris). BOLÒS & VIGO (1996: 721) reported the name *Evax petro-ianii* (Rita & Dittrich in Kit Tan) Rita, but this combination has never been validated.

*Galactites tomentosa* f. *albiflora* Gand. in Bull. Soc. Bot. France 47: 120 (1900), nom. nud.

***Gnaphalium ambiguum*** Pers., Syn. Pl. 2: 417 (1807); ≡ *Helichrysum ambiguum* (Pers.) C. Presl, Fl. Sicul. 1: xxix (1826); ≡ *H. ambiguum* (Pers.) Pau in Brotéria Ci. Nat. 3: 59 (1934), comb. superfl.; ≡ *H. lamarckii* Cambess. in Mém. Mus. Hist. Nat. 14: 269 (1827), nom. illeg.

Ind. loc.: Not stated

Type material: Not traced at P.

Remarks: This rupicolous endemic has long been known as *Helichrysum ambiguum*, and under such name has been indicated in recent papers dealing with the Balearic flora. However, HILLIARD & BURTT (1973; 1981) pointed out that the older available name for this plant was *H. crassifolium* (L.) D. Don ex Loudon. This view was not followed by (CLAPHAM, 1976) in their European account of the genus, who use the traditional *H. ambiguum* to name the Balearic endemic.

***Gnaphalium crassifolium*** L., Mant Pl.: 112 (1767); ≡ *Helichrysum crassifolium* (L.) D. Don ex Loudon, Hort. Brit.: 341 (1830)

Ind. loc.: "Habitat ad Cap. b. spei. [sic]"

Type material: LINN 989.27 (lectotype; HILLIARD & BURTT, 1973; 1981: 252)

Remarks: See comments under *Gnaphalium ambiguum*. According to HILLIARD & BURTT (1973; 1981) the name *G. crassifolium* has been misapplied to African plants due to the incorrect indication of the geographic location of the plants given in the Linnean protologue.

*Helichrysum balearicum* Gand., Fl. Eur. 13: 249 (1887), nom. inval.

*Helichrysum dasycephalum* Gand., Fl. Eur. 13: 249 (1887), nom. inval.

*Helichrysum eugenii* Gand., Fl. Eur. 13: 249 (1887), nom. inval.

*Helichrysum macrophyllum* Gand., Fl. Eur. 13: 249 (1887), nom. inval.

*Helichrysum richardi* Gand., Fl. Eur. 13: 250 (1887), nom. inval.

**Helichrysum fontanesii** Cambess. in Mém. Mus. Hist. Nat. 14: 270 (1827); ≡ *H. stoechas* f. *fontanesii* (Cambess.) Knoche, Fl. Balear. 2: 459 (1922)

Ind. loc.: "In fissuris rupium montis Puig-dê-Torrella in insulâ Majore"

Type material: Lluch, 20-IV-1825 (Cambessedès) (**MPU-Knoche**). **Lectotype here designated** (right specimen).

Remarks: A species of doubtful taxonomic value. Analytical treatments included this plant under *Helichrysum rupestre* (Rafin.) DC. (CLAPHAM, 1976) but a thorough revision of the complex is needed.

**Helichrysum fontanesii** var. **latifolium** Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 148 (1920); ≡ *H. rupestre* f. *latifolium* (Font Quer) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 103 (1983)

Ind. loc.: "Cala de les Terretes [sic], Gros, 29-V-18; Punta de Creu, c. San Miguel, F.Q., 19-V-19"

Type material: Eivissa: Cala de les Torretes, pr. Sta. Agnès, 29-V-1918, Gros (**BC** 30830). **Lectotype here designated** (bottom specimen).

Remarks: The status of this taxon is uncertain and requires further study in the context of a whole revision of the *Helichrysum rupestre* (Rafin.) DC. complex. Populations of *H. rupestre* growing on the north coast of Eivissa usually showed larger leaves than Majorcan populations but, despite this, these forms intergrade with specimens having narrower leaves.

**Helichrysum rupestre** var. **cambessedesii** DC., Prodr. 6: 182 (1838)

Ind. loc.: "In fissuris rupium ins. Balearicae Majoris, ins. Cretae et propè Athenas (Parol.)"

Type material: **G-Boiss** (sintypes).

Remarks: The type material included in the De Candolle herbarium is heterogeneous, and a lectotypification of this taxon is only possible after a thorough revision

of the *Helichrysum rupestre* (Rafin.) DC. group has been made. The Majorcan populations of this taxon refer to what is known as *H. fontanesii*.

*Helichrysum stoechas* var. *argentatum* P. Palau in Anales Inst. Bot. Cavanilles 11: 516 (1954), nom. inval.

***Helichrysum stoechas* var. *argentatum*** P. Palau in Treb. Inst. Catalana Hist. Nat. 7: 91 (1976);  $\equiv H. stoechas$  subsp. *argentatum* (P. Palau) Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), comb. inval.

Ind. loc.: "A Caló del Forn usque ad Pinar, valde abundans, ubi d. 2 junii 1948 legi"

Type material: Desde el Caló d'es Forn hasta el comienzo del Pinar, (camino de Cap Ventós), muy abundante, localizado, 2-VI-1948, Palau Ferrer (**BC** 112729). **Lectotype here designated** (upper specimen).

Remarks: Coastal populations of *Helichrysum stoechas* (L.) Moench growing in some of the Balearic Islands have a remarkable cinereous appearance, showing a smaller habitus. They have been named either *H. decumbens* (Lag.) Cambess. or *H. stoechas* var. *argentatum*, and they have also been recorded outside the Balearic archipelago (LAGUNA, 1998: 252). Experimental work is required to substantiate that these forms are more than ecotypic variants of the widespread and polymorphic *H. stoechas*.

*Helichrysum stoechas* f. *congestum* Knoche, Fl. Balear. 2: 460 (1922), nom. nud.

***Helichrysum stoechas* f. *helianthemifolium*** Pau in Butll. Inst. Catalana Hist. Nat. 14: 140 (1914)

Ind. loc.: "Monte Toro (leg. Hernández Ponseti). ex hb. Pons Quer [sic]"

Type material: Monte Toro, 13-VI-1913, Hernández Ponseti (**BC** 30877).

**Lectotype here designated** (single specimen); **BC** (isolectotype).

Remarks: *Helichrysum stoechas* f. *helianthemifolium* should be included within *H. stoechas* (L.) Moench without giving any formal recognition.

*Helichrysum stoechas* [var. *decumbens*] f. *latiorifolium* Garcías Font in Butll. Inst. Catalana Hist. Nat. 23: 93 (1923), nom. nud.

*Helichrysum stoechas* var. *linearifolium* Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 149 (1920), nom. nud.  $\equiv H. stoechas$  f. *linearifolium* (Font Quer) Knoche, Fl. Balear. 2: 460 (1922), nom. inval.

*Hieracium amplexicaule* var. *balearicum* Freyn ex Porta in Nuovo Giorn. Bot. Ital. 19: 310 (1887), nom. nud.

***Hieracium balearicum*** Arv.-Touv., Hier. Gall. Hisp. Cat.: 157 (1913);  $\equiv H. erioce-rinthe$  subsp. *balearicum* (Arv.-Touv.) Malag., H. Bianor Educador Botánico Baleares: 137 (1971), comb. inval.

Ind. loc.: "Hab. Espagne: Balearum insula Majore, in rupestribus montis Puig Mayor [sic] de Torrellas, solo calcareo, alt. 100-1300 m (8 Jun. 1885 Porta et Rigo)"

Type material: To be searched for at GRM and P; duplicates may be distributed elsewhere.

Remarks: The agamospermous taxa of *Hieracium* L. from the Balearic Islands are poorly known and are in need of clarification to substantiate the alleged endemic status of the described microspecies.

**Hieracium majorcanum** Arv.-Touv., Hier. Gall. Hisp. Cat.: 313 (1913); ≡ *H. bifidum* subsp. *majorcanum* (Arv.-Touv.) Malag., Sin. Fl. Ibér. ed. 1, fasc. 84: 1332 (1977)

Ind. loc.: "Hab. Espagne: in Insulis Balearicis: Majorque, au Puig Mayor (sic), vers 1400 m; Jun.Jul. (Frére Bianor de Solér), etc."

Type material: To be searched for at GRM and P; duplicates may be distributed elsewhere.

Remarks: See comments under *Hieracium balearicum* Arv.-Touv.

**Hieracium microscapum** Arv.-Touv., Hier. Gall. Hisp. Cat.: 307 (1913); ≡ *H. bifidum* [subsp. *majorcanum*] var. *microscapum* (Arv.-Touv.) Malag., Sin. Fl. Ibér. ed. 1, fasc. 84: 1332 (1977)

Ind. loc.: "Hab. Espagne: Insulis Balearibus: Mallorca: Coma den Arbona, in rupium fissuris, alt. 2800'; 25 mai 1899 (Gandoger), etc."

Type material: To be searched for at GRM and P; duplicates may be distributed elsewhere.

Remarks: See comments under *Hieracium balearicum* Arv.-Touv.

**Hieracium praecox** subsp. **brachypus** Freyn ex Zahn, in Engl., Pflanzenr. 76 (IV. 280): 240 (1921); ≡ *H. glaucinum* Jord. subsp. *brachypus* (Freyn ex Zahn) O. Bolòs & Vigo, Fl. Països Catalans 3: 1054 (1996)

Ind. loc.: "Balearen: Puig mayor de Torrella, 1100-1300 m"

Type material: To be searched for at B, but most of his collections were destroyed in 1943 during the Second World War.

Remarks: See comments under *Hieracium balearicum* Arv.-Touv.

**Hieracium triasii** Cambess. in Mém. Mus. Hist. Nat. 14: 263 (1827); ≡ *Crepis triasii* (Cambess.) Fries in Nova Acta Reg. Soc. Sci. Upsala, Ser. 2, 14: 220 (1848); ≡ *C. triasii* (Cambess.) Willk. in Linnaea 40: 52 (1876), comb. superfl.; ≡ *Barkhausia triasii* (Cambess.) Marès & Vigin., Cat. Pl. Vasc. Baleáres: 175 (1880); ≡ *B. triasii* (Cambess.) Coss. ex Burnat & Barbey, Notes Voy. Bot.: 55 (1882), comb. superfl.; ≡ *Hieracioides triasii* (Cambess.) Kuntze, Revis. Gen. Pl. 1: 346 (1891)

Ind. loc.: "In fissuris rupium montis qui villae Di. [sic] Trias imminet, prope Esporlas, in insulâ Majore"

Type material: K (lectotype; BABCOK, 1947: 465); **MPU-Knoche** (isotype).

Remarks: Name in current use (BABCOK 1947a, 1947b; SELL, 1976c; BOLÒS & VIGO, 1996); endemic to the Eastern Balearics.

**Hyoseris knochei** Sennen, Pl. Espagne-F. Sennen 1933, n.º 8621 (1933), in sched.; Diagn. Nouv.: 175 (1936)

Ind. loc.: "Baléares: Marratxi [sic], garrigues"

Type material: Baléares: Marratxi, garrigues, 8-IV-1933, F. Sennen, Pl. Espagne-F. Sennen 1933 n.º 8621 (BC 824426). **Lectotype here designated** (bottom specimen).

Remarks: Not worthy of recognition from *Hyoseris radiata* L.

*Hyoseris balearica* Gand., Fl. Eur. 14: 199 (1888) nom. inval.

*Hyoseris majorica* Gand., Fl. Eur. 14: 198 (1888) nom. inval.; ≡ *H. scabra* subsp. *majorica* (Gand.) Gand., Nov. Consp. Fl. Eur.: 315 (1910), nom. inval.

**Hyoseris radiata** var. **pusilla** Porta in Nuovo Giorn. Bot. Ital. 19: 311 (1887); ≡ *H. radiata* f. *pusilla* (Porta) Knoche, Fl. Balear. 2: 508 (1922)

Ind. loc.: "Min[orca]. Ad rupes schistosas dit. Cala Mezquita. 25 Apr."

Type material: To be searched for at FI, but duplicates are expected to be widely distributed.

Remarks: Plants from the type locality do not show any deviant feature from *Hyoseris radiata* L.

*Hypochoeris glabra* var. *frumentarica* Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 155 (1920), nom. nud.; ≡ *Hypochoeris glabra* f. *frumentarica* (Font Quer) Knoche, Fl. Balear. 2: 513 (1922), nom. inval.

*Inula viscosa* f. *mixta* P. Palau in Anales Inst. Bot. Cavanilles 12: 258 (1955), nom. inval.

*Jasonia balearica* Gand., Fl. Eur. 13: 288 (1887), nom. inval.

*Jasonia brevifolia* Gand., Fl. Eur. 13: 288 (1887), nom. inval.

**Leucanthemum paludosum** subsp. **ebusitanum** Vogt in Ruizia 10: 223 (1991); ≡ *Mauranthemum paludosum* subsp. *ebuitanum* (Vogt) Vogt & Oberprieler in Taxon 44: 377 (1995)

Ind. loc.: "Holotypus: Ibiza, Sommet du puig d'En Serra, pradells, 350 m alt., 26-III-1918, P. Font Quer (BC, vidi; Isotypus in MA, vidi)"

Type material: BC 30256 (holotype), MA (isotype).

Remarks: Name in current use (VOGT, 1991); endemic to the Western Balearics (Eivissa).

*Logfia balearica* Gand., Fl. Eur. 13: 217 (1887), nom. inval.

*Notobasis balearica* Gand., Fl. Eur. 12: 210 (1887), nom. inval.

*Onopordum balearicum* Gand., Fl. Eur. 12: 213 (1887), nom. inval.; ≡ *O. illyricum* subsp. *balearicum* (Gand.) Gand., Nov. Consp. Fl. Eur.: 242 (1910), nom. inval.

**Pallenis spinosa** var. **gymnesica** O. Bolòs & P. Monts. ex O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 90 (1987);  $\equiv$  Astericus spinosus var. *gymnesicus* (O. Bolòs & P. Monts.) O. Bolòs & Vigo, Fl. Països Catalans 3: 760 (1996)

Ind. loc.: "Holotypus asservatus est in herbario Instituti Botanici Barcinonensis (BC): Menorca, Ciutadella, Cala Macarella, ubi leg. A. Bolòs, O. Bolòs & P. Montserrat, 19-V-1959 (BC 485766)"

Type material: **BC** (holotype).

Remarks: Apparently all populations of *Asteriscus spinosus* (L.) Schultz Bip. from Menorca are homogeneous concerning the pale yellow coloration of the ligules, the single feature discriminating this taxon. However, AURICH & PODLECH (1989) did not support it as being taxonomically distinct from typical *A. spinosus*.

*Pertya balearica* Gand., Fl. Eur. 13: 368 (1887), nom. inval.

*Pertya normalis* Gand., Fl. Eur. 13: 368 (1887), nom. inval.

*Phagnalon balearicum* Gand., Fl. Eur. 13: 318 (1887), nom. inval.

**Phagnalon rupestre** var. **grosii** Font Quer in Bol. Soc. Esp. Hit. Nat. 20: 148 (1920)

Ind. loc.: "Hab. in ins. Frumentaria, l.d. La Mola, ubi Gros d. 12-V-18 leg."

Type material: La Mola, 12-V-1918, Gros (**BC 31449**). **Lectotype here designated** (upper specimen).

Remarks: No consistent characters discriminate this taxon from the variation exhibited by *Phagnalon rupestre* (L.) DC.

**Phagnalon saxatile** var. **squarrosum** Willk. in Linnaea 40: 40 (1876)

Ind. loc.: "Mallorca, Barranco de Sóller, in parte inferiore ad rupes et muros copiose"

Type material: Mallorca: Barranco de Soller, in parte inferiore ad rupes et muros frequ., 2-V-1873, Willkomm, Herb. balear. n. 394. (**COI-Willkomm**). **Lectotype here designated** (upper right specimen).

Remarks: No consistent characters discriminate this taxon from the variation exhibited by *Phagnalon saxatile* (L.) Cass.

*Picridium balearicum* Gand., Fl. Eur. 14: 256 (1888), nom. inval.

*Picridium divergens* Gand., Fl. Eur. 14: 256 (1888), nom. inval.

**Praenanthes cervicornis** Boiss., Voy. Bot. Espagne 2: 744 (1845);  $\equiv$  Sonchus cervicornis (Boiss.) Nyman, Syllog. Fl. Eur.: 38 (1854-1855);  $\equiv$  S. spinosus var. *cervicornis* (Boiss.) Lange in Vidensk. Meddel. Dansk Naturhist. Foren. Kjobenhavn, ser. 2, 3: 99 (1861);  $\equiv$  Zollikoferia spinosa subsp. *cervicornis* (Boiss.) Gand., Nov. Conspl. Fl. Eur.: 308 (1910);  $\equiv$  S. spinosus f. *cervicornis* (Boiss.) Knoche, Fl. Balear. 2: 538 (1922);  $\equiv$  Launaea cervicornis (Boiss.) Font Quer & Rothm., Sched. Fl. Iber. Select., Cent. I, n. 99 (1934)

Ind. loc.: "Hab. in rupibus maritimis Balearium prope Arta (sic) (Cambessèdes), Palma (Monard in herb. Fauché)"

Type material: **G-Boiss.** (lectotype; BURDET & al., 1983: 792).

Remarks: Name in current use (KILIAN, 1997); endemic to the Eastern balearics (Mallorca and Menorca). According to this author *Launaea cervicornis* showed several primitive features (homomorphic achenes, with five main ribs; the homomorphic pappus and its chromosome number,  $2n=18$ ) which suggested an old origin, probably from an old lineage related to sect. *Microrhynchus* (Less.) O. Hoffm. KILIAN (1997) included the Balearic plant under the monotypic section *Cervicornes* N. Kilian.

*Pulicaria balearica* Gand., Fl. Eur. 13: 329 (1887), nom. inval.

**Pulicaria majoricensis** Gand. in Bull. Soc. Bot. France 47: 134 (1900); ≡ *P. odora* subsp. *majoricensis* (Gand.) Gand., Nov. Consp. Fl. Eur.: 283 (1910)

Ind. loc.: "Hab. frequens in pascuis ericetis ad basin Puig de l'Ofra, alt. 800 metr."

Type material: To be searched for at LY.

Remarks: Identified as *Pulicaria odora* (L.) Rchb. by KNOCHE (1922).

*Reichardia picroides* f. *lyratifolia* Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 158 (1920), nom. nud.

*Reichardia picroides* f. *sinuatifolia* Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 158 (1920), nom. nud.

*Reichardia tingitana* f. *gracillima* Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 158 (1920), nom. nud.

*Reichardia tingitana* f. *robusta* Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 158 (1920), nom. nud.

*Rhagadiolus balearicus* Gand., Fl. Eur. 14: 275 (1888), nom. inval.

**Santolina chamaecyparissus** subsp. **magonica** O. Bolòs, Molinier & P. Monts in Acta Geobot. Barcinon. 5: 107 (1970); ≡ *S. chamaecyparissus* var. *magonica* (O. Bolòs, Molinier & P. Monts.) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 90 (1987); ≡ *S. magonica* (O. Bolòs, Molinier & P. Monts.) Romo, Fl. Silvestres Baleares: 303 (1994)

Ind. loc.: "Minorica, Tirant, ubi leg. RODRIGUEZ FEMENIAS"

Type material: BC (holotype; BOLÒS & VIGO, 1987: 90), not traced, but probably on loan.

Remarks: A poorly characterized taxon which was not recognized by GUINEA & TUTIN (1976) when dealing with the European representants of the genus. The alleged discriminant features for this subspecies are not reliable and do not help to identify the Minorcan specimens from those coming from Mallorca and the E of the Peninsula Iberica, where typical *Santolina chamaecyparissus* grows. Also, the des-

cribed variant from the mountains of Mallorca (*S. chamaecyparissus* var. *teucrietorum*) cannot be morphologically discerned from other Balearic material. By contrast, the plant occurring in the Vedrà islet (N coast of Eivissa) shows a conspicuous morphology. However, neither its taxonomic status nor its relationships have been fully appraised, and an in-depth study involving karyological work is required.

**Santolina chamaecyparissus** var. **teucrietorum** O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 90 (1987)

Ind. loc.: "Mallorca, Puig de Maçanella, 1250 m, leg. A. Bolòs & O. Bolòs (BC 137212)"

Type material: BC (holotype), not traced, but probably on loan.

Remarks: See comments under *Santolina chamaecyparissus* subsp. *magonica* O. Bolòs & al.

**Santolina chamaecyparissus** var. **vedranensis** O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 90 (1987)

Ind. loc.: "Es Vedrà, pr. Eivissa, in rupibus maritimis calcareis, leg. E. Gros, 19 jul. 1920 (BC 30056)"

Type material: BC (holotype), not traced, but probably on loan.

Remarks: See comments under *Santolina chamaecyparissus* subsp. *magonica* O. Bolòs & al. *Santolina chamaecyparissus* var. *vedranensis* and *S. magonica* subsp. *vedranense* Romo refer to the same entity.

**Santolina magonica** subsp. **vedraense** Romo, Fl. Silvestres Baleares: 305 (1994)

Ind. loc.: "Holotypus: In parva insula Vedrà dicta, pr. Ebusum, in rupestribus maritimis calcareis. E. Gros, 17.07.1920. BC 30046"

Type material: BC (holotype), not traced, but probably on loan.

Remarks: See comments under *Santolina chamaecyparissus* subsp. *magonica* O. Bolòs & al. and *S. magonica* var. *vedranensis* O. Bolòs & Vigo.

**Scorzonera baetica** subsp. **ebusitana** O. Bolòs & Vigo in Fontqueria 14: 9 (1987)

Ind. loc.: "Ins. Balearicae, Eivissa (Ebusus), inter Sant Miquel et Sant Mateu, in eremis argillaceis, legit P. Palau, 22-V-1950 (BC 112869)"

Type material: BC (holotype).

Remarks: The Balearic material falls within the range of variation of *Scorzonera baetica* (Boiss.) Boiss. and in our opinion does not merit taxonomic recognition.

**Senecio rodriguezii** Willk. ex J.J. Rodr. in Anales Soc. Esp. Hist. Nat. 3: 36 (1874);  $\equiv$  *Pertya rodriguezii* (Willk.) Gand., Fl. Eur. 13: 249 (1887), nom. inval.;  $\equiv$  *Senecio leucanthemifolius* subsp. *rodriguezii* (Willk.) Malag., Sin. Fl. Ibér. ed. 2, fasc. 76: 1207 (1976);  $\equiv$  *S. leucanthemifolius* subsp. *rodriguezii* (Willk. ex J.J. Rodr.) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 91 (1988), comb. superfl.

Ind. loc.: "Hab. Cerca del mar en terrenos arenosos y pedregosos: mezquita, Capifort en el Pou den [sic] Carles, Mongofre-nou, Rodr.; Son Saura cerca del arenal den [sic] Castell, Casall!; entre la Torre del Ram y el puerto de Ciudadela, Rodr."

Type material: Menorca: in glareosis rupibusque arenosis et limosis ad finum Cala-Mezquita. Legi d. 5 Aprili 1873, Willkomm, Herb. balear. n. 34. (**COI-Willkomm**). **Lectotype here designated** (upper left specimen).

Remarks: Name in current use (ALEXANDER, 1979); endemic to the Eastern Balearic Islands.

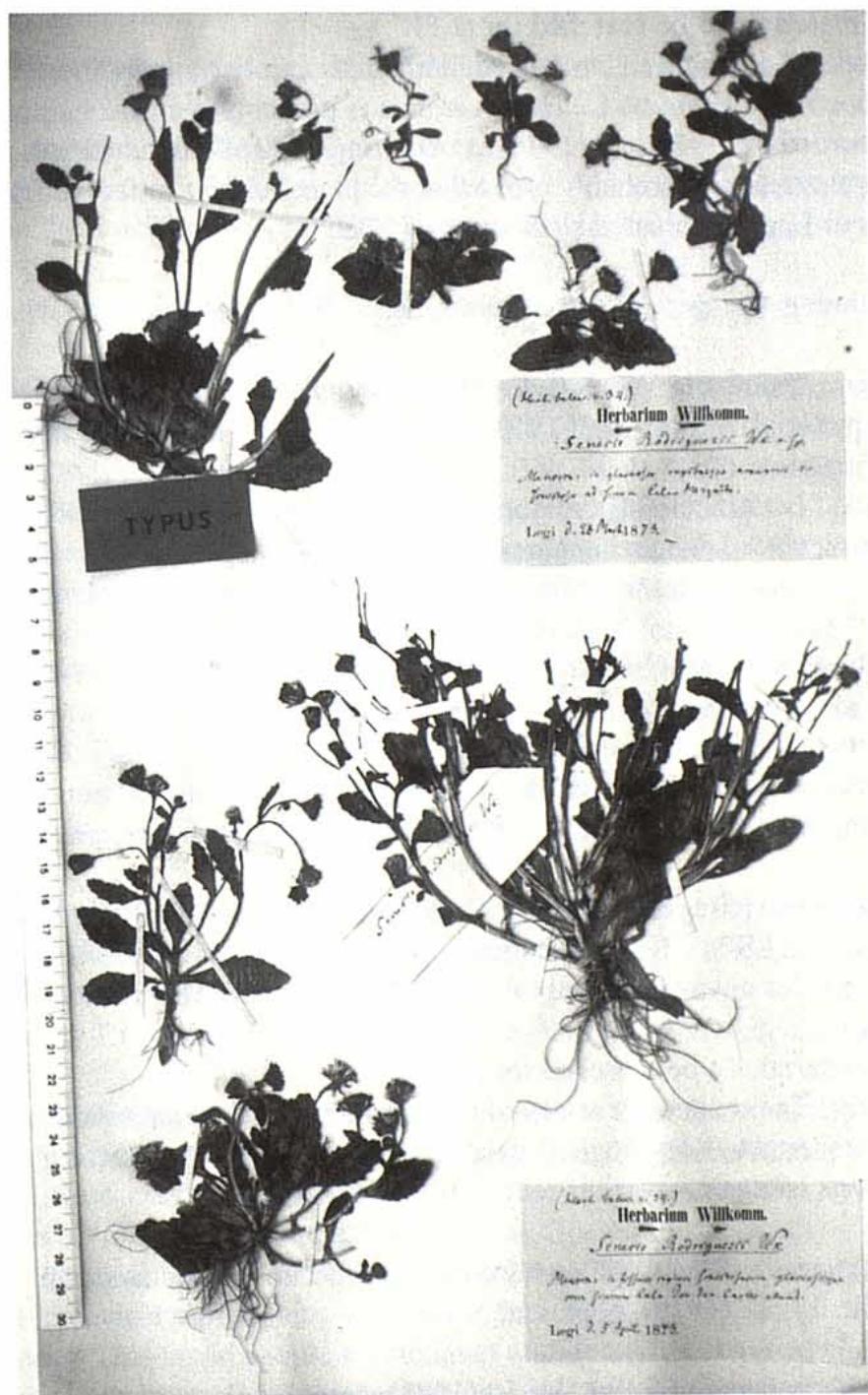


Fig. 3. Lectotype of *Senecio rodriguezii* Willk. ex J.J. Rodr. (**COI-Willkomm**).

*Senecio rodriguezii* subsp. *balearicus* Gand., Nov. Consp. Fl. Eur.: 264 (1910), nom. inval.

**Seriola caespitosa** Porta in Nuovo Giorn. Bot. Ital. 19: 310 (1887); ≡ *S. aetnensis* subsp. *caespitosa* (Porta) Gand., Nov. Consp. Fl. Eur.: 313 (1910); ≡ *S. aetnensis* f. *caespitosa* (Porta) Pau in Brotéria Ci. Nat. 3: 177 (1934)

Ind. loc.: "Min[orca]. Individuum unicum, ad rupes schistosas maritimas dit. Cala Mezquita 25 Apr."

Type material: To be searched for at FI.

Remarks: According to DE FILIPPS (1976), *Seriola caespitosa* should be adscribed to *Hypochoeris radicata* L.. However, this is probably a mistake since the latter was not recorded by DE FILIPPS (1976) as occurring on the Balearic Islands. The study of the type material will probably prove that the plant belongs in fact to *Hypochoeris achyrophorus* L. as anticipated by KNOCHE (1922).

**Sonchus dianae** var. **grandiflorus** Font Quer in Bol. Soc. Esp. Hist. Nat. 20: 157 (1920)

Ind. loc.: "Islote del Vedrà, Gros, 19-V-18"

Type material: Vedrà, 19-V-1918, Gros (BC 35764). **Lectotype here designated** (single specimen).

Remarks: BOULOS (1973) did not mention this taxon in his revision of the genus. Moreover, he included *Sonchus dianae* Lacaita ex Willk. under *S. tenerrimus* L. The type material of *Sonchus dianae* var. *grandiflorus* clearly falls within the variation of the latter.

**Sonchus oleraceus** f. **maritima** Gand. in Bull. Soc. Bot. France 47: 140 (1900)

Ind. loc.: "Formentera"

Type material: To be searched for at LY.

Remarks: BOULOS (1973) did not mention this taxon in his revision of the genus. Judging from the diagnosis it can hardly be recognized as a distinct entity.

**Taraxacum balearicum** Soest in Acta Bot. Neerl. 10: 282 (1961)

Ind. loc.: "ESPAGNE (Baléares): Mallorca, chemin à l'entrée du jardin d'Alfabia, dans les environs du col de Sóller, 2.4.1953, L. Kofler (h. R. de Litardière et h.v. Soest)"

Type material: To be searched for at G.

Remarks: The taxonomic status of this microspecies, only known from the type locality, is uncertain. Karyological data (2n=32; CARDONA & CONTANDRIOPoulos, 1983) supports an agamosperm breeding system for this plant.

*Taraxacum cupreum* Sahlin & Soest ex Duvigneaud in Soc. Échange Pl. Vasc. Eur. Occid. Médit. 17: 11 (1979), nom. nud.

*Triasia brevifolia* Gand., Fl. Eur. 14: 56 (1888), nom. inval.

*Triasia glabrescens* Gand., Fl. Eur. 14: 56 (1888), nom. inval.

*Triasia macrodon* Gand., Fl. Eur. 14: 56 (1888), nom. inval.

*Triasia majorica* Gand., Fl. Eur. 14: 56 (1888), nom. inval.

### Boraginaceae

**Anchusa undulata** var. **barceloi** O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 91 (1983)

Ind. loc.: "Typus: Mallorca, Son Puigdorfila, pr. Ciutat, ubi leg. A. Marcos, 12-II-1970, BC 605244"

Type material: **BC** (holotype).

Remarks: A doubtful taxon which is in need of further research. This plant is very rare in Mallorca and has probably become extinct in recent years.

*Cynoglossum balearicum* Gand., Fl. Eur. 16: 201 (1889), nom. inval.

**Echium balearicum** Porta in Nuovo Giorn. Bot. Ital. 19: 312 (1887); ≡ E. italicum subsp. *balearicum* (Porta) Gand., Nov. Consp. Fl. Eur.: 349 (1910); ≡ E. *pyrenaicum* var. *balearicum* (Porta) Lacaita in J. Linn. Soc., Bot. 44: 414 (1919); ≡ E. italicum var. *balearicum* (Porta), O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 90 (1983)

Ind. loc.: "M[ajorca]. et M[inorca]. Ad margines agrorum et viarum circa S. Ponsa prope Palma, et prope la Cueva de Ciudadela. 21 Mai. 9 Jul."

Type material: Balearium insula Majore, in agris estirilib. inter Palma et S. Ponsa, et insula Minore alla Cueva prope Ciudadela. sol. calcar. 15-30 m s.m., 21-VII-1885, Porta & Rigo (G). **Lectotype here designated** (single specimen).

Remarks: The lectotype is not worthy of recognition from *Echium italicum* L.

*Echium balearicum* Sennen, Campagn. Bot.: 117 (1936), nom. nud.

**Echium confusum** f. **roseum** R. Fernandes in Bol. Soc. Brot. 43: 158 (1969)

Ind. loc.: "Formentera, Playa del Migjorn, 13-V-1918, Gros s.n."

Type material: **BC** (holotype).

Remarks: This plant is indistinguishable from *Echium sabulicolum* Pomel.

**Heliotropium europaeum** var. **parietarifolium** Font Quer in Asoc. Esp. Progr. Ci., Congreso de Oporto, 6: 6 (1921) ≡ *H. europaeum* f. *parietarifolium* (Font Quer) Knoche, Fl. Balear. 2: 548 (1922)

Ind. loc.: "Ibiza: Llano de Santa Inés, Gros, 30-V-18"

Type material: Ibiza, Llano de Santa Inés, 30-V-1921, Gros (**BC** 41984).

**Lectotype here designated** (single specimen).

Remarks: This taxon should be included within the type variety, since it cannot be discriminated from *Heliotropium europaeum* L. on morphological grounds. Despite the obvious disagreement between the date of collection given in the protologue and that of the sheet designated as lectotype, we are confident that this merely

reflects a labelling error. The sheet was annotated by Font Quer himself and did not conflict with the diagnosis; no other specimen belonging to this taxon has been found at BC, the herbarium where the collections of Font Quer are held.

**Myosotis arvensis** var. **garciasii** O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 91 (1983)

Ind. loc.: "Barranc de sa Mola, Alaior, Menorca, ubi leg. P. Font i Quer, 30-V-1913, BC 42889"

Type material: **BC** (holotype).

Remarks: According to BOLÒS & VIGO (1996) this variety approaches *Myosotis ramossissima* Rochel in Schult. in several features. These authors suggest that previous records of *M. ramossissima* in the Balearic Islands should probably be referred to *M. arvensis* var. *garciasii*. Further work on this genus is required to solve the *Myosotis* taxa growing on the Balearic Islands.

*Rhytispermum minoricense* Gand., Fl. Eur. 16: 240 (1889), nom. inval.

### Brassicaceae

**Alyssum maritimum** f. **argentatum** Font Quer in Bol. Soc. Esp. Hist. Nat. 19: 270 (1919); ≡ *A. maritimum* var. *argentatum* (Font Quer) P. Palau in Treb. Inst. Catalana Hist. Nat. 7: 49 (1976), comb. inval.

Ind. loc.: "Menorca... Forma de lugares secos y áridos"

Type material: Cala de S. Esteban, Menorca, 10-VII-1913, Font Quer (**BC** 4507). **Lectotype here designated** (single specimen).

Remarks: None of the forms described from Menorca by FONT QUER (1919) have been recognized as distinct from *Lobularia maritima* (L.) Desv. subsp. *maritima* (FERNANDES, 1993a).

**Alyssum maritimum** f. **crassifolium** Font Quer in Bol. Soc. Esp. Hist. Nat. 19: 270 (1919)

Ind. loc.: "Menorca...Forma de lugares frescos y sombríos"

Type material: Mahón, en cala Figuera, arenas marítimas, 29-XII-1913, Font Quer (**BC** 4495). **Lectotype here designated** (bottom specimen).

Remarks: See comments under *Alyssum maritimum* f. *argentatum* Font Quer.

*Alyssum maritimum* f. *crassifolia* P. Palau in Anales Inst. Bot. Cavanilles 12: 295 (1955), nom. inval.

*Alyssum maritimum* f. *intermedium* P. Palau in Treb. Inst. Catalana Hist. Nat. 7: 49 (1976), nom. inval.

**Alyssum maritimum** f. **virescens** Font Quer in Bol. Soc. Esp. Hist. Nat. 19: 270 (1919)

Ind. loc.: "Menorca...Forma de salinas, cerca del mar"

Type material: Mahón en Trepucó, 24-I-1913, Font Quer (BC 4498). **Lectotype here designated** (single specimen).

Remarks: See comments under *Alyssum maritimum* f. *argentatum* Font Quer.

**Arabis muralis** var. **balearica** Porta in Nuovo Giorn. Bot. Ital. 19: 297 (1887); ≡ *A. collina* var. *balearica* (Porta) O. Bolòs & Vigo, Fl. Països Catalans 2: 97 (1990)

Ind. loc.: "M[allorca]. In rupestribus ad cuspidem m. Puig de Galatzó in plaga orientali. 17 Mai."

Type material: To be searched for at FI; not traced at G.

Remarks: Included by TALAVERA (1993) as a synonym of *Arabis collina* Ten.

**Biscutella balearica** Jord., Diagn. Esp. Nouv. 1: 325 (1864); ≡ *B. auriculata* subsp. *balearica* (Jord.) Gand., Nov. Consp. Fl. Eur.: 44 (1910)

Ind. loc.: "Reichenbach a figuré dans ses Icon pl. rar. t 602, n° 823, sous le nom de *B. auriculata*, une plante des îles Baléares, ..."

Type material: Not traced, probably at LY.

Remarks: GRAU & KLINGENBERG (1993) listed this taxon as a synonym of *Biscutella auriculata* L.

**Biscutella ebusitana** Rosselló, N. Torres & L. Sáez in Bot. J. Linn. Soc. 129: 157 (1999)

Ind. loc.: "Holotypus. INSULAE BALEARICAE, EBUSUS: In rupestribus maritimis loco dicto Es Penyal de s'Aquila, 31S62 ubi N. Torres et J.A. Rosselló 9.x.1993 legerunt (VAB 950061) Isotypes BCC, MA VAL"

Type material: **VAB** (holotype), **BCC**, **MA**, **VAL** (isotypes).

Remarks: Name in current use (ROSELLÓ & al., 1999); endemic to the Western Balearics. Previously included under *Biscutella frutescens* Coss. and *B. montana* Cav., but easily distinguished by a combination of vegetative and reproductive features. This taxon is a heterotypic synonym of *Biscutella montana* var. *densiflora* Font Quer.

**Biscutella montana** var. **densiflora** Font Quer in Butll. Inst. Catalana Hist. Nat. 26: 104 (1926); in Cavanillesia 1: 31 (1928); ≡ *B. laevigata* [subsp. *montana*] var. *densiflora* (Font Quer) O. Bolòs & Masclans ex O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 76 (1974)

Ind. loc.: "Hab. in Ebuso, in rupibus maritimis Punta de la Creu, ubi d. 19 majii 1919, legi (typus)"

Type material: in Ebuso: Punta de la Creu, in rupibus maritimis, 19-V-1919, Font Quer (BC 4995). **Lectotype here designated**.

Remarks: See comments under *Biscutella ebusitana* Rosselló & al.

**Brassica balearica** Pers., Syn. Pl. 2: 206 (1806)

Ind. loc.: "Hab. in ins. Balearicis...(Herb. Richard.)"

Type material: **P-Lamarck** (holotype).

Remarks: Name in current use (BOLÒS & VIGO, 1990; GÓMEZ CAMPO, 1993a); endemic to the island of Mallorca. It has been suggested that *Brassica balearica* is of allopolyploid origin sharing a genome with the *B. oleracea* L. group (SNÖGERUP & PERSSON, 1983), whereas the other parent could be related to *Biscutella repanda* (Willd.) DC. (GÓMEZ CAMPO, 1993a).

**Bunias balearica** L., Syst. Nat. ed. 12, 2: 446 (1767); ≡ *Myagrum balearicum* (L.) Lam., Encycl. 1: 571 (1785); ≡ *Succowia balearica* (L.) Medik., Pfl.-Gatt.: 65 (1792)

Ind. loc.: "Habitat in Balearibus. Dav. Royen"

Type material: **BM** (syntype), **LINN** (syntype).

Remarks: Name in current use (MARCOS SAMANIEGO, 1993). Described from the Balearic Islands but distributed elsewhere in the Mediterranean basin.

*Cardamine minoricensis* Gand., Fl. Eur. 2: 125 (1884), nom. inval.

*Diplotaxis balearica* Gand., Fl. Eur. 2: 150 (1884), nom. inval.

*Diplotaxis balearica* Sennen in Bol. Soc. Ibér. Ci. Nat. 25: 109 (1926), nom. inval.

**Diplotaxis balearica** Sennen in Monde Pl. 31 n.º 183: 16 (1930)

Ind. loc.: "Hab.- Baléares: Pont d'Inca. Leg. F. Bianor"

Type material: Champs, Pont d'Inca, 6-XI-1916, Bianor (**BC** 4036). **Lectotype here designated** (single specimen).

Remarks: Included by MARTÍNEZ LABORDE (1993) under the synonymy of *Diplotaxis viminea* (L.) DC.

**Diplotaxis catholica** var. **ibicensis** Pau in Mem. Soc. Esp. Hist. Nat. 12: 278 (1924); ≡ *D. catholica* subsp. *ibicensis* (Pau) Font Quer in Butll. Inst. Catalana Hist. Nat. 33: 211 (1933); ≡ *D. ibicensis* (Pau) Gómez-Campo in Anales Jard. Bot. Madrid 38: 32 (1981)

Ind. loc.: "... ejemplares de Ibiza, que los viajeros Font Quer y Gros herborizaron en las rocas marítimas de esta pequeña isla"

Type material: Bledas, Ibiza, VII-1908, Gros (**MA** 46318). **Lectotype here designated** (single specimen).

Remarks: Name in current use (MARTÍNEZ LABORDE, 1993). *Diplotaxis ibicensis* also forms coastal populations on the mainland of Eastern Spain.

*Diplotaxis apula* subsp. *heterophylla* Porta & Rigo ex Gand., Nov. Consp. Fl. Eur.: 37 (1910), nom. nud.

**Eruca sativa** var. **nana** Cambess. in Mém. Mus. Hist. Nat. 14: 213 (1827)

Ind. loc.: "In arenosis maritimis insulae Majoris, inter Palmam et locum dictum Prat"

Type material: To be searched for at MPU.

Remarks: Not studied by GÓMEZ CAMPO (1993b) in his account of the genus *Eruca* Mill. from Spain.

***Eruca sativa* var. *papillosa*** Marès & Vigin., Cat. Pl. Vasc. Balèares: 29 (1880)

Ind. loc.: "FORMENTERA (île de): Champs incultes et pierreux"

Type material: To be searched for at MPU.

Remarks: Not studied by GÓMEZ CAMPO (1993b) in his account of the genus *Eruca* Mill. from Spain. KNOCHE (1922) included this variety under *Eruca sativa* L., but it should probably be included under *E. vesicaria* (L.) Cav.

***Iondraba cambessedesii*** Sennen in Bol. Soc. Ibér. Ci. Nat. 25: 112 (1926)

Ind. loc.: "Baléares: Pont d'Inca, champ, le long de la route de Sineu. Leg. F. Bianor"

Type material: Not traced at BC, but duplicates may be found elsewhere.

Remarks: Not worthy of recognition from *Biscutella auriculata* L. (GRAU & KLINGENBERG, 1993)

***Lepidium carrerasii*** J.J. Rodr. in Anales Soc. Esp. Hist. Nat. 3: 7 (1874); ≡ *Nasturtium carrerasii* (J.J. Rodr.) Kuntze, Revis. Gen. Pl. 2: 937 (1891); ≡ *Lepidium spinosum* var. *carrerasii* (J.J. Rodr.) Asch. & Willk. ex Asch. in Ber. Deuts. Bot. Ges. 10: 100 (1892); ≡ *L. spinosum* subsp. *carrerasii* (J.J. Rodr.) Gand., Nov. Consp. Fl. Eur.: 48 (1910); ≡ *L. spinosum* f. *carrerasii* (J.J. Rodr.) Knoche, Fl. Balear. 2: 13 (1922)

Ind. loc.: "Hab. Inmediaciones de mahon [sic] en sitios frescos, tanto incultos como cultivados: hacia [sic] los caminos de la Mezquita y de la Albufera, Rodr.; margen [sic] del torrente de la huerta de San Juan, Casall!"

Type material: Binisarmeña (Mahon), sitios frescos herbosos, 19-IV-1874, Rodríguez (**COI-Willkomm**). **Lectotype here designated** (middle specimen).

Remarks: Does not merit distinct treatment from *Lepidium spinosum* Ard. (BOLÒS & VIGO, 1990; HERNÁNDEZ-BERMEJO & CLEMENTE, 1993), an eastern Mediterranean plant introduced in Menorca.

*Matthiola balearica* Gand., Fl. Eur. 2: 276 (1884), nom. inval.

*Senebiera balearica* Gand., Fl. Eur. 2: 319 (1884), nom. inval.

***Sisymbrium balearicum*** Porta in Nuovo Giorn. Bot. Ital. 19: 298 (1887); ≡ *Hugueninia balearica* (Porta) Schultz, Das Pflanzenreich IV., Heft 70, 105: 351 (1924)

Ind. loc.: "M[allorca]. Ad muros vetustos circa pagum Andraitx, rarissimum. 24 Mai."

Type material: Not traced at FI, probably lost.

Remarks: A doubtful taxon of uncertain affiliation. KNOCHE (1922) included it under *Diplotaxis catholica* (L.) DC., a view later followed by MARTÍNEZ LABORDE (1993). However, earlier Balearic reports of *D. catholica* should be referred to *D. ibicensis*. The attribution of *Sisymbrium balearicum* to *Diplotaxis ibicensis* should be verified since the original diagnosis neither applies to this plant nor to other *Diplotaxis* species.

*Succowia richardii* Gand., Fl. Eur. 2: 354 (1884), nom. inval.

## Buxaceae

***Buxus balearica*** Lam., Encycl. 1: 511 (1785)

Ind. loc.: "Ce beau Bois croît dans les isles Baléares, & est cultivé au Jardin du Roi"

Type material: Not traced at P-Lamarck.

Remarks: Name in current use. Described from the Balearic Islands, but present in the western Mediterranean basin (GREUTER & al., 1984).

*Buxus litigiosa* Gand., Fl. Eur. 20: 64 (1890), nom. inval.

## Callitrichaceae

*Callitriche balearica* Gand., Fl. Eur. 9: 56 (1886), nom. inval.;  $\equiv$  *C. hamulata* subsp. *balearica* (Gand.) Gand., Nov. Consp. Fl. Eur.: 189 (1910), nom. inval.

## Campanulaceae

***Specularia parviflora* f. *balearica*** Sennen ex Knoche, Fl. Balear. 2: 442 (1922);  $\equiv$  *Legousia hybrida* var. *balearica* (Sennen ex Knoche) O. Bolòs & Vigo, Fl. Països Catalans 3: 664 (1996)

Ind. loc.: "Sennen 3458!"

Type material: Baléares: Pont d'Inca, champs, 11-V-1918, Bianor, Plantes d'Espagne-F. Sennen n.<sup>o</sup> 3458 (**BC-Sennen 852472**). **Lectotype here designated; BC** (isolectotype).

Remarks: The type material cannot be distinguished from *Legousia hybrida* (L.) Delarbre.

*Specularia parviflora* subsp. *balearica* Sennen in Bol. Soc. Ibér. Ci. Nat. 28: 171 (1929), nom. illeg.

## Capparaceae

*Capparis spinosa* var. *inermis* J.J. Rodr., Cat. Pl. Vasc. Menorca: 7 (1865), nom. illeg.;  $\equiv$  *C. spinosa* f. *inermis* (J.J. Rodr.) Knoche, Fl. Balear. 2: 11 (1922), nom. inval.

***Capparis spinosa* var. *intermedia*** Texidor in Rev. Progr. Ci. Exact. 18: 590 (1869)

Ind. loc.: "Menorca"

Type material: To be searched for at MAF.

Remarks: No information is available concerning this taxon. It probably refers to *Capparis spinosa* L. subsp. *rupestris* (Sm.) Nyman.

### Caprifoliaceae

**Caprifolium balearicum** Dum. Cours. in Bot. Cult. ed. 2, 4: 338 (1811);  $\equiv$  Lonicera implexa var. balearica (Dum. Cours.) Viv., Flora Corsicae Spec. Nov.: 4 (1824);  $\equiv$  L. balearica (Dum. Cours.) DC., Fl. France 5: 499 (1815)

Ind. loc.: "Minorque"

Type material: Not traced.

Remarks: BROWICZ (1976) treated *Lonicera balearica* as a synonym of *L. implexa* Aiton.

*Lonicera amblyochlamis* Gand., Fl. Eur. 11: 19 (1886), nom. inval.

*Lonicera minoricensis* Gand., Fl. Eur. 11: 19 (1886), nom. inval.

**Lonicera majoricensis** Gand. in Bull. Soc. Bot. France 47: 136 (1900);  $\equiv$  L. pyrenaica subsp. majoricensis (Gand.) Gand., Nov. Consp. Fl. Eur.: 226 (1910);  $\equiv$  L. pyrenaica f. majoricensis (Gand.) Knoche, Fl. Balear. 2: 431 (1922);  $\equiv$  L. pyrenaica subsp. majoricensis (Gand.) Malag., Subsp. Var. Geogr.: 5 (1973), comb. superfl.;  $\equiv$  L. pyrenaica subsp. majoricensis (Gand.) Browicz in Bot. J. Linn. Soc. 68: 279 (1974), comb. superfl.;  $\equiv$  L. pyrenaica var. majoricensis (Gand.) Pericás & Rosselló in Candollea 42: 397 (1987)

Ind. loc.: "Puig Mayor"

Type material: To be searched for at LY.

Remarks: Name in current use (BROWICZ, 1976); endemic to the island of Mallorca.

**Lonicera pyrenaica** var. **grandiflora** Bourg. ex Marès & Vigin., Cat. Pl. Vasc. Baleáres: 136 (1880)

Ind. loc.: "Cette espèce a été publié par Bourgeau, Exsicc. n. 2750"

Type material: Majorque: Rochers au sommet du Puig Major, 19-VI-1869, E. Bourgeau pl. d'Espagne 2750 (G). **Lectotype here designated** (bottom specimen).

Remarks: This name is a taxonomic synonym of *Lonicera pyrenaica* subsp. *majoricensis* (Gand.) Gand.

*Xylosteum balearicum* Gand., Fl. Eur. 11: 26 (1886), nom. inval.

### Caryophyllaceae

*Alsine tenuifolia* f. *intermedia* Garcías Font in Butll. Inst. Catalana Hist. Nat. 23: 92 (1923), nom. nud.

**Arenaria balearica** L., Syst. Nat. ed. 12, 3: 230 (1768);  $\equiv$  Alسانthus balearicus (L.) Desv. in J. Bot. (Desvaux) 3(5): 221 (1806)

Ind. loc.: "Habitat in insul. Balearibus"

Type material: **LINN 585.12** (lectotype; DIANA-CORRIAS, 1981: 293-294)

Remarks: Name in current use (LÓPEZ GONZÁLEZ, 1990; BOLÒS & VIGO, 1990).

Described from the Balearic Islands, but it is also present in several western Mediterranean islands (Corsica, Sardinia, Montecristo).

*Arenaria dicrocalyx* Gand., Fl. Eur. 4: 24 (1885), nom. inval.

**Arenaria grandiflora** var. **bолосii** Cañig. in Collect. Bot. (Barcelona) 3: 319 (1953); ≡ *A. grandiflora* subsp. *bолосii* (Cañig.) KÜPFER in Boissiera 23: 139 (1975); ≡ *A. grandiflora* subsp. *bолосii* (Cañig.) Colom, Biogeografía Baleares ed. 2, 1: 192 (1978), comb. inval.; ≡ *A. болосii* (Cañig.) L. Sáez & Rosselló, **comb. nov.**

Ind. loc.: "En una excursión hecha al Puig de Massanella, el 1 de julio de 1951, encontré esta planta en abundancia al pie de las peñas más altas que dan al Norte"

Type material: **BC 119869** (lectotype; KÜPFER, 1975: 138). The lectotype [Peñas norte de Massanella (Mallorca), 1-VII-1951, J. Cañigueral (**BC 119869**)] is held at BC, not at BCC as reported by KÜPFER (1975).

Remarks: Name in current use (LÓPEZ GONZÁLEZ, 1990; ALOMAR & al., 1997); endemic to the island of Mallorca.

*Arenaria grandiflora* subsp. *bourageana* Coss. ex Gand., Nov. Conspp. Fl. Eur.: 80 (1910), nom. inval.

**Arenaria grandiflora** var. **incrassata** Coss. ex Knoche, Fl. Balear. 1: 452 (1921)

Ind. loc.: "MAJORQUE; rochers, Sierra, entre 850-1430 mètres (Knoche)"

Type material: Puig Major, 1430 m, exp. O, 1-VII-1909, Knoche 2231 (**MPU-Knoche**). **Lectotype here designated.**

Remarks: The names *Arenaria grandiflora* var. *incrassata* Coss. ex Knoche and *A. incrassata* var. *glabrescens* Willk. refer to the same entity.

*Arenaria grandiflora* subsp. *pseudoincrassata* Malag., H. Bianor Educador Botánico Baleares: 150 (1971); Subsp. Var. Geogr.: 6 (1973), nom. inval.

**Arenaria incrassata** var. **glabrescens** Willk. in Willk. & Lange, Prodr. Fl. Hispan. 3: 624 (1878); ≡ *A. grandiflora* var. *glabrescens* (Willk.) F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 248 (1914); ≡ *A. grandiflora* var. *glabrescens* (Willk.) Pau & Font Quer ex Font Quer in Mém. R. Acad. Ci. Barcelona 22(18): 342 (1931), comb. superfl.; ≡ *A. grandiflora* subsp. *glabrescens* (Willk.) F. Herm. ex Colom, Biogeografía Baleares ed. 2, 1: 192 (1978), comb. inval.; ≡ *A. grandiflora* subsp. *glabrescens* (Willk.) G. López & Nieto Feliner in Anales Jard. Bot. Madrid 42: 351 (1986)

Ind. loc.: "... β in Astur. (supra Barco de Soto) pr. Oviedo, BOURG.!). Hab. var. β in insula quoque Balearium majore"

Type material: **G** (lectotype; KÜPFER, 1975: 138).

Remarks: Name in current use; endemic to the island of Mallorca (LÓPEZ GONZÁLEZ & NIETO FELINER, 1986; LÓPEZ GONZÁLEZ, 1990; BOLÒS & VIGO, 1990).

The names *Arenaria grandiflora* var. *incrassata* Coss. ex Knoche and *Arenaria incrassata* var. *glabrescens* Willk. in Willk. & Lange are taxonomic synonyms. Records of *A. grandiflora* L. subsp. *glabrescens* (Willk.) G. López & Nieto Feliner from Northern Africa should be referred to another closely related taxon, *A. grandiflora* L. subsp. *gomerica* Sáez & al. (SÁEZ & al., 2000).

*Arenaria pulvinulans* Gand., Fl. Eur. 4: 24 (1885), nom. inval.

**Arenaria tenuior** var. **balearica** Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 17 (1911); ≡ *A. serpyllifolia* f. *balearica* (Sennen & Pau) Knoche, Fl. Balear. 1: 451 (1921)

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: Not traced at BC and MA.

Remarks: Included by LÓPEZ GONZÁLEZ (1990) within typical *Arenaria leptoclados* (Reichenb.) Guss.

**Cerastium balearicum** F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 247 (1914); ≡ *C. varians* f. *balearicum* (F. Herm.) Knoche, Fl. Balear. 1: 455 (1921); ≡ *C. semidecandrum* subsp. *balearicum* (F. Herm.) Litard. in Candollea 11: 198 (1948)

Ind. loc.: "Der Aufstieg zum Puig mayor"

Type material: To be searched for at GAT and GZU.

Remarks: RICO (1990) subsumed *Cerastium balearicum* under *C. semidecandrum* L. at the varietal level (var. *linneanum* Chaub. & Bory). Described from Balearic material, but later reported elsewhere.

**Cerastium brachypetalum** subsp. **balearicum** Romo, Fl. Silvestres Baleares: 214 (1994)

Ind. loc.: "Holotypus: Mallorca, Lluc Palau Ferrer 24-Mayo-1954, BC 126453"

Type material: **BC** (holotype).

Remarks: Surprisingly, the holotype does not belong to any taxa of *Cerastium*. The lower petiolate leaves, the dehiscing capsules by 6 valves, the pistil having 3 styles, and the seeds c. 1.2-1.4 mm diameter with acute tubercles clearly show that this plant should be referred to a taxon of the *Stellaria media* (L.) Vill. group.

**Cerastium diffusum** var. **palaui** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 86 (1974)

Ind. loc.: "Typus: Majorica, Coll d'En Rabassa, in arenosis, ubi legit P. Palau i Ferrer, 15-III-1947 (Pl. Bal. 16, BC 105031)"

Type material: **BC** (holotype).

Remarks: According to RICO (1990) this taxon is a taxonomic synonym of *Cerastium semidecandrum* var. *sennenii* Font Quer.

**Cucubalus mollissimus** L., Sp. Pl. ed. 2: 593 (1763); ≡ *Silene mollissima* (L.) Pers., Syn. Pl.: 498 (1805); ≡ *S. mollissima* (L.) Sibth & Sm., Prodr. Fl. 1: 298 (1806), comb. superfl.

Ind. loc.: "Habitat in Italiae maritimis"

Type material: LINN (lectotype; JEANMONOD, 1984: 228-229).

Remarks: Name in current use, endemic of the Balearic Islands (JEANMONOD, 1984; TALAVERA, 1990; BOLÒS & VIGO, 1990). See JEANMONOD (1984) for the adscription of the Linnean type to the Balearic plant.

*Corone balearica* Gand., Fl. Eur. 4: 278 (1885), nom. inval.

*Corone crassiuscula* Gand., Fl. Eur. 4: 277 (1885), nom. inval.

*Corone majorica* Gand., Fl. Eur. 4: 288 (1885), nom. inval.

*Corone minoricensis* Gand., Fl. Eur. 4: 278 (1885), nom. inval.

*Corone rodriguezii* Gand., Fl. Eur. 4: 278 (1885), nom. inval.

*Corone umbraticola* Gand., Fl. Eur. 4: 277 (1885), nom. inval.

**Dianthus rupicola** subsp. **bocchoriana** L. Llorens & Gradaille in Candollea 46: 389 (1991)

Ind. loc.: "Mallorca. In rupinis maritimis l.d. Cap de Formentor (Mallorca). Leg. L. Llorens, 17.7.1973." Herbarium Universitatis Insularum Balearicarum (UIB)"

Type material: UIB (holotype).

Remarks: Name in current use (LLORENS & GRADAILLE, 1991). Earlier reports of *Dianthus rupicola* Viv. subsp. *hermaeensis* (Coss.) O. Bolòs & Vigo and *D. rupicola* subsp. *rupicola* from Mallorca should be adscribed to this taxon. ROMO (1994) made the combination *Dianthus rupicola* subsp. *bocchoriana* (L. Llorens & Gradaille) Romo, Fl. Silvestres Baleares: 313 (1994), erroneously reporting the basionym as *Dianthus bocchoriana* L. Llorens & Gradaille in Candollea 46: 389 (1991).

*Kohlrauxhia balearica* Gand., Fl. Eur. 4: 136 (1885), nom. inval.

**Moehringia balearica** F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 249 (1914)

Ind. loc.: "Der Aufstieg zum Puig mayor"

Type material: To be searched for at GAT.

Remarks: No information concerning this taxon is available and it has not been included in recent regional floras (MONTSERRAT, 1990). It is probably a mere variant of *Moehringia pentandra* J. Gay, which is present at the type locality.

*Polycarpon balearicum*, Gand., Fl. Eur. 9: 126 (1886), nom. inval.;  $\equiv$  *P. peploides* subsp. *balearicum* (Gand.) Gand., Nov. Conspl. Fl. Eur.: 191 (1910), nom. inval.

**Polycarpon colomense** Porta in Nuovo Giorn. Bot. Ital. 19: 305 (1887);  $\equiv$  *P. peploides* subsp. *colomense* (Porta) Gand., Nov. Conspl. Fl. Eur.: 191 (1910);  $\equiv$  *P. peploides* f. *colomense* (Porta) Knoche, Fl. Balear. 1: 459 (1921);  $\equiv$  *P. polycarpoides* [subsp.]

*catalaunicum*] var. *colomense* (Porta) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 86 (1974);  $\equiv$  *P. polycarpoides* subsp. *colomense* (Porta) Pedrol in Castroviejo & al., Fl. iberica 2: 164 (1990);  $\equiv$  *P. polycarpoides* var. *colomense* (Porta) Romo, Fl. Silvestres Baleares: 214 (1994), comb. superfl.

Ind. loc.: "Min[orca]. In agris restilibus parvae insulae Colom. 11 Apr."

Type material: Balearium insola Minore, in agris restilibus insulae, parva Colom, fol. colior 2-6 m s. m., 11. April. 1885, Porta et Rigo (**B**). **Lectotype here designated** (upper specimen); **G** (isotypes).

Remarks: Name in current use (AMICH & PEDROL, 1990); endemic to the Eastern Balearics.

*Polycarpon leptocladum* Gand., Fl. Eur. 9: 126 (1886), nom. inval.;  $\equiv$  *P. peploides* subsp. *leptocladum* (Gand.) Gand., Nov. Consp. Fl. Eur.: 191 (1910), nom. inval.

*Prerotia minoricensis* Gand., Fl. Eur. 4: 80 (1885), nom. inval.

**Sagina brevipedicellata** Sennen in Bol. Soc. Ibér. Ci. Nat. 25: 216 (1926);  $\equiv$  *S. apetala* var. *brevipedicellata* (Sennen) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 86 (1974)

Ind. loc.: "Baléares: Pont d'Inca, lieux sablonneux. Leg. F. Bianor"

Type material: Baléares: Pont d'Inca, lieux sablonneux, 9-IV-1919 F. Bianor, Pl. Espagne-F. Sennen n.º 3664 (**MA 35203**). **Lectotype here designated** (upper specimen).

Remarks: According to MONTSERRAT & MONTSERRAT (1990) *Sagina brevipedicellata* cannot be distinguished from *S. apetala* Ard.

**Sagina rodriguezii** Willk. in Oesterr. Bot. Z. 25: 113 (1875); in Linnaea 40: 115 (1876);  $\equiv$  *S. maritima* var. *rodriguezii* (Willk.) Pau in Butll. Inst. Catalana Hist. Nat. 14: 139 (1914);  $\equiv$  *S. maritima* subsp. *rodriguezii* (Willk.) Gand., Nov. Consp. Fl. Eur.: 83 (1910);  $\equiv$  *S. maritima* subsp. *rodriguezii* (Willk.) Pau ex Colom, Biogeografía Baleares ed. 2, 1: 204 (1978) comb. inval.

Ind. loc.: "Menorca: in arenosis littoralibus, v.c. in ditione la Canasia, d. 3. April. c. flor. et fruct."

Type material: Menorca: in arenosis ditionis littoralis la canasia. Legi d. 3 April 1873, Willkomm, Herb. balear. n. 156. (**COI-Willkomm**). **Lectotype here designated** (middle specimen).

Remarks: According to MONTSERRAT & MONTSERRAT (1990) *Sagina rodriguezii* should be considered a mere synonym of *S. maritima* G. Don.

*Silene ambigua* Camb. ex Soyer-Willemet & Godr. in Mém. Soc. Roy. Sci. Nancy 1850: 158 (1851), nom. illeg.

*Silene ambigua* Cambess. ex Barceló, Fl. Baleares: 61 (1880), nom. illeg.

**Silene ambigua** var. **littoralis** Willk. in Oesterr. Bot. Z. 25: 113 (1875); in Linnaea 40: 119 (1875)

Ind. loc.: "Mallorca: in fissuris rupium maritimorum calcar. ad portum oppidi Sóller, d. 3. Maji c. flor."

Type material: Mallorca: Puerto de Sóller in fissuris rupium, glareosis, sub dumetis collum juxta Sta. Catalina (...), 3-V-1873, Willkomm, Herb. balear. n. 142. (COI-Willkomm). **Lectotype here designated** (bottom left specimen).

Remarks: The type material belongs to the polymorphic *Silene secundiflora* Otth., and on morphological grounds no further recognition is advisable.

***Silene cambessedesii* Boiss. & Reut., Pugill. Pl. Afr. Bor. Hisp.: 18 (1852, january)**

Ind. loc.: "Hab. in arenosis maritimis Balearium (Cambess.), Gibraltariae. (Boiss. Reut.)"

Type material: **G** (lectotype; TALAVERA & MUÑOZ GARMENDIA, 1989: 429)

Remarks: Name in current use (CANDAU & TALAVERA, 1979; TALAVERA, 1990; BOLÒS & VIGO, 1990). As currently circumscribed *Silene cambessedesii* is restricted to the western Balearic Islands and to a few localities from Eastern Spain. *Silene villosa* var. *nana* Cambess. also refers to this taxon .

***Silene decipiens* Barceló in Anales Soc. Esp. Hist. Nat. 8: 343 (1879)**

Ind. loc.: "Mallorca, en algunos baluartes del Oeste de la muralla de Palma, en el glácis del Ornabegue y en el Molinar de Levante."

Type material: A sheet incuding only a capsule with seeds has been located at **MPU-Knoche**. The remains are annotated by the handwriting of Barceló and probably refer to authentic *Silene decipiens*. However, it is useless to take this sheet as material for lectotypification. Duplicates of the Barceló specimen should be searched for in other herbaria.

Remarks: *Silene decipiens* refers to the taxon previously known as *S. apetala* Willd., and only recently has been used to replace the later name (cf. TALAVERA, 1990). However, GREUTER (1995) has suggested that *S. decipiens* Barceló is an illegitimate later homonym of *S. decipiens* (Ball) Ball in J. Linn. Soc. London, Bot. 16: 768 (1878). He made the proposal to conserve the name *S. apetala* with a conserved type against *S. decipiens*, since the type material held at the Willdenow herbarium is, in fact, *S. nocturna* L.

*Silene minoricensis* Gand., Fl. Eur. 4: 218 (1885), nom. inval.

***Silene sericea* var. *balearica* Willk. in Linnaea 40: 118 (1875)**

Ind. loc.: "Mallorca: in sabulosis zonae littoralis prope Campos, in consortio Helichrysi Stoechadis. D. 20 Apr. c. flor. et caps."

Type material: Mallorca: in sabulosis zonae littoralis prope Salobrar de Campos in consortio Helichrysi Stoechadis. 20-IV-1873, Willkomm, Herb. balear. n. 303 (COI-Willkomm). **Lectotype here designated** (middle specimen).

Remarks: A doubtful taxon related to *Silene colorata* Poir. requiring further study.

***Silene vesicaria* var. *serratulifolia* Sennen in Bol. Soc. Ibér. Ci. Nat. 25: 139 (1926)**

Ind. loc.: "Baléares: Pont d'Inca, champs. Leg. F. Bianor"

Type material: Baléares: Pont d'Inca, champs. IV et V-1917, Bianor, Pl. Espagne-F. Sennen n.<sup>o</sup> 2981 (**BC** 75003). **Lectotype here designated**; **BC** (isolectotype)

Remarks: This taxon belongs to *Silene vulgaris* (Moench) Garcke subsp. *vulgaris*.

**Silene villosa** var. **nana** Cambess. in Mém. Mus. Hist. Nat. 14: 221 (1827); ≡ *S. littorea* var. *nana* (Cambess.) Knoche, Fl. Balear. 1: 471 (1921); ≡ *S. nana* (Cambess.) Pau in Brotéria Ci. Nat. 3: 174 (1934); ≡ *S. adscendens* var. *nana* (Cambess.) Pau in Brotéria Ci. Nat. 3: 175 (1934); ≡ *S. littorea* subsp. *nana* (Cambess.) Knoche ex Colom, Biogeografía Baleares ed. 2, 1: 186 (1978), comb. inval.; ≡ *S. littorea* subsp. *nana* (Cambess.) O. Bolòs & Vigo, Fl. Països Catalans 2: 733 (1990)

Ind. loc.: "In arenosis maritimis Ebusi"

Type material: **MPU-Knoche** (holotype).

Remarks: See comments under *Silene cambessedesii* Boiss. & Reut.

**Spergularia balearica** Sennen in Bol. Soc. Ibér. Ci. Nat. 25: 219 (1926); ≡ *S. rubra* [var. *marginata*] f. *balearica* (Sennen) Knoche, Fl. Balear. 1: 458 (1921)

Ind. loc.: "Baléares: Portopí, lieux sablonneux. Leg. F. Sauvan-Denis"

Type material: Baléares: Portopí, lieux sablonneux, 27-III-1919, F. Sauvan-Denis, Pl. Espagne-F. Sennen n.<sup>o</sup> 3666 (**BC-Sennen** 836623). **Lectotype here designated**.

Remarks: No previous information apart from the original publication concerning this taxon is available. In fact, it is not included in the Spanish revision of the genus (RATTER, 1990). The type material of *Spergularia balearica* cannot be distinguished from *S. marina* (L.) Besser.

*Spergularia rubra* [var. *dilleni*] f. *gracilis* Knoche, Fl. Balear. 1: 457 (1921), nom. nud.

*Spergularia rubra* [var. *marginata*] f. *gracilis* Knoche, Fl. Balear. 1: 458 (1921), nom. nud.

*Spergularia rubra* [var. *stipularis*] f. *laciflora* Garcías Font in Butll. Inst. Catalana Hist. Nat. 17: 115 (1917), nom. nud.

*Viscago balearica* Gand., Fl. Eur. 4: 240 (1885), nom. inval.

*Viscago vigens* Gand., Fl. Eur. 4: 240 (1885), nom. inval.

## Chenopodiaceae

*Ambrina balearica* Gand., Fl. Eur. 19: 179 (1890), nom. inval.

**Atriplex tornabenei** var. **pedunculata** Castrov. in Anales Jard. Bot. Madrid 43: 475 (1987)

Ind. loc.: "Holotypus: Baleares, "Flora Capraerense [sic]. Rarísima. Arenales marítimos. Es Caló d'Es Forn, media docena de pequeños ejemplares, en grupo. 6-X-1947 legi Palau Ferrer" (MA 29221)"

Type material: **MA** (holotype).

Remarks: A little known taxon requiring further study. Apparently restricted to the small island of Cabrera, but this requires ulterior confirmation.

**Beta maritima f. nana** Gand. in Bull. Soc. Bot. France 47: 121 (1900)

Ind. loc.: "[Palma]. Ad orientem urbis in glareosis maritimis"

Type material: To be searched for at LY.

Remarks: No information is available concerning this taxon. It is not indicated in the taxonomic revision of the spanish taxa by GUTIÉRREZ-BUSTILLO (1990). Probably this, together with *Beta maritima* f. *pubescens*, probably does not deserve recognition from *B. maritima*.

**Beta maritima f. pubescens** Gand. in Bull. Soc. Bot. France 47: 121 (1900)

Ind. loc.: "[Palma]. Ad «Castillo»"

Type material: To be searched for at LY.

Remarks: No information is available concerning this taxon. See comments under *Beta maritima* f. *nana*.

**Beta vulgaris** var. **marcosii** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 88 (1974); ≡ *B. maritima* subsp. *marcosii* (O. Bolòs & Vigo) A. Juan & M.B. Crespo in Acta Bot. Malacitana 24: 219 (1999)

Ind. loc.: "Illa de ses Bledes, escletxes de roques. Leg. A. Marcos, 8-VI-1933, BC 87509"

Type material: **BC** (holotype).

Remarks: Plants inhabiting some islets off the coasts of Eivissa and Formentera differ from typical *Beta maritima* L. in several noteworthy vegetative and reproductive features. The taxon could be raised to the specific level when a complete revision of the *B. maritima* group is made. Additionally, the presence of this taxon in similar habitats elsewhere should not be ruled out.

*Suaeda balearica* Gand., Fl. Eur. 19: 206 (1890), nom. inval.

## Cistaceae

**Cistus albidus** var. **anthyllidetorum** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 79 (1974)

Ind. loc.: "Majorica, Cas Català, Serra de Na Burguesa, 100 m alt., exp. S, in Anthyllido-Genisteto lucidae. Leg. A. et O. de Bolòs, 10-VII-1956, BC 137042"

Type material: **BC** (holotype).

Remarks: This taxon should be included within the variability of the polymorphic *Cistus albidus* L. without any taxonomic designation.

*Cistus balearicus* Gand. Fl. Eur. 3: 5 (1884), nom. inval.

*Fumana thymifolia* var. *oppositifolia* P. Palau ex Bonafè, Fl. Mallorca 3: 203 (1979), nom. nud.

×***Halimiocistus balearicus*** Dansereau in Nuovo Giorn. Bot. Ital. 46: 359 (1939)

Ind. loc.: “«Torre den Pau à l'Est de Palma (Mallorca), 28-V-1881» in herb. Burnat”

Type material: **G** (holotype).

Remarks: The plant was described as a hybrid between *Halimium umbellatum* (L.) Spach and *Cistus clusii* Dunal. However, the study of the type material clearly showed that the plant belongs to *C. clusii*. A field exploration of the type locality only revealed *C. clusii* plants. See futher comments under *Halimium umbellatum* var. *bianoris*.

*Halimium bianoris* Sennen in Bol. Soc. Ibér. Ci. Nat. 25: 120 (1926), nom. nud.

***Halimium umbellatum* var. *bianoris*** Sennen in Monde Pl. 3 ser. 77 (192): 39 (1931)

Ind. loc.: “Hab. Baléares: Palma à Portopi. Leg. F. Bianor”

Type material: Not traced at BC.

Remarks: In the Balearic Islands all records concerning *Halimium umbellatum* are misidentifications of *Cistus clusii*.

***Helianthemum origanifolium* f. *cambessedesii*** Font Quer & Rothm. in Cavanillesia 6: 161 (1934); ≡ *H. origanifolium* [subsp. *serrae*] var. *cambessedesii* (Font Quer & Rothmaler) Guinea & Heywood in Guinea in Bol. Inst. Forest. Invest. Madrid 71: 134 (1954)

Ind. loc.: “Pytiusae: Ebuso, versus Cala Llonga, l. Sta. Eulàlia (F. Q.)”

Type material: Ebuso: inter Eivissa et Sta. Eulalia, versus Cala Llonga, 14-V-1919, Font Quer (**BC** 82252). **Lectotype here designated** (single specimen).

Remarks: LÓPEZ GÓNZALEZ (1993) included the Balearic plants known as *Helianthemum origanifolium* (Lam.) Pers. subsp. *serrae* (Cambess.) Gand. under *H. marifolium* (L.) Mill. subsp. *origanifolium* (Lam.) G. López. However, the Balearic specimens are heterogeneous. Plants from Eivissa and Formentera islands differ from the single population known from Mallorca in habitus and leaf shape. Further research of the *Helianthemum marifolium* complex is needed in order to clarify the status of the Balearic populations.

***Helianthemum scopulicolum*** L. Sáez, Rosselló & Alomar in Nordic J. Bot. 19: 414 (1999)

Ind. loc.: “Insulae Balearicae, Majorica, ubi loco dicto Cap Fabioler, Andratx, 31S DD4584, 450 m, in rupestribus calcareis, die 31-V-1996 G. Alomar legit, MA 609763 (Isotypi: BCC; Herb. L. Sáez)”

Type material: **MA** (holotype), **BCC**, **PH- Sáez** (isotypes).

Remarks: Name in current use (SÁEZ & al., 1999), endemic to the island of Mallorca. On morphological grounds this taxon is related to some members of the

*Helianthemum appeninum* (L.) Mill. aggregate, notably *H. appeninum* s.l., *H. asperum* Lag. ex Dunal, and *H. violaceum* (Cav.) Pers.

***Helianthemum serra*** Cambess. in Mém. Mus. Hist. Nat. 14: 216 (1827); ≡ *H. origanifolium* var. *serra* (Cambess.) Nyman, Consp. Fl. Eur. 1: 76 (1878); ≡ *H. canum* [var. *organifolium*] f. *serra* (Cambess.) Grosser in Engl., Pflanzenr. IV, 193: 115 (1903); ≡ *H. dichotomum* var. *serra* (Cambess.) Pau in Butll. Inst. Catalana Hist. Nat. 7: 69 (1907); ≡ *H. origanifolium* subsp. *serra* (Cambess.) Gand., Nov. Consp. Fl. Eur.: 53 (1910); ≡ *H. origanifolium* f. *serra* (Cambess.) Knoche, Fl. Balear. 2: 201 (1922); ≡ *H. origanifolium* [subsp. *genuinum*] var. *serra* (Cambess.) Font Quer & Rothm. in Cavanillesia 6: 162 (1934), comb. superfl.; ≡ *H. origanifolium* subsp. *serra* (Cambess.) Guinea & Heywood in Guinea in Bol. Inst. Forest. Invest. Exp. 71: 134 (1954), comb. superfl.

Ind. loc.: "In arenosis maritimis insulae Majoris inter Palmam et locum dictum Prat"

Type material: Bord de la mer, dans les sabes, en allant de palma au pratt, 30-III-1825, (Cambessedès) (MPU). **Lectotype here designated** (upper left specimen).

Remarks: LÓPEZ GÓNZALEZ (1993) included this taxon in *Helianthemum mari-*  
*folium* (L.) Mill. subsp. *organifolium* (Lam.) G. López. See additional comments  
under *H. origanifolium* f. *cambessedesii* Font Quer & Rothm.

***Helianthemum tuberaria*** var. ***glabrum*** Texidor in Restaurador Farm. 28: 53 (1872)

Ind. loc.: "La α y β en Menorca, cerca de Mahon [sic], de Mayo-Octubre (Casall!)"

Type material: To be searched for at MAF.

Remarks: Probably not worthy of recognition from *Xolana tuberaria* (L.) Gallego & al. (GALLEGÓ, 1993).

*Tuberaria balearica* Gand., Fl. Eur. 3: 43 (1884), nom. inval.

## Colchicaceae

*Colchicum majoricum* Bonner, Plantes Balears, ed. 9: 87 (1994), nom. nud.

*Merendera majorica* Gand., Fl. Eur. 22: 215 (1890), nom. inval.

***Merendera filifolia*** Cambess. in Mém. Mus. Hist. Nat. 14: 319-320 (1827); ≡ *Bulbocodium balearicum* Nyman, Sylloge Fl. Eur.: 379 (1855), nom. illeg.; ≡ *Merendera balearica* (Nyman) Gand., Fl. Eur. 22: 215 (1890), nom. inval.; ≡ *Merendera bulbocodium* subsp. *filifolia* (Cambess.) Malag., Subsp. Var. Geogr.: 26 (1973), comb. inval.

Ind. loc.: "In campis incultis insulae majoris prope Esporlas. Floret Autumno (Trias)"

Type material: Without locality and date (MPU). **Lectotype here designated** (single specimen).

Remarks: Name in current use (VALDÉS, 1980). Described from the Balearic Islands, but reported elsewhere in SW Europe and N Africa.

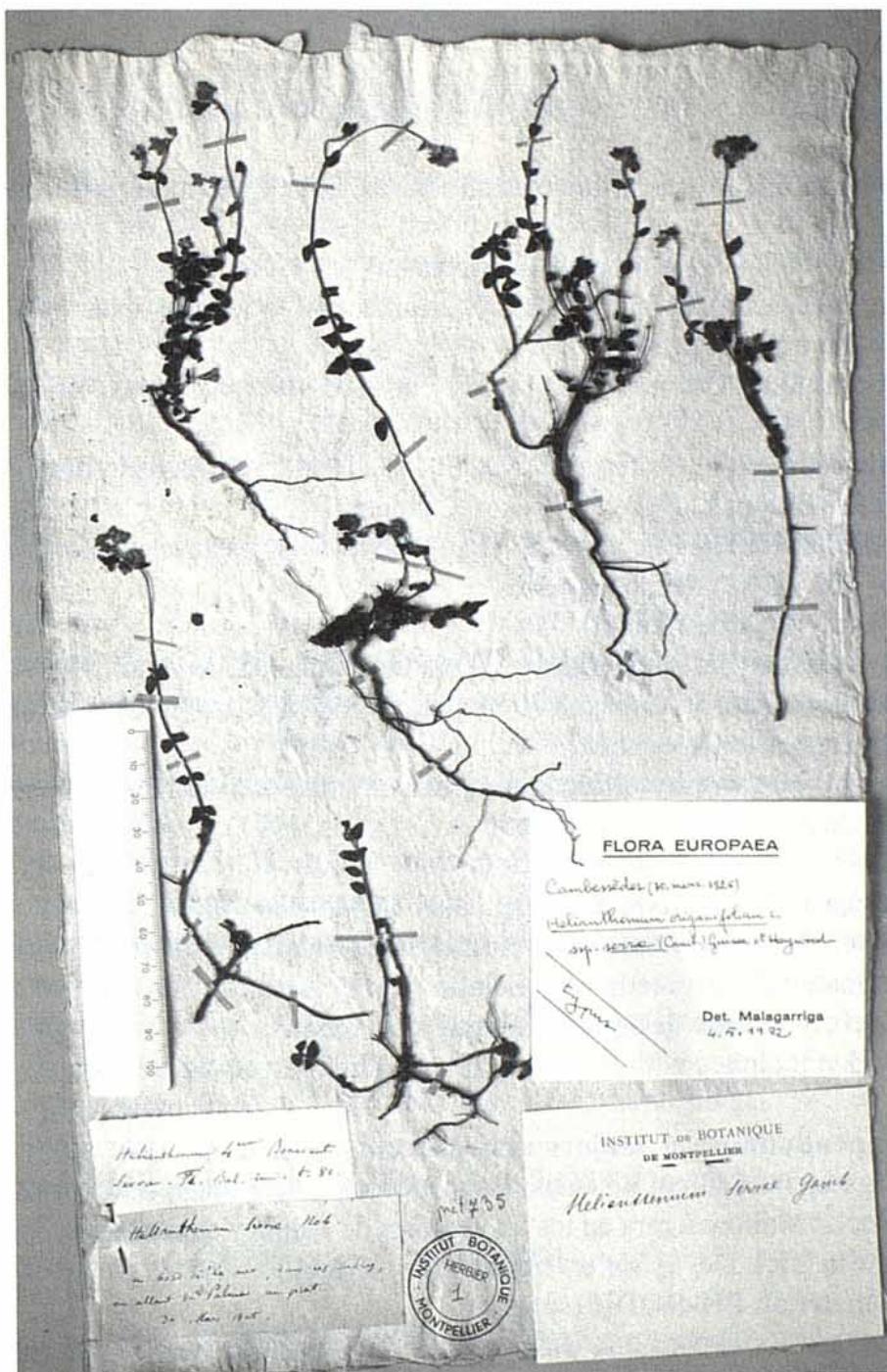


Fig. 4. Lectotype of *Helianthemum serrae* Cambess. (MPU).

## **Convolvulaceae**

*Convolvulus balearicus* Gand., Fl. Eur. 16: 85 (1889), nom. inval.

## Crassulaceae

*Buillardia balearica* Gand., Fl. Eur. 9: 146 (1886), nom. inval.

**Cotyledon umbilicus** var. **minoricensis** Pau ex Font Quer in Bol. Soc. Esp. Hist. Nat. 19: 271 (1919)

Ind. loc.: "Hab. Cala Mezquita, pr. Mahón"

Type material: Mahón, en Cala Mezquita, V-1913, Font Quer (**BC** 22871).

**Lectotype here designated.**

Remarks: Does not merit recognition from *Umbilicus rupestris* (Salisb.) Dandy.

**Sedum morodei** Pau in Brotéria Ci. Nat. 3: 175 (1934);  $\equiv$  *S. dasypodium* var. *moreri* (Pau) O. Bolòs & Vigo, Fl. Països Catalans 1: 295 (1984);  $\equiv$  *S. dasypodium* [subsp. *glanduliferum*] var. *moreri* (Pau) Rivas-Mart., Costa & Loidi in Itinera Geobot. 6: 169 (1992), comb. superfl.

Ind. loc.: "Puig de Randa"

Type material: Baléares: Majorca, Puig de Randa, rochers, collitur, V-VI-1935, E. Moroder & C. Pau, Pl. Espagne-F. Sennen n.º 9959 (**MA** 51343). **Lectotype here designated** (upper left specimen).

Remarks: Not worthy of recognition from *Sedum dasypodium* L. subsp. *glanduliferum* (Guss.) Nyman (CASTROVIEJO & VELAYOS, 1997).

**Sedum ibicense** Pau in Actas Soc. Esp. Hist. Nat. 29: 66 (1900)

Ind. loc.: "Pinares, yendo de la ciudad Santa Eulalia; 30 de Abril"

Type material: In pinetis Sta. Eulalia (Ibiza) Baleares, 30-IV-1899 Pau (**MA** 51858). **Lectotype here designated** (single specimen).

Remarks: Included within *Sedum rubens* L. by CASTROVIEJO & VELAYOS (1997).

**Umbilicus pendulinus** var. **majoricensis** Barceló, Fl. Baleares: 184 (1880);  $\equiv$  *U. vulgaris* [var. *gaditanus*] f. *majoricensis* (Barc.) Knoche, Fl. Balear. 2: 45 (1922)

Ind. loc.: "Mallorca: rara en los alrededores de Palma y de Andraitx; comun [sic] en Valldemosa [sic], Deyá, Sóller, etc. (V[ista]. V[iva].)"

Type material: **PH-RODR** (syntype).

Remarks: CASTROVIEJO & VELAYOS (1997) listed this taxon as a synonym of *Umbilicus gaditanus* Boiss.

**Umbilicus rodriguezii** Gand. in Bull. Soc. Bot. France 47: 133 (1900);  $\equiv$  *U. horizontalis* subsp. *rodriguezii* (Gand.) Gand., Nov. Consp. Fl. Eur.: 194 (1910)

Ind. loc.: "Hab. Tulichant d'Amunt, Gorch Blau et Aumalluch in saxosis et rupibus umbrosis non raro; legi etiam in insula Ibiza supra urbem copiose inter Opuntias."

Type material: To be searched for at LY.

Remarks: Not specifically distinct from *Umbilicus gaditanus* Boiss. (CASTROVIEJO & VELAYOS, 1997). *Umbilicus pendulinus* var. *majoricensis* and *U. rodriguezii* refer to the same entity.

## Cyperaceae

*Aunieria balearica* Gand., Fl. Eur. 24: 35 (1890), nom. inval.

**Carex halleriana** var. **bracteosa** Willk. in Oesterr. Bot. Z. 40: 215 (1890); ≡ *C. halleriana* f. *bracteosa* (Willk.) Knoche, Fl. Balear. 1: 348 (1921)

Ind. loc.: "In insula Balearium minore (in summo cacumine montis Puig de las Fonts radonas [sic] in arenosis humidis, Rodriguez! [sic] d. 2. April 1873"

Type material: The herbarium specimens of this taxon held at COI-Willk. are not concordant with the protologue and could not be used for typification purposes.

Remarks: LUCEÑO (1994) did not recognize this variety as taxonomically distinct from *Carex halleriana* Asso.

*Carex halleriana* var. *bracteosa* J.J. Rodr., Fl. Menorca: 146 (1904), nom. illeg.

**Carex rorulenta** Porta in Nuovo Giorn. Bot. Ital. 19: 321 (1887); ≡ *C. halleriana* subsp. *rorulenta* (Porta) Gand., Nov. Consp. Fl. Eur.: 477 (1910); ≡ *C. halleriana* var. *rorulenta* (Porta) Knoche, Fl. Balear. 1: 348 (1921); ≡ *C. halleriana* subsp. *rorulenta* (Porta) Malag., Subsp. Var. Geogr.: 26-27 (1973), comb. superfl.; ≡ *C. halleriana* subsp. *rorulenta* (Porta) Knoche ex Colom, Biogeografía Baleares ed. 2, 1: 208 (1978), comb. inval.

Ind. loc.: "M[ajorca]. In rupium rimis m. Puig major de Torrella. 24 Jun."

Type material: To be searched for at FI.

Remarks: Name in current use (LUCEÑO, 1994); endemic to the Balearic Islands.

*Cladium balearicum* Gand., Fl. Eur. 24: 181 (1890), nom. inval.

*Cladium orthocladum* Gand., Fl. Eur. 24: 183 (1890), nom. inval.

*Cryptoglochin balearicus* Gand., Fl. Eur. 24: 169 (1890), nom. inval.

*Cyperus balearicus* Gand., Fl. Eur. 24: 194 (1890), nom. inval.

*Eleocharis balearica* Gand., Fl. Eur. 24: 257 (1890), nom. inval.

*Isolepis balearica* Gand., Fl. Eur. 24: 251 (1890), nom. inval.; ≡ *I. saviniana* subsp. *balearica* (Gand.) Gand., Nov. Consp. Fl. Eur.: 473 (1910), nom. inval.

*Protocarex balearica* Gand., Fl. Eur. 24: 35 (1890), nom. inval.

*Pycreus balearicus* Gand., Fl. Eur. 24: 201 (1890), nom. inval.

*Pycreus insulanus* Gand., Fl. Eur. 24: 201 (1890), nom. inval.

*Schoenoplectus majoricus* Gand., Fl. Eur. 24: 236 (1890), nom. inval.

*Scirpus balearicus* Gand., Fl. Eur. 24: 227 (1890), nom. inval.

*Scirpus insulanus* Gand., Fl. Eur. 24: 228 (1890), nom. inval.

*Scirpus holoschoenus* var. *pygmaea* P. Palau in Anales Inst. Bot. Cavanilles 12: 295 (1955), nom. inval.

*Vignea balearica* Gand., Fl. Eur. 24: 165 (1890), nom. inval.

### Dipsacaceae

*Astrocephalus angustatus* Gand., Fl. Eur. 11: 226 (1886), nom. inval.

*Astrocephalus balearicus* Gand., Fl. Eur. 11: 227 (1886), nom. inval.

*Astrocephalus gratus* Gand., Fl. Eur. 11: 226 (1886), nom. inval.

**Cephalaria balearica** Coss. ex Willk. in Linnaea 40: 37 (1876);  $\equiv$  *C. rigida* var. *balearica* (Coss. ex Willk.) Knoche, Fl. Balear. 2: 436 (1922);  $\equiv$  *C. mediterranea* var. *balearica* (Coss. ex Willk.) Szabó in Math. Természettud. Közlem. 38: 152 (1940);  $\equiv$  *C. squamiflora* subsp. *balearica* (Willk.) Greuter in Candollea 22: 236 (1967);  $\equiv$  *C. mediterranea* subsp. *balearica* (Coss. ex Willk.) Malag., Subsp. Var. Geogr.: 14 (1973), comb. inval.;  $\equiv$  *C. rigida* subsp. *balearica* (Coss. ex Willk.) Knoche ex Colom, Biogeografia Baleares ed. 2, 1: 208 (1978), comb. inval.;  $\equiv$  *C. squamiflora* var. *balearica* (Coss. ex Willk.) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 89 (1987)

Ind. loc.: "Mallorca: in fissuris rupium calcarearum praeruptarum septentrionem versus expositarum accesu difficiili in tractu Sierra in regione montana passim (Puig de Torella [sic], ubi hanc plantam detexit cl. Barceló! Barranco de Sóller, in parte superiori, Barceló! Willk.; Puig gross [sic] de Ternellas in consortio Helichrys. Lamarckii, supra Miramar, Willk., Puig de Teix, Barc., Willk.). Habitare videtur ad alt. 5-800 met."»

Type material: Soller, s.d., Barceló (**COI-Willkomm**). Lectotype here designated (left specimen).

Remarks: Name in current use (GREUTER, 1967). As currently circumscribed *Cephalaria squamiflora* subsp. *balearica* is endemic to the Balearic archipelago (Mallorca). Plants from Corsica and Sardinia previously referred to *C. squamiflora* subsp. *balearica* should be included under *C. squamiflora* (Sieber) Greuter subsp. *mediterranea* (Viv.) Pignatti (PIGNATTI, 1977; 1982).

**Cephalaria squamiflora** [subsp. *balearica*] var. **ebositana** O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 89 (1987);  $\equiv$  *C. squamiflora* subsp. *ebositana* (O. Bolòs & Vigo) O. Bolòs in Butll. Inst. Catalana Hist. Nat. 59: 145 (1991);  $\equiv$  *C. squamiflora* subsp. *ebositana* (O. Bolòs & Vigo) Romo, Fl. Silvestres Baleares: 289 (1994), comb. superfl.

Ind. loc.: "Eivissa, Cap Jueu, penya-segat orientat al nord. Leg. M.A. Cardona & E. Velasco, 8-VII-1977 (BC 529369)"

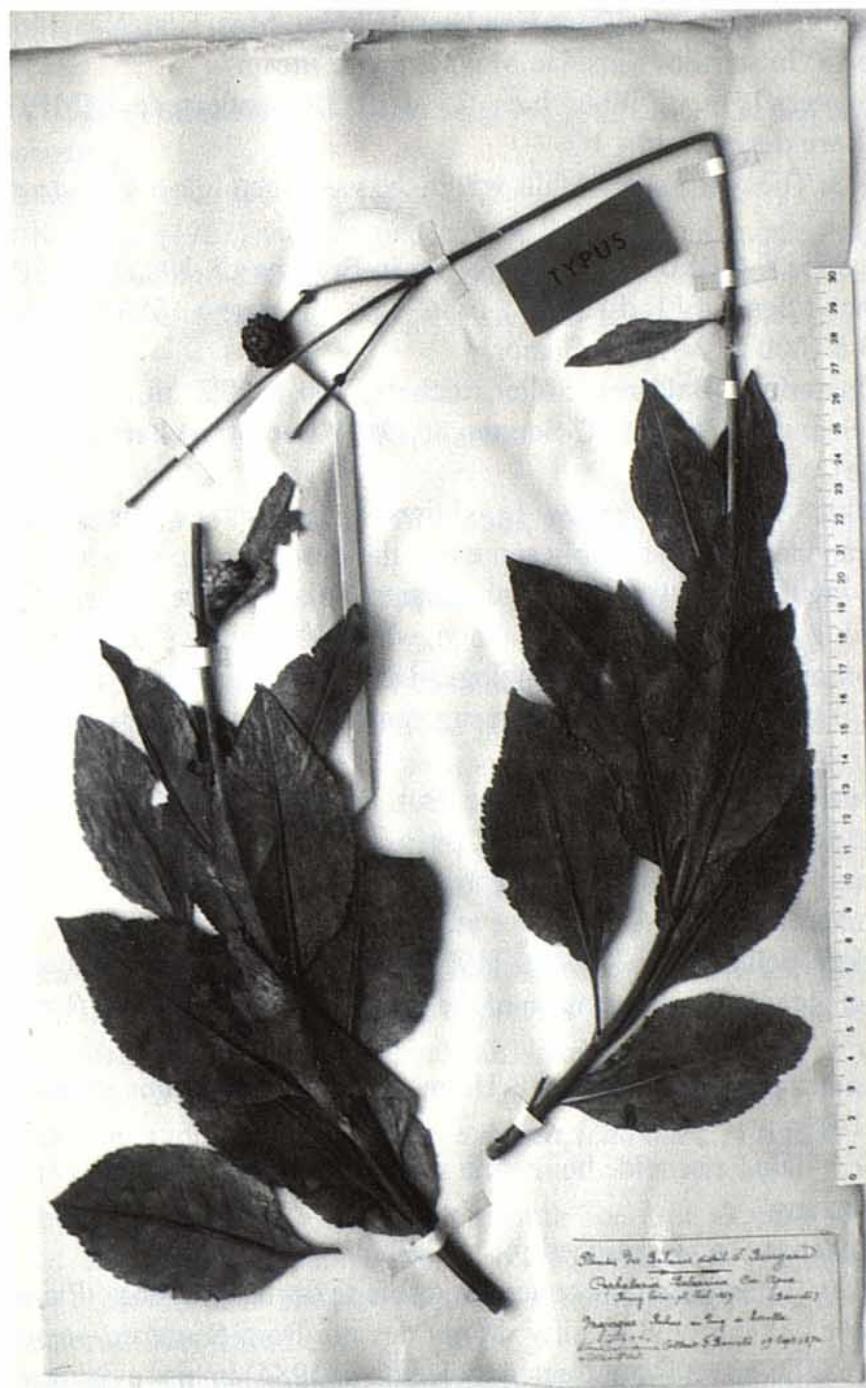


Fig. 5. Lectotype of *Cephalaria balearica* Coss. ex Willk.

Type material: BC (holotype).

Remarks: Mus & al. (1990) identified the plant from Eivissa, also referred as *C. squamiflora* subsp. *balearica*, with *C. squamiflora* subsp. *mediterranea*, previously known only from Sardinia.

*Knautia integrifolia* subsp. *amplexicaulis* Knoche ex Colom, Biogeografia Baleares ed. 2, 1: 198 (1978), nom. inval.

**Scabiosa columbaria** var. **triflora** Cambess. in Mém. Mus. Hist. Nat. 14: 261 (1827)

Ind. loc.: "In sterilibus insulae Majoris prope Incam"

Type material: In sterilibus Inca, 25-V-1825 (Cambessedès) (**MPU-Knoche**).

**Lectotype here designated.**

Remarks: The type material falls within the variation of *Scabiosa atropurpurea* L.

**Scabiosa cretica** f. **balearica** Sennen & Pau in Brotéria Ci. Nat. 3: 59 (1934)

Ind. loc.: "Sennen Fl. d'Esp. n.º 1086" [Pl. d'Espagne 1086 "Baléares: Soller, rochers 200 à 1000 m, V-1910, Bianor]

Type material: "Baléares, Sóller, rochers, 200 à 1000 m, V-910, Bianor, Pl. Espagne-F. Sennen n.º 1086 (**BC-Sennen** 852919). **Lectotype here designated; MA** (isolectotype).

Remarks: *Scabiosa cretica* L. shows a fragmented distribution on the Mediterranean basin, and probably some populations have experienced a genetic isolation, allowing the persistence of local variants. This could be the case for the populations growing in the Balearic archipelago, where VERLAQUE (1986) reported karyological polymorphisms. Fine morphological comparisons should be undertaken to substantiate if these chromosomal rearrangements are related to fixed morphotypes.

**Scabiosa fruticulosa** Gand. in Bull. Soc. Bot. France 47: 136 (1900); ≡ *S. maritima* subsp. *fruticulosa* (Gand.) Gand., Nov. Consp. Fl. Eur.: 237 (1910)

Ind. loc.: "Hab. Fornalutx, in olivetis passim"

Type material: To be searched for at LY.

Remarks: Included by KNOCHE (1922) within *Scabiosa atropurpurea* L. This taxon was not included in the revision of the Spanish taxa of the genus (DEVESA, 1984).

**Scabiosa maritima** rasse **balearica** F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 241 (1914)

Ind. loc.: "Die Felseheide bei Palma zeigt auf rotbraunem Boden etwa folgende Zusammensetzung"

Type material: To be searched for at GAT.

Remarks: No information concerning this taxon is available. Plants from the neighbourhoods of the type locality do not deviate from *Scabiosa atropurpurea* L. in any feature. The taxon is not treated by DEVESA (1984) in his revision of the genus in Spain.

*Scabiosa maritima* var. *integrifolia* Porta in Nuovo Giorn. Bot. Ital. 19: 307 (1887), nom. nud.

**Scabiosa maritima** var. **latifolia** Porta in Nuovo Giorn. Bot. Ital. 19: 308 (1887)

Ind. loc.: "Min[orca]. In glareosis maritimis inter Fornells, et Cabo Cavalleria. 8 Mai."

Type material: To be searched for at FI.

Remarks: Not treated by DEVESA (1984) in his taxonomic revision of the genus in Spain. Probably not deserving taxonomic recognition from *Scabiosa atropurpurea* L.

**Scabiosa stellata** subsp. **insularis** F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 241 (1914)

Ind. loc.: "Die Felseheide bei Palma zeigt auf rotbraunem Boden etwa folgende Zusammensetzung"

Type material: To be searched for at GAT.

Remarks: KNOCHE (1922) did not find any discriminant character from *Scabiosa stellata* L., and considered it to be a mere variant from dry soils. Also, DEVESA (1984) did not mention any singular feature from *S. stellata* plants collected at Mallorca.

### Ericaceae

*Arsace balearica* Gand., Fl. Eur. 15: 176 (1888), nom. inval.

*Arsace proxima* Gand., Fl. Eur. 15: 174 (1888), nom. inval.

**Erica arborea** f. **albida** L. Chodat in Bull. Soc. Bot. Genève 15: 237 (1924)

Ind. loc.: "Il existe cependant, entre le port de Valdemosa [sic] et la Estaca des maquis denses et élevés, de même plus haut dans la montagne au Nord de Valdemosa."

Type material: Not traced at G.

Remarks: All variants of *Erica arborea* L. described from a single locality are mere polymorphisms devoid of any taxonomic signification (BAYER, 1993).

**Erica arborea** f. **chloranta** L. Chodat in Bull. Soc. Bot. Genève 15: 237-238 (1924)

Ind. loc.: "Il existe cependant, entre le port de Valdemosa [sic] et la Estaca des maquis denses et élevés, de même plus haut dans la montagne au Nord de Valdemosa."

Type material: Not traced at G.

Remarks: see comments under *Erica arborea* f. *albida* L. Chodat

**Erica arborea** f. **erythrostigma** L. Chodat in Bull. Soc. Bot. Genève 15: 238 (1924)

Ind. loc.: "Il existe cependant, entre le port de Valdemosa [sic] et la Estaca des maquis denses et élevés, de même plus haut dans la montagne au Nord de Valdemosa."

Type material: Not traced at G.

Remarks: see comments under *Erica arborea* f. *albida* L. Chodat

**Erica arborea** f. **saccata** L. Chodat in Bull. Soc. Bot. Genève 15: 238 (1924)

Ind. loc.: "Il existe cependant, entre le port de Valdemosa [sic] et la Estaca des maquis denses et élevés, de même plus haut dans la montagne au Nord de Valdemosa."

Type material: Not traced at G

Remarks: see comments under *Erica arborea* f. *albida* L. Chodat

*Gypsocallis balearica* Gand., Fl. Eur. 15: 179 (1888), nom. inval.

*Gypsocallis dasyantha* Gand., Fl. Eur. 15: 178 (1888), nom. inval.

## Euphorbiaceae

*Euphorbia bianorii* Sennen ex Bianor in Butll. Inst. Catalana Hist. Nat 17: 142 (1917), nom. nud.

*Euphorbia bianorii* var. *simplex* Bianor in Butll. Inst. Catalana Hist. Nat 17: 142 (1917), nom. nud.

*Euphorbia bianorii* var. *ramosa* Bianor in Butll. Inst. Catalana Hist. Nat 17: 142 (1917), nom. nud.

*Euphorbia characias* f. *maritima* P. Monts. in Collect. Bot. (Barcelona) 3: 413 (1953), nom. inval.

***Euphorbia characias* f. *maritima*** P. Monts. in O. Bolòs, Molinier & P. Monts. in Acta Geobot. Barcinon. 5: 21 (1970)

Ind. loc.: "Illa d'En Colom, in hb. P. Montserrat, BCF"

Type material: To be searched for at JACA; BCF (isotype).

Remarks: Subsumed by BENEDÍ & al. (1997) under *Euphorbia characias* L.

***Euphorbia dendroides* f. *angustifolia*** Marcos in Cavanillesia 8: 31 (1936)

Ind. loc.: "Garrigues, ..., en els vessants d'algún caló de Cala Ganduf; Serra de Sa Pleta d'Es Castell, 6-VI; Sa Punta d'Es Castell; Illot de L'Imperial; Na Redona; Na Pobra"

Type material: Serra de sa Pleta des Castell, 6-VI-1933, A. Marcos (BC 87372).

**Lectotype here designated** (single specimen).

Remarks: According to BENEDÍ & al. (1997) this taxon should be adscribed to typical *Euphorbia dendroides* L.

***Euphorbia dendroides* var. *longeradiata*** Sennen, Diagn. Nouv.: 175 (1936); ≡ *E. dendroides* f. *longeradiata* (Sennen) Sennen, Diagn. Nouv.: 175 (1936)

Ind. loc.: "Hab.- Baléares: Lluch, escarpements calcaires, 600 m"

Type material: Baléares: Lluch, escarpaments calc., 600 m, 9-IV-1933, F. Sennen, Pl. Espagne-F. Sennen 1933 n.º 8625 (BC 82438) **Lectotype here designated** (single specimen). Isolectotype in BC-Sennen.

Remarks: According to BENEDÍ & al. (1997) this taxon should be adscribed to typical *Euphorbia dendroides* L.

***Euphorbia flavo-purpurea*** Willk. in Oesterr. Bot. Z. 25: 112 (1875); in Linnaea 40: 106 (1876); ≡ *E. platyphyllos* subsp. *flavo-purpurea* (Willk.) Gand., Nov. Conspl. Fl. Eur.: 414 (1910); ≡ *E. platyphyllos* var. *flavo purpurea* (Willk.) Benedí, Molero, Simon Pall. & Vicens In Castroviejo & al. (eds.) Fl. iberica 8: 229 (1997)

Ind. loc.: "Menorca: ad fossas in solo pingui in ditione oppidi Alayor versus oram insulae occidentalem, die 3. April. c. flor. et fruct. mat."

Type material: Menorca: ad fossas in solo pingui in ditione la Canasia. 3-IV-1873, Willkomm, Herb. balear. n. 145. (**COI-Willkomm**). **Lectotype here designated** (upper specimen).

Remarks: According to BENEDÍ & al. (1997) *Euphorbia flavo-purpurea* should be included under the synonymy of *E. hirsuta* L.

**Euphorbia fontqueriana** Greuter in Candollea 20: 172 (1965)

Ind. loc.: "In glareosis saxosisque calcareis montium septemtrionalium balearum insulae majoris ad altitudinem 1000-1300m."

Type material: **G** (holotype)

Remarks: Name in current use (BENEDÍ & al., 1997). *Euphorbia fontqueriana* and *E. myrsinifolia* subsp. *litardierei* refer to the same taxon.

**Euphorbia gayii** var. **balearica** Willk., Ill. Fl. Hispan. 2: 152, tab. 182 A (1892); ≡ *E. maresii* var. *balearica* (Willk.) Knoche ex Bianor in Butll. Inst. Catalana Hist. Nat 17: 140 (1917); ≡ *E. maresii* var. *balearica* (Willk.) Knoche, Fl. Balear. 2: 162 (1922), comb. superfl.; ≡ *E. maresii* subsp. *balearica* (Willk.) Malag., Subsp. Var. Geogr.: 5 (1973), comb. inval.; ≡ *E. maresii* subsp. *balearica* (Willk.) Knoche ex Colom, Biogeografía Baleares ed. 2, 1: 209 (1978), comb. inval.; ≡ *E. maresii* subsp. *balearica* (Willk.) Malag. ex Molero, Mus, Rosselló & Vallès-Xirau in Acta Bot. Gallica 140: 78 (1993); ≡ *E. balearica* (Willk.) Romo, Fl. Silvestres Baleares: 205 (1994)

Ind. loc.: "Hab. in insula balearum majore, ubi in rupium fissuris regionis subalpinae hinc inde crescit (Puig Mayor de Torella [sic] et Puig Mayor de Masanella [sic] ad alt. 1000-1300 m., PORTA, RIGO!)"

Type material: **BM** (lectotype; MOLERO & al., 1993: 78).

Remarks: Name in current use (MOLERO & al., 1993; BENEDÍ & al., 1997).

**Euphorbia maresii** Knoche, Fl. Balear. 2: 161 (1922)

Ind. loc.: "Habitus in insula Mayore ubi in rupium cretacearum fisurris (sic) 300 (?) metros (sic) in via Talaya Veya (Atalaya Freda) Col. Mar. et V. 1852, et Knoche"

Type material: **MPU-Knoche** (lectotype; MOLERO & al., 1993: 74).

Remarks: Name in current use (MOLERO & al., 1993; BENEDÍ & al., 1997).

**Euphorbia maresii** var. **minoricensis** Knoche, Fl. Balear. 2: 163 (1922); ≡ *E. maresii* subsp. *minoricensis* (Knoche) Colom, Biogeografía Baleares ed. 2, 1: 181 (1978), comb. inval.; ≡ *E. minoricensis* (Knoche) Colom, Biogeografía Baleares ed. 2, 1: 226 (1978), comb. inval.

Ind. loc.: "Barranco Fererias [sic]: (5E) in insula Balearum Menore [sic]"

Type material: **BM** (lectotype; MOLERO & al., 1993: 76).

Remarks: Included by MOLERO & al. (1993) within the variation of *Euphorbia maresii* Knoche subsp. *maresii*.

**Euphorbia margalidiana** Kuhbier ex Lewej. ex Kuhbier in Veröff. Überseemus. Bremen, Reihe A, 5: 25 (1978); ≡ *E. squamigera* subsp. *margalidiana* (Kuhbier ex Lewej. ex Kuhbier) O. Bolòs & Vigo, Fl. Països Catalans 2: 579-580 (1990)

Ind. loc.: "Holotypus: "in BREM; leg. H. KUHBIER, 19.4.1976, No. 2835, Insula "Ses Margalides" (prope Ibiza, Baleares) qua causa nomen elexi."

Type material: BREM (holotype); GOET, M, SEV (isotypes).

Remarks: Name in current use (BENEDÍ & al., 1997).

**Euphorbia medicaginea f. balearica** Sennen, Diagn. Nouv.: 175 (1936); ≡ E. medicaginea var. balearica (Sennen) Sennen, Diagn. Nouv.: 175 (1936)

Ind. loc.: "Hab.- Baléares: Marratxi, à S. Marcial couteaux en friche"

Type material: Baléares: Marratxí, à S. Marcial, coteaux, 8-IV-1933, F. Sennen, Pl. Espagne-F. Sennen 1933 n.º 8626 (**BC-Sennen 836579**). **Lectotype here designated** (single specimen). Isolectotype in BC 82439.

Remarks: According to BENEDÍ & al. (1997) this taxon is not worthy of recognition from *Euphorbia medicaginea* Boiss.

**Euphorbia myrsinites** subsp. **litardierei** Font Quer & Garcias Font in Garcias Font in Butll. Inst. Catalana Hist. Nat. 37: 55 (1949); ≡ E. litardierei (Font Quer & Garcías Font) Garcías Font in Butll. Inst. Catalana Hist. Nat. 37: 57 (1949)

Ind. loc.: "Hab. in rupestribus calcareis l. Coma dels Prats de Maçanella, ad 1.170 m. alt."

Type material: Coma dels prats de Massanella entre la macada del cim, 4-VI-1934, Garcias Font (**BC 78076**). **Lectotype here designated** (bottom specimen).

Remarks: This name is a taxonomic synonym of *Euphorbia fontqueriana* Greuter.

**Euphorbia rivasii** P. Palau in Anales Inst. Bot. Cavanilles 11: 510 (1954)

Ind. loc.: "Se halla a mano izquierda de la carretera militar del Pinar, a cosa de 1-1, 5 Hm. antes de llegar al pequeño tunel"

Type material: **PH-ORELL** (lectotype; MOLERO & al., 1993: 76)

Remarks: Not recognizable as taxonomically distinct from *Euphorbia maresii* subsp. *maresii* (MOLERO & al., 1993).

**Euphorbia segetalis** var. **truncata** Willk. in Linnaea 40: 109 (1875); ≡ E. segetalis f. truncata (Willk.) Knoche, Fl. Balear. 2: 159 (1922)

Ind. loc.: "Menorca: ad muros prope Mahon [sic], d. 29. Mart. c. flor. et fr."

Type material: Menorca: in ruderatis ad muros pr. Mahon frequ., 29-III-1873, Willkomm, Herb. balear. n. 49. (**COI-Willkomm**). **Lectotype here designated** (single specimen).

Remarks: According to BENEDÍ & al. (1997) this taxon should be adscribed to typical *Euphorbia segetalis* L.

*Euphorbia theodosia* Sennen, Campagn. Bot.: 117 (1936), nom. nud.

**Euphorbia triangularis** R. Hernandez in Ann. Cliniques Montpellier 42: 82 (1817) [n.v.]

Ind. loc.: "Minorque"

Type material: Unknown, probably lost. No plants belonging to this taxon were available to RODRIGUEZ (1904).

Remarks: No information concerning this taxon is available.

*Esula balearica* Gand., Fl. Eur. 20: 118 (1890), nom. inval.

*Esula majorica* Gand., Fl. Eur. 20: 116 (1890), nom. inval.

*Esula minoricensis* Gand., Fl. Eur. 20: 125 (1890), nom. inval.

*Galarrhoeus balearicus* Gand., Fl. Eur. 20: 85 (1890), nom. inval.

*Galarrhoeus latiusculus* Gand., Fl. Eur. 20: 95 (1890), nom. inval.

*Galarrhoeus majoricus* Gand., Fl. Eur. 20: 85 (1890), nom. inval.

*Galarrhoeus minoricensis* Gand., Fl. Eur. 20: 96 (1890), nom. inval.

*Mercurialis balearica* Gand., Fl. Eur. 20: 154 (1890), nom. inval.

*Pachyclada balearica* Gand., Fl. Eur. 20: 85 (1890), nom. inval.

## Fabaceae

*Amoria balearica* Gand., Fl. Eur. 7: 182 (1885), nom. inval.

*Anagyris balearica* Gand., Fl. Eur. 6: 5 (1885), nom. inval.

*Anagyris glareosa* Gand., Fl. Eur. 6: 5 (1885), nom. inval.

*Anagyris insulana* Gand., Fl. Eur. 6: 6 (1885), nom. inval.

**Anthyllis balearica** Coss. ex Marès & Vigin., Cat. Pl. Vasc. Baléares: 75 (1880); ≡ *A. rubra* subsp. *balearica* (Coss.) Gand., Nov. Consp. Fl. Eur.: 109 (1910); ≡ *A. vulneraria* var. *balearica* (Coss. ex Marès & Vigin.) Knoche, Fl. Balear. 2: 92 (1922); ≡ *A. vulneraria* subsp. *balearica* (Coss. ex Marès & Vigin.) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 71 (1974)

Ind. loc.: “Rochers du puig de Torellas [sic] (Bourgeau, Exsicc)”

Type material: Not traced at MPU and COI-Willk. Neither was any type material seen by Benedí (pers. com.) when dealing with the Iberian revision of *Anthyllis*.

Remarks: Name in current use. *Anthyllis balearica* Coss. ex Marès & Vigin. and *A. vulneraria* var. *rosea* refer to the same entity.

**Anthyllis cytisoides** var. **sallustiani** Sennen, Pl. Espagne-F. Sennen 1933 n.º 8617 (1933), in sched.; Diagn. Nouv.: 174 (1936)

Ind. loc.: “Hab.- Baléares: Palma à Cas Català, garrigues”

Type material: Baléares: Palma à Cas Català, garrigues, 12-IV-1933, Sennen, Pl. Espagne-F. Sennen 1933 n.º 8617 (**BC** 82422). **Lectotype here designated** (right specimen).

Remarks: Not recognisable from typical *Anthyllis cytisoides* L.

**Anthyllis fulgurans** Porta in Nuovo Giorn. Bot. Ital. 19: 303 (1887);  $\equiv$  A. hispida subsp. *fulgurans* (Porta) Gand., Nov. Consp. Fl. Eur.: 109 (1910);  $\equiv$  *Dorycnium fulgurans* (Porta) Lassen in Bot. Not. 132: 357 (1979);  $\equiv$  D. pentaphyllum subsp. *fulgurans* (Porta) Cardona, L. Llorens & Sierra in Collect. Bot. (Barcelona) 14: 134 (1983)

Ind. loc.: "Min[orca]. In pascuis maritimis petroso-schistosis prope Fornells. Jun. Jul."

Type material: **B** (isotype), LD (isotype), **FI** (isotype).

Remarks: Name in current use (CARDONA & al., 1983).

**Anthyllis fulgurans** var. **efulgurata** P. Palau in Anales Inst. Bot. Cavanilles 11: 486 (1954);  $\equiv$  A. *fulgurans* subsp. *efulgurata* (P. Palau) Colom, Biogeografía Baleares ed. 2, 1: 199 (1978), comb. inval.

Ind. loc.: "Hallada sólo en Cabrera, rareando en el camino del Niu del Aguila"

Type material: **BC** (holotype; cf. PALAU, 1976)

Remarks: This taxon does not show any relevant morphological feature supporting its recognition from *Dorycnium fulgurans*.

**Anthyllis hermanniae** var. **hystrix** Willk. ex Barceló, Fl. Baleares: 112 (1880);  $\equiv$  A. *hermanniae* subsp. *hystrix* (Willk. ex Barceló) O. Bolòs, Molinier & P. Monts. in Acta Geobot. Barcinon. 5: 102 (1970), comb. inval.;  $\equiv$  A. *hermanniae* subsp. *hystrix* (Willk. ex Barceló) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 71 (1974);  $\equiv$  A. *hystrix* (Willk. ex Barceló) Cardona, Contandr. & Sierra in Taxon 32: 324 (1983)

Ind. loc.: "Menorca: c. de Mahon [sic], (Ant. Rich. ex Lamk.), monte Toro, (Salv. Pourr. ex Colm.), Mongofre-nou, S. Cristóbal, Sta. Ponsa, la Anclusa, (Rodr.) (V[ista]. S[eca].)"

Type material: **BC-Salvador** (lectotype; CARDONA & al., 1986: 22); **COI** (syntype).

Remarks: Name in current use (CARDONA & al., 1986); endemic to the island of Minorca. *Anthyllis hystrix* is closely related to A. *hermanniae* L., but differs mainly in the ploidy level and some quantitative vegetative and floral features (CARDONA & al., 1986). The origin of its polyploidy is unknown.

**Anthyllis insularum** Rothm. in Repert. Spec. Nov. Regni Veg. 50: 239 (1941);  $\equiv$  A. *vulneraria* [subsp. *font-queri*] var. *insularum* (Rothm.) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 71 (1974);  $\equiv$  A. *vulneraria* subsp. *insularum* (Rothm.) Romo, Fl. Silvestres Baleares: 153 (1994)

Ind. loc.: "Hab. in rupestribus calcareis [...] Cabo Vermey (Willk., Typus B)"

Type material: B (holotype); non-duplicated sheets were found at COI-Willk.

Remarks: According to GREUTER & al. (1989) and BENEDÍ (1998) this taxon should be adscribed to A. *vulneraria* L. subsp. *gandogerii* (Sagorski) W. Becker ex Maire.

**Anthyllis vulneraria** [var. *rubrifolia*] f. **insularis** L. Chodat in Bull. Soc. Bot. Genève 15: 214 (1924)

Ind. loc.: "On trouve cette forme dans les endroits rocaillieux de la côte Nord, dans les environs d'Arta [sic], le long des chemins"

Type material: Arta (Majorque), s.d., R. Chodat & al. 255 (**G**). **Lectotype here designated** (upper specimen).

Remarks: This form is a taxonomic synonym of *Anthyllis vulneraria* L. subsp. *gandogeri* (Sagorski) W. Becker ex Maire.

***Anthyllis vulneraria* var. *rosea*** Willk. in Oesterr. Bot. Z. 25: 112 (1875); ≡ *A. rosea* (Willk.) Willk. in Willk. & Lange, Prodr. Fl. Hispan. 3: 332 (1877); ≡ *A. rosea* (Willk.) Willk. ex J.J. Rodr. in Anales Soc. Esp. Hist. Nat. 8: 53 (1879), comb. superfl.; ≡ *A. rosea* (Willk.) Marès & Vigin., Cat. Pl. Vasc. Baléares: 331 (1880), comb. superfl.; ≡ *A. rosea* (Willk.) Porta in Nuovo Giorn. Bot. Ital. 19: 304 (1887), comb. superfl.; ≡ *A. rubra* subsp. *rosea* (Willk.) Gand., Nov. Consp. Fl. Eur.: 109 (1910)

Ind. loc.: "Mallorca: in fissuris rupium praeruptarum pr. Sóller ad alt. c. 800 m. d.5. maji c. flor."

Type material: Not traced at COI-Willk.

Remarks: *Anthyllis rosea* is a heterotypic synonym of *A. balearica* Coss. ex Marès & Vigin.

***Anthyllis vulneraria* [var. *ruberifolia*] f. *subunifoliata*** L. Chodat in Bull. Soc. Bot. Genève 15: 214 (1924); ≡ *A. vulneraria* [subsp. *font-queri*] var. *subunifoliata* (L. Chodat) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 71 (1974); ≡ *A. vulneraria* [subsp. *font-queri*] subvar. *subunifoliata* (L. Chodat) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 71 (1974)

Ind. loc.: "Nous avons récolté cette jolie forme naine sur les rochers maritimes de Cas Catala [sic], le jour de Pâques, mais nous en l'avons pas retrouvée depuis lors"

Type material: Cas Catalan, III-1913, R. Chodat (**G**). **Lectotype here designated** (upper left specimen).

Remarks: This form is a taxonomic synonym of *Anthyllis vulneraria* L. subsp. *gandogeri* (Sagorski) W. Becker ex Maire.

*Arthrolobium balearicum* Gand., Fl. Eur. 6: 23 (1885), nom. inval.

*Arthrolobium mediterraneum* Gand., Fl. Eur. 6: 23 (1885), nom. inval.

*Arthrolobium minus* Gand., Fl. Eur. 6: 23 (1885), nom. inval.

***Astragalus balearicus*** Chater in Feddes Repert. Spec. Nov. Regni Veg. 79: 51 (1968); ≡ *Tragacantha balearica* (Chater) Romo, Fl. Silvestres Baleares: 140 (1994)

Ind. loc.: "Majorque: Pentes arides vers le sommet du Puig Major. 19 Juin"

Type material: K (holotype); MA (isotype), G (isotype).

Remarks: Name in current use (GREUTER & al., 1989); endemic to the Eastern Balearics. The name *Astragalus poterium* Vahl was thought for a long time to be the correct name for the Balearic plant, but CHATER (1968) showed that this name should be applied to a non-Balearic taxon.

*Bonjeania balearica* Gand., Fl. Eur. 6: 68 (1885), nom. inval.; ≡ *B. hirsuta* subsp. *balearica* (Gand.) Gand., Nov. Conspl. Fl. Eur.: 118 (1910), nom. inval.

*Bonjeania subglabrata* Gand., Fl. Eur. 6: 68 (1885), nom. inval.

**Calycotome spinosa** [raza villosa] var. **fontqueri** Pau in Font Quer in Bol. Soc. Esp. Hist. Nat. 19: 270 (1919)

Ind. loc.: "Hab. Binisarmenya."

Type material: Binisarmenya, pr. Mahó, estiu 1913, Font Quer 553 (**BC** 14276).

**Lectotype here designated.**

Remarks: GARCÍA MURILLO (1999) identified this plant with *Calicotome infesta* (C. Presl) Guss. The type material consists of only a few pods and seeds, but nevertheless it allows a safe identification with the latter species.

**Calycotome spinosa** var. **leptocarpa** Pau in Brotéria Ci. Nat. 3: 57 (1934)

Ind. loc.: "Rodriguez! de Son Blanch."

Type material: Son Blanc nou (Menorca), 19-VI-1872, Rodríguez Femenias (**MA** 59728). **Lectotype here designated** (single specimen).

Remarks: According to GARCÍA MURILLO (1999) this plant cannot be discriminated from *Calicotome spinosa* (L.) Link.

**Calycotome spinosa** var. **ponsgueraui** Pau in Bull. Acad. Int. Géogr. Bot. 6(206): 75 (1906); ≡ *C. infesta* var. *ponsgueraui* (Pau) Pau in Butll. Inst. Catalana Hist. Nat. 14: 138 (1914); ≡ *C. spinosa* f. *ponsgueraui* (Pau) Knoche, Fl. Balear. 2: 58 (1922)

Ind. loc.: "Alcoitx (Mercadal) insulae Minoricensis: 16.V. 1900. Pons Guerau"

Type material: Alcoitx (Mercadal), 16-V-1900, Pons Guerau (**MA** 59731).

**Lectotype here designated** (single specimen).

Remarks: According to GARCÍA MURILLO (1999) this plant belongs to *Calicotome infesta* (C. Presl) Guss.

*Clymenum balearicum* Gand., Fl. Eur. 6: 192 (1886), nom. inval.

*Clymenum insulare* Gand., Fl. Eur. 6: 192 (1886), nom. inval.

*Clymenum obtusifolium* Gand., Fl. Eur. 6: 192 (1886), nom. inval.

*Coelorytis subintegra* Gand., Fl. Eur. 6: 299 (1886), nom. inval.

*Corniola balearica* Gand., Fl. Eur. 6: 141 (1885), nom. inval.

*Coronilla balearica* Gand., Fl. Eur. 6: 76 (1885), nom. inval.

*Coronilla divergens* Gand., Fl. Eur. 6: 78 (1885), nom. inval.

**Coronilla repanda** var. **montserratii** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 71 (1974); ≡ *C. repanda* subsp. *montserratii* (O. Bolòs & Vigo) Romo, Fl. Silvestres Baleares: 154 (1994)

Ind. loc.: "Hab. in sabulosis maritimis l. Cala Macarella, pr. Ciutadella (Minorica) ubi legerunt P. Montserrat atque A. et O. Bolòs 19-V-1959. Typus in BC."

Type material: **BC** (holotype).

Remarks: The Balearic plants do not show any diagnostic features which support their distinction as a separate taxon from typical *Coronilla repanda* (Poir.) Guss.

*Cracca balearica* Gand., Fl. Eur. 7: 268 (1885), nom. inval.

*Dorycnium balearicum* Gand., Fl. Eur. 6: 113 (1885), nom. inval.; ≡ *D. suffruticosum* subsp. *balearicum* (Gand.) Gand., Nov. Conspl. Fl. Eur.: 118 (1910), nom. inval.

**Dorycnium hirsutum** var. **ciliatum** Rikli in Bot. Jahrb. Syst. 31: 340 (1901)

Ind. loc.: "...im südlichen Teil des Mittelmeergebietes: südliches Griechenland, Südspanien, Balearen."

Type material: Not traced.

Remarks: No information concerning this taxon has been available to us, but the name is not in current use. A syntype from the Balearic Islands ("Insula Minorca, Balearen 16.IV.1885 lg. RIGO et PORTA") was mentioned in the protologue, but otherwise the plant was thought to be widely distributed.

**Ervum gracile** var. **rosea** Willk., Spanien Balearen: 311 (1876)

Ind. loc.: «Albuferetaniederung und des Strandes von Pollenza [...] und eine hübsche Form von *Ervum gracile* DC. mit rosenrothen Blumen (unter Binsen und Salicornien)»

Type material: Not traced at COI-Willk.

Remarks: No information concerning this taxon is available. Without the study of the type material it is not possible to suggest to which species of the *Vicia tetrasperma* L. complex it may belong.

*Galeania balearica* Gand., Fl. Eur. 7: 155 (1885), nom. inval.

**Genista acanthoclada** var. **fasciculata** Knoche, Fl. Balear. 2: 59 (1922); ≡ *G. acanthoclada* subsp. *fasciculata* (Knoche) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 68 (1974); ≡ *G. valdes-bermejoi* Talavera & L. Sáez in Anales Jard. Bot. Madrid 57: 208 (1999)

Ind. loc.: "Majorque: «Es coll des Coulombs dins el Tossalsverts d'Aumalluch. 19 Juin, environ 600 mètres» (Mar. et V.)"

Type material: **MPU-Knoche** (lectotype; TALAVERA & SALGUEIRO, 1999: 208)

Remarks: Name in current use (TALAVERA, 1999); endemic to the Eastern Balearics (Mallorca). See VALSECCHI (1975) for a comparison with related Mediterranean taxa. *Genista valdes-bermejoi* has long been known under the invalid name *G. acanthoclada* var. *balearica* (Willk. ex Porta) Porta.

*Genista balearica* Willk. ex Porta in Nuovo Giorn. Bot. Ital. 19: 302 (1887), nom. nud.; ≡ *G. acanthoclada* var. *balearica* (Willk. ex Porta) Porta in Nuovo Giorn. Bot.



Fig. 6. Lectotype of *Genista acanthoclada* var. *fasciculata* Knoche (MPU-Knoche).

Ital. 19: 302 (1887), nom. inval.;  $\equiv$  *G. acanthoclada* subsp. *balearica* (Porta & Rigo) Willk. ex Colom, Biogeograf a Baleares ed. 2, 1: 193 (1978), nom. inval.

*Genista cinerea* f. *grandiflora* Willk. in Linnaea 40: 93 (1876), nom. nud.

*Genista cinerea* f. *leptoclada-microphylla* Willk. in Linnaea 40: 93 (1876), nom. nud.

**Genista cinerea** var. **leptoclada** Willk., Suppl. Prodr. Fl. Hispan.: 253 (1893); ≡ *G. cinerea* subsp. *leptoclada* (Willk.) O. Bolòs & Molinier in Collect. Bot. (Barcelona) 5: 807 (1958), nom. inval.; ≡ *G. cinerea* subsp. *leptoclada* (Willk.) P.E. Gibbs in Notes Roy. Bot. Gard. Edinburgh 27: 42 (1966); ≡ *G. cinerea* subsp. *leptoclada* (Willk.) O. Bolòs & Vigo, Fl. Països Catalans 2: 823 (1990), comb. superfl.

Ind. loc.: “Gorg bloan ad alt. 1470 met.” [WILLKOMM, 1876: 93]; “In prov. Gadit. passim (in collibus dumos. int. Zahara et Algodonales, in ditione urbis Jerez hinc inde, PER. LARA!)” [WILLKOMM, 1893: 253].

Type material: To be searched for at COI-Willk.

Remarks: This name has been traditionally applied to the rupicolous plants growing in Mallorca (also known as *Genista majorica* Cantó & M.J. Sánchez) despite the fact that another rather different taxon from SW Spain (Andalusia) was included in the protologue. Yet, no formal typification for this name has been made. However, recent revisions of the genus (CANTÓ & al., 1997) interpret *G. cinerea* var. *leptoclada* in the traditional sense, i.e. excluding the andalusian locality given in the protologue.

**Genista dorycnifolia** Font Quer in Butll. Inst. Catalana Hist. Nat. 20: 46 (1920); ≡ *G. numidica* var. *dorycnifolia* (Font Quer) Knoche, Fl. Balear. 2: 62 (1922); ≡ *G. numidica* subsp. *dorycnifolia* (Font Quer) Knoche ex Colom, Biogeografia Baleares ed. 2, 1: 186 (1978), comb. inval.

Ind. loc.: “Hab. in insula Ebusae, l.d. Puig Cirer, ubi d. 19 majii 1919 legi”

Type material: Eivissa: Puig Sirer, Boscos de Pinus halepensis, 200 m. alt., cara a W.; sol. arg. calc., 18-V-1919, Font Quer (**BC** 13591). **Lectotype here designated.**

Remarks: Name in current use (GIBBS, 1966; BOLÒS & VIGO, 1984; TALAVERA, 1999); endemic to the Western Balearics (Eivissa).

**Genista dorycnifolia** Font Quer var. **grosii** Font Quer in Butll. Inst. Catalana Hist. Nat. 20: 48 (1920); ≡ *G. numidica* [var. *dorycnifolia*] f. *grosii* (Font Quer) Knoche, Fl. Balear. 2: 63 (1922); ≡ *G. grosii* (Font Quer) Font Quer in Mem. Real Acad. Ci. Barcelona 20: 151 (1927); ≡ *G. dorycnifolia* subsp. *grosii* (Font Quer) Font Quer & Rothm., Schedae Fl. Iber. Select., Cent. II-III: n. 239 (1935)

Ind. loc.: “Mes en aquesta Genista d'Eivissa, que herboritzà En Enric Gros a la Cala de les Torretes...”

Type material: Eivissa: Sta. Agnès, Cala de les Torretes, 29-V-1918, Gros (**BC** 13947). **Lectotype here designated.**

Remarks: The taxonomic status of this plant is uncertain and requires further study. Some recent revisions of the genus included it under the synonymy of *Genista dorycnifolia* (GIBBS, 1966; TALAVERA, 1999). However, several quantitative floral and fruit characters distinguish this taxon from typical *Genista dorycnifolia* (MUS, 1992) and the subspecific rank may be adequate to recognize this variant.

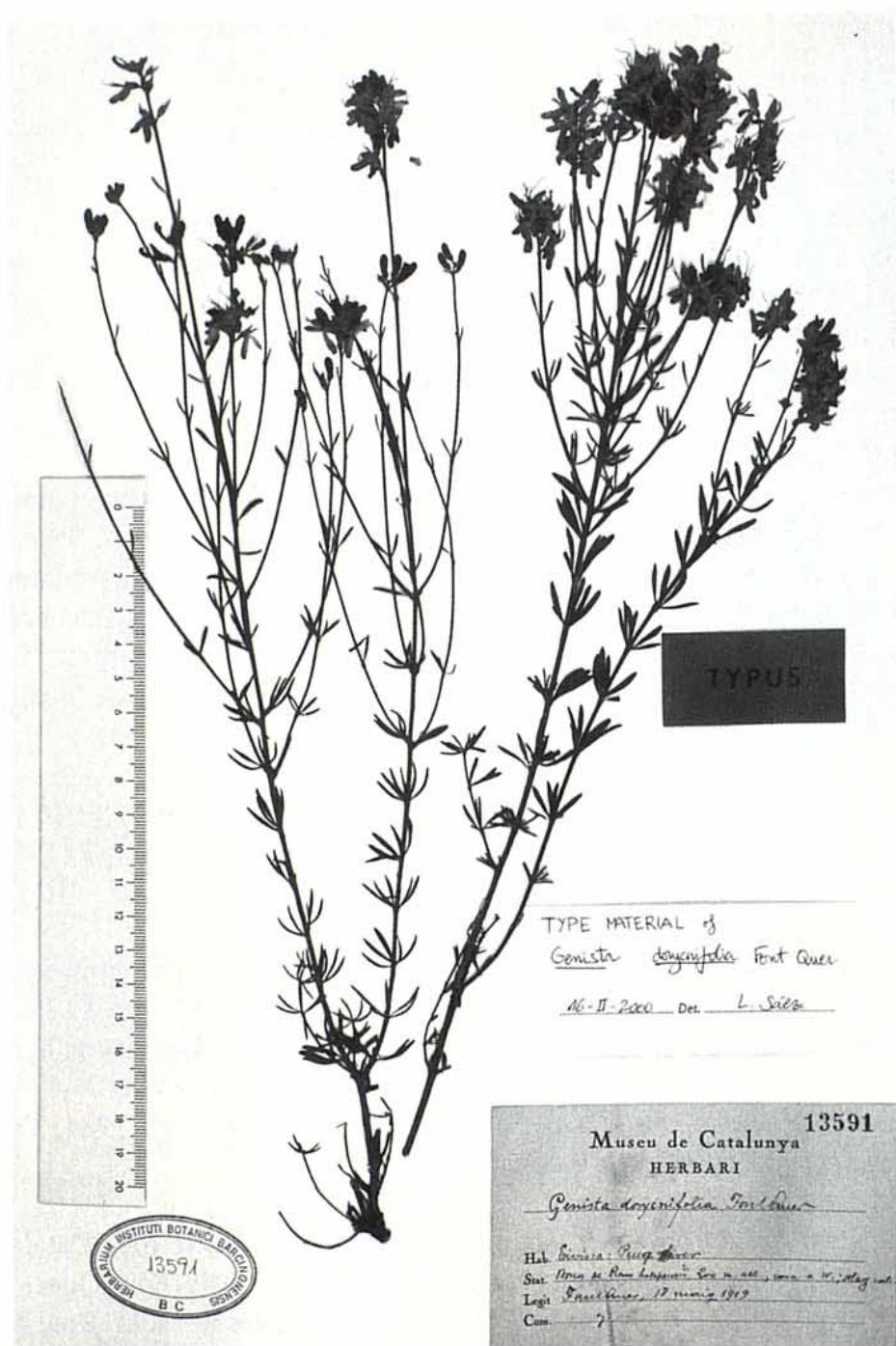


Fig. 7. Lectotype of *Genista dorycnifolia* Font Quer (BC).

***Genista hirsuta* f. *trichoacantha*** Font Quer in Butll. Inst. Catalana Hist. Nat. 20: 51 (1920);  $\equiv$  *G. hirsuta* var. *trichoacantha* (Font Quer) O. Bol s & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 68 (1974)

Ind. loc.: ...la *G. hirsuta* fou herboritzada per En Gros, pel maig de 1918 a l illa d Eivissa; En Gros la trob entre Sta. Eulalia i S. Miquel, en una sola localitat. Nosaltres, la primavera passada, l hem collida en uns marges secs de vora la carretera de S. Joan, no lluny tampoc de Sta. Eulalia, cap al kil metre 10.

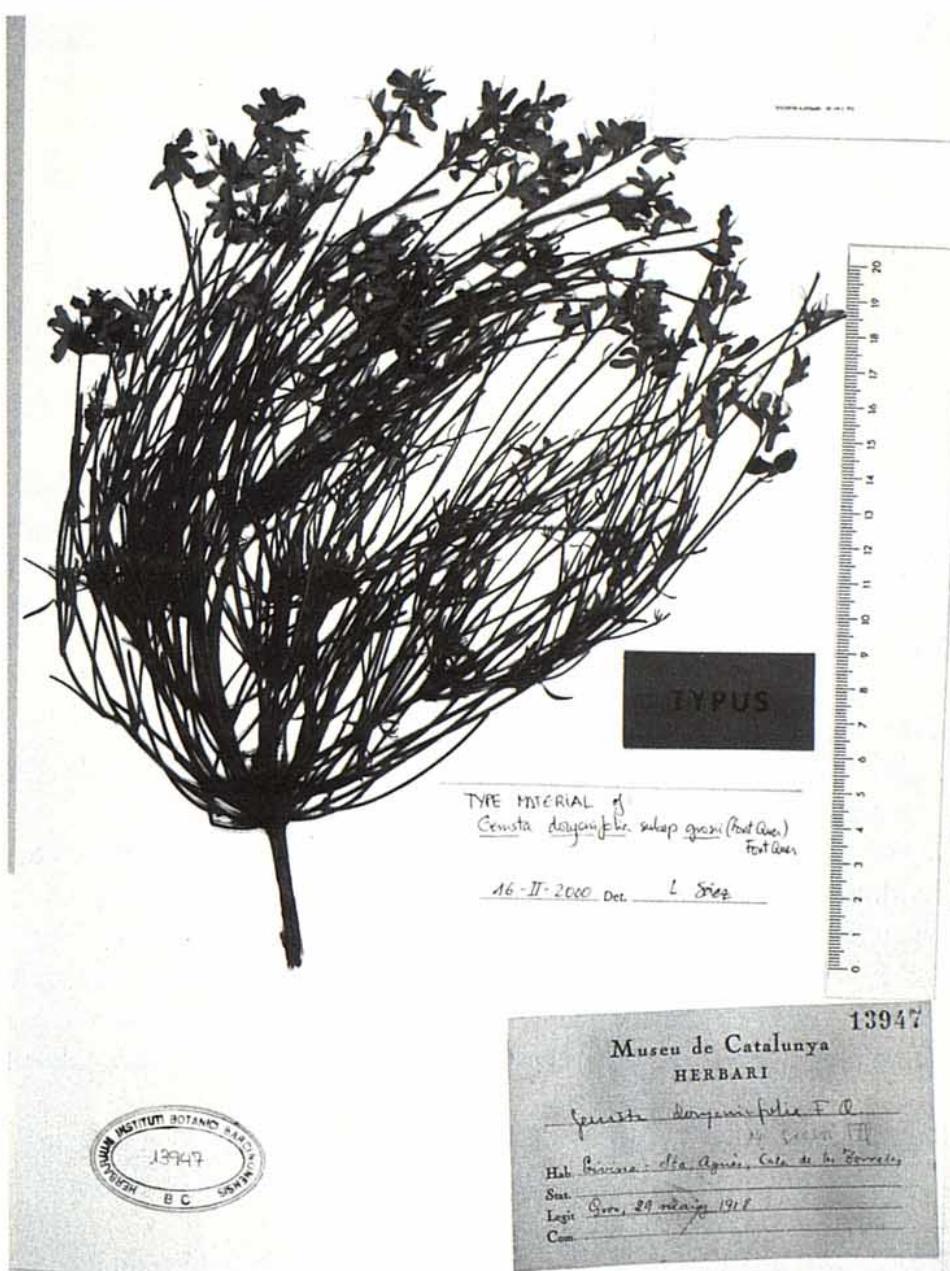


Fig. 8. Lectotype of *Genista dorycnifolia* var. *grosii* Font Quer (BC).

Type material: Eivissa: carretera de S. Juan, kilom. 10, pr. Sta. Eulalia, garrigues, 21-V-1919, Font Quer (BC 13657). **Lectotype here designated.**

Remarks: TALAVERA (1999) identified this plant with the N African *Genista hirsuta* subsp. *erioclada* (Spach) Raynaud.

**Genista linifolia** var. **leucocarpa** J.J. Rodr. in Bull. Soc. Bot. France 25: 238 (1878);  
≡ *Cytisus linifolius* var. *leucocarpus* (J.J. Rodr.) Porta in Nuovo Giorn. Bot. Ital. 19:  
302 (1887)

Ind. loc.: HAB- Canum, rare. - Fl. Mars

Type material: Canum (Minorque), maquis, 3-IV-1878, J.J. Rodr guez (**MPU-Knoche**). **Lectotype here designated** (bottom specimen).

Remarks: The distinction of *Genista linifolia* var. *leucocarpa* as taxonomically segregate from typical *G. linifolia* L. is not supported by TALAVERA & GIBBS (1999).

**Genista lucida** Cambess. in Mém. Mus. Hist. Nat. 14: 231 (1827); ≡ *G. tricuspidata* [subsp. *sparsiflora*] var. *lucida* (Cambess.) O. Bolòs & Molinier in Collect. Bot. (Barcelona) 5: tab. 5 (1958); ≡ *G. tricuspidata* [subsp. *sparsiflora*] var. *lucida* (Cambess.) O. Bolòs in Publ. Junta Ci. Nat. Barcelona 27: 61 (1958); ≡ *G. tricuspidata* subsp. *lucida* (Cambess.) L. Llorens in Pla & al., Aprox. Catàleg Flora I. Balears: 57 (1992)

Ind. loc.: "In collibus petrosis circa Artam in insulâ Majore vulgatissima. Florebat Aprili."

Type material: In collibus petrosis circa Artam frequens. Aprili floret. (Cambessedès) (**MPU-Knoche**). **Lectotype here designated** (single specimen).

Remarks: Described from Mallorca and later reported from E Spain (PERIS & STUBING, 1984). TALAVERA (1999) included *Genista lucida* within the N African *G. tricuspidata* Desf.

**Genista majorica** Cantó & M.J. Sánchez in Candollea 43: 78 (1988)

Ind. loc.: "Typus: Baleares, Gorç Blau, 600 m, 28.4.1985, M. Jesús Sánchez"

Type material: **MAF** 124034 (holotype).

Remarks: Name in current use (CANTÓ & al., 1997; TALAVERA, 1999). The taxonomic relationships within the *Genista cinerea* (Vill.) DC. complex are far from being solved. The Balearic plant shows strong similarities with other Spanish taxa, like *G. ausestana* (Bolòs & Vigo) Talavera and conclusiv evidences supporting its recognition as a separate taxon remains to be presented. *Genista majorica* is a heterotypic synonym of *G. cinerea* var. *leptoclada* Willk. See further comments under *Genista multicaulis* Lam.

**Genista multicaulis** Lam., Encycl. 2: 617 (1788); ≡ *Spartium multicaule* (Lam.) Lam. Encycl. 2: 617 (1788); ≡ *Anthyllis multicaulis* (Lam.) Pau in Brotéria, Ser. Bot. 22: 114 (1926)

Ind. loc.: "Cet arbuste est cultivé depuis long-temps au Jardin du Roi, où il fleurit rarement. On le dit originaire de Mahon, d'où il fut apporté par M. Richard"

Type material: **P-Lamarck** (holotype).

Remarks: The identity of this taxon requires further study. PAU (1907) erroneously attributed this taxon to the Minorcan endemic *Anthyllis hystrix*. The type material has been identified as belonging to the *G. cinerea* (Vill.) DC. complex. (TALAVERA, 1999), but a precise determination of the plant is a difficult task. *Genista multicaulis* shows most similarities with either *G. ausestana* (O. Bolòs & Vigo) Talavera (not occurring in the Balearic Islands) or *G. majorica*, and may be a name which takes priority name over either taxon at the specific level.

**Genista pomeli** Marès & Vigin., Cat. Pl. Vasc. Balèares: 70 (1880); ≡ *G. lucida* subsp. *pomeli* (Marès & Vigin.) Gand., Nov. Consp. Fl. Eur.: 101 (1910) ≡ *G. lucida* f. *pomelii* (Marès & Vigin.) L. Chodat in Bull. Soc. Bot. Genève 15: 211 (1924)

Ind. loc.: "MAJORQUE: La ermita d'Arta [sic]"



Fig. 9. Lectotype of *Genista lucida* Cambess. (MPU-Knoche).

Type material: Majorque. La ermita d Arta, pr s Arta, 21-V-1852, P. Mar s, G.V. (**MPU-Knoche**). **Lectotype here designated** (single specimen).

Remarks: This plant cannot be distinguished from other plants referred to *Genista lucida*. See further comments under this species.

**G. valdes-bermejoi** Talavera & L. Sáez, see **G. acanthoclada** var. **fasciculata** Knoche

*Gyrocytis balearica* Gand., Fl. Eur. 6: 287 (1886), nom. inval.

*Gyrocytis insulana* Gand., Fl. Eur. 6: 286 (1886), nom. inval.

*Hedysarum balearicum* Gand., Fl. Eur. 6: 154 (1885), nom. inval.

**Hippocrepis balearica** Jacq., Misc. Bot. 2: 305-306 (1781-1782);  $\equiv H. balearica$  subsp. *eu-balearica* Hrabetova-Uhrova in Acta Acad. Sci. Nat. Morav.-Siles. 21: 48 (1949), nom. illeg.

Ind. loc.: "Ex horto Parisino transiit in nostrum"

Type material: To be searched for at BM, LINN and W. According to TALAVERA & DOMÍNGUEZ (1999) the following herbarium specimens (MA 262301, G-DC 2: 312 n.º 1, LINN 919.5) were taken from the cultivated plants which were sent to Jacquin to describe the species. The colour plate given in JACQUIN (1781) could also be used for typification purposes.

Remarks: Name in current use (BELLOT, 1946; HRABETOVA-UHROVA, 1949; BOLÒS & VIGO, 1984; TALAVERA & DOMÍNGUEZ, 1999); endemic to the Eastern Balearic Islands. According to TALAVERA & DOMÍNGUEZ (1999) the sheet MA 262301 shows floral features (small calyx) like those occurring in plants from the island of Menorca, suggesting that the plants described as *Hippocrepis balearica* were indeed of Minorcan origin.

**Hippocrepis balearica** var. **grosii** Pau in Brotéria Ci. Nat. 3: 58 (1934);  $\equiv H. balearica$  f. *grosii* (Pau) Bellot in Anales Jard. Bot. Madrid 7: 253 (1948);  $\equiv H. balearica$  subsp. *grosii* (Pau) Mus, Rosselló & N. Torres in Candollea 45: 79 (1990);  $\equiv H. grosii$  (Pau) Boira, Gil & L. Llorens in Fl. Medit. 5: 170 (1996);  $\equiv H. grosii$  (Pau) Talavera & E. Domínguez in Anales Jard. Bot. Madrid 57: 458 (2000), comb. superfl.

Ind. loc.: "Mas diferente es la planta herborizada por Gros en Puig Nonó (Ibiza)"

Type material: **MA** (lectotype; Mus & al., 1990); **BC** (isolectotypes).

Remarks: Name in current use (MUS & al., 1990; LLORENS & al., 1995; TALAVERA & DOMÍNGUEZ, 2000).

**Hippocrepis balearica** var. **minoricensis** P. Monts. ex M. Laínz in Fontqueria 24: 2 (1989)

Ind. loc.: "MENORCA: pr. Trabaluger [sic] de Ferrerías, loco dicto Son Fideu, 31SEE8522, ad 50 m, in rupibus calcareis umbratis, P. Montserrat, 22-IV-1957 (holotypus in hb. JACA 1450/57, specimen basi lignosum; paratypi autem, ibidem, venientes e loco dicto Barranco de Algendar)"

Type material: **JACA** (holotype), **MA** (isotype), **MAF** (isotype).

Remarks: Using a morphometric approach BOIRA & al. (1996) supported the distinction of the Minorcan plants as *Hippocrepis balearica* var. *minoricensis*. However, this view is not followed by TALAVERA & DOMÍNGUEZ (2000) and CRESPO (2000) who

included this taxon under *H. balearica*. In addition, if as suggested by TALAVERA & DOMÍNGUEZ (2000) the type material of *Hippocrepis balearica* has to be identified from the plants growing in Minorca, *H. balearica* var. *minoricensis* is a technical synonym of *H. balearica* var. *balearica*.

*Hippocrepis cambessedesii* Gand., Fl. Eur. 6: 159 (1885), nom. inval.; ≡ *H. balearica* subsp. *cambessedesii* (Gand.) Gand., Nov. Consp. Fl. Eur.: 120 (1910), nom. inval.

*Hippocrepis confusa* Gand., Fl. Eur. 6: 159 (1885), nom. inval.

*Hippocrepis eminens* Gand., Fl. Eur. 6: 159 (1885), nom. inval.; ≡ *H. balearica* subsp. *eminens* (Gand.) Gand., Nov. Consp. Fl. Eur.: 120 (1910), nom. inval.

*Hippocrepis gracilescens* Gand., Fl. Eur. 6: 164 (1885), nom. inval.

*Hippocrepis longifolia* Gand., Fl. Eur. 6: 159 (1885), nom. inval.

*Hippocrepis minoricensis* Gand., Fl. Eur. 6: 159 (1885), nom. inval.

*Hippocrepis valens* Gand., Fl. Eur. 6: 159 (1885), nom. inval.

*Hippocrepis fruticosa* Rouy in Bull. Soc. Bot. France 35: 116 (1888), nom. illeg.

*Krochena balearica* Gand., Fl. Eur. 6: 225 (1885), nom. inval.

**Lathyrus trachyspermus** Webb ex J.J. Rodr. in Bull. Soc. Bot. France 25: 239 (1878); ≡ *L. cicera* subsp. *trachyspermus* (Webb) Gand., Nov. Consp. Fl. Eur.: 128 (1910)

Ind. loc.: "HAB.- Biniaixa, dans des terres cultivées, où il pourrait avoir été introduit.- Fl. Avril-mai"

Type material: Biniaixa (Mahon), cultives, 1-VI-1876, J.J. Rodríguez (**MPU-Knoche**). **Lectotype here designated** (single specimen).

Remarks: The type material belongs to *Lathyrus annuus* L. and does not deserve any taxonomic recognition.

*Lotea balearica* Gand., Fl. Eur. 6: 223 (1885), nom. inval.

*Lotea elegans* Gand., Fl. Eur. 6: 225 (1885), nom. inval.

*Lotea majorica* Gand., Fl. Eur. 6: 225 (1885), nom. inval.

*Lototrichis balearica* Gand., Fl. Eur. 6: 221 (1885), nom. inval.

*Lototrichis dilatata* Gand., Fl. Eur. 6: 221 (1885), nom. inval.

*Lototrichis insularis* Gand., Fl. Eur. 6: 220 (1885), nom. inval.

*Lotus balearicus* Gand., Fl. Eur. 6: 201 (1885), nom. inval.

**Lotus fallax** Font Quer in Bol. Real Soc. Esp. Hist. Nat. 19: 270 (1919);  $\equiv$  *L. hispidus* var. *fallax* (Font Quer) Knoche, Fl. Balear. 2: 95 (1922);  $\equiv$  *L. angustissimus* var. *fallax* (Font Quer) P. Monts. in Collect. Bot. (Barcelona) 3: 404 (1953), comb. inval.;  $\equiv$  *L. angustissimus* var. *fallax* (Font Quer) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 70 (1974);  $\equiv$  *L. angustissimus* subsp. *fallax* (Font Quer) Knoche ex Colom, Biogeografia Baleares ed. 2, 1: 191 (1978), comb. inval.

Ind. loc.: "Hab. cerca de Mahón, en Binissarmenya [sic]"

Type material: Binissarmenya, pr. Mahó, 12-V-1913, Font Quer (BC 16680).

**Lectotype here designated.**

Remarks: According to GREUTER & al. (1989) this species should be adscribed to *Lotus hispidus* Desf. ex DC. in Lam. & DC.

**Lotus tetraphyllus** Murray, Syst. Veg. ed. 13: 575 (1774)

Ind. loc.: Not stated.

Type material: LINN 931.33 (lectotype designated by Lassen; cf. TURLAND & JARVIS, 1997).

Remarks: Name in current use (GREUTER & al., 1989); endemic to the Eastern Balearics. This taxon shows an isolated position within the genus, and it has been included within a monotypic section by BRAND (1898).

**Lotus tetraphyllus** var. **artaensis** L. Chodat in Bull. Soc. Bot. Genève 15: 217 (1924);  $\equiv$  *L. tetraphyllus* subsp. *artaensis* (L. Chodat) Colom, Biogeografia Baleares ed. 2, 1: 250 (1978), comb. inval.

Ind. loc.: "Récoltée par nous-mêmes à Arta [sic], vers la Cueva où elle est commune"

Type material: To be searched for at BC. Not traced, but probably on loan.

Remarks: The splitting of *Lotus tetraphyllus* into three varieties made by CHODAT (1924) does not have a sound taxonomic basis and does not adequately reflect the pattern of variation of the species. They shoud be included within *L. tetraphyllus* without any formal recognition.

**Lotus tetraphyllus** var. **formentorica** L. Chodat in Bull. Soc. Bot. Genève 15: 217 (1924);  $\equiv$  *L. tetraphyllus* subsp. *formentorica* (L. Chodat) Colom, Biogeografia Baleares ed. 2, 1: 250 (1978), comb. inval.

Ind. loc.: "Récoltée par R. CHODAT à Formentor"

Type material: To be searched for at G. Not traced, but probably on loan.

Remarks: See comments under *Lotus tetraphyllus* var. *artaensis* L. Chodat.

**Lotus tetraphyllus** var. **minoricensis** L. Chodat in Bull. Soc. Bot. Genève 15: 216 (1924);  $\equiv$  *L. tetraphyllus* subsp. *minoricensis* (L. Chodat) Colom, Biogeografia Baleares ed. 2, 1: 250 (1978), comb. inval.

Ind. loc.: "récoltée par Porta et Rigo en 1885, Herb., Barbey-Boissier"

Type material: To be searched for at G. Not traced, but probably on loan.

Remarks: See comments under *Lotus tetraphyllus* var. *artaensis* L. Chodat.

*Lupinus balearicus* Gand., Fl. Eur. 6: 227 (1885), nom. inval.

*Lupinus merati* Gand., Fl. Eur. 6: 227 (1885), nom. inval.

**Medicago arborea** var. **citrina** Font Quer in Mem. Mus. Ci. Nat. Barcelona, Sèr. Bot. 1: 7 (1924); ≡ *M. arborea* subsp. *citrina* (Font Quer) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 69 (1974); ≡ *M. citrina* (Font Quer) Greuter in Willdenowia 16: 112 (1986)

Ind. loc.: "Hab. in rupestribus calcareis parva insula «Espartar» dicta, pr. Ebuso, ubi GROS, d. 23-V-1918, legit."

Type material: Pythiuses: Illa de l'Espartar, 23-V-1918, Gros (**BC** 15100). **Lectotype here designated** (middle specimen). This sheet was annotated as lectotype by A. Juan & M.B. Crespo (18-I-1996), but as far as we know it has not been formally published.

Remarks: Name in current use (GREUTER & RAUS, 1986), but see LESINS & LESINS (1979) for an opposite view. Ribosomal DNA sequences from *Medicago citrina* differ from the other taxa of section *Dendrotilis*, *M. arborea* L. and *M. strasseri* Greuter & al., suggesting that the Western Mediterranean endemic plant should be granted the subspecific or specific rank. *Medicago citrina* also grows on some islets of the Columbretes archipelago, but it has probably been introduced there in recent times.

*Medicago litoralis* f. *breviseta* P. Monts. in Collect. Bot. (Barcelona) 3: 403 (1953), nom. nud.

*Medicago litoralis* f. *longiseta* P. Monts. in Collect. Bot. (Barcelona) 3: 403 (1953), nom. nud.

*Medicago murex* f. *glabra* P. Monts. in Collect. Bot. (Barcelona) 3: 403 (1953), nom. nud.

*Medicago murex* f. *pilosa* P. Monts. in Collect. Bot. (Barcelona) 3: 403 (1953), nom. nud.

**Medicago murex** var. **rodriguezii** Font Quer ex Casellas in Collect. Bot. (Barcelona) 6: 244 (1962); ≡ *M. murex* [var. *sphaerocarpa*] subvar. *rodriguezii* (Font Quer) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 69 (1974)

Ind. loc: "Typus: BC 15292 [Mahón]"

Type material: **BC** (holotype).

Remarks: We see no reasons for treating this variety as a segregate from *Medicago murex* Willd.

**Melilotus indica** var. **prostrata** P. Palau in Treb. Inst. Catalana Hist. Nat. 7: 55 (1976)

Ind. loc.: "Typus: BC 104162 [Cabrera]"

Type material: [Cabrera] S'Avaradero des Coll Roig, 3-VI-1948, Palau Ferrer (BC 104162). **Lectotype here designated.**

Remarks: Does not merit taxonomical distinction from *Melilotus indicus* (L.) All.

***Melilotus italicus* var. *confertus*** O.E. Schulz in Bot. Jahrb. Syst. 29: 710 (1901)

Ind. loc.: "Hab. in Balearibus ins. Mallorca: in cultis praedii Raxa: Willhom[sic] (H.Vr.)"

Type material: To be searched for at B.

Remarks: This taxon should be included in the synonymy of *Melilotus indicus* (L.) All.

*Melilotus parviflora* var. *procumbens* P. Palau in Anales Inst. Bot. Cavanilles 11: 507 (1954), nom. inval.;  $\equiv M. parviflora$  subsp. *procumbens* (P. Palau) Colom, Biogeografía Baleares ed. 2, 1: 199 (1978), comb. inval.

***Melilotus sulcata* var. *major*** Cambess. in Mémoires Mus. Hist. Nat. 14: 289 (1827)

Ind. loc.: "In arvis Ebusi. Florebat Majo. Hab. in Corsicâ!, Barbarâ prope Tingidem!"

Type material: In arvis Ebusi, 5-V-1825 (Cambessedès) (**MPU-Knoche**). **Lectotype here designated** (left specimen).

Remarks: The lectotype falls within the variation of *Melilotus sulcatus* Desf. and does not deserve any taxonomic recognition.

*Natrix jucunda* Gand., Fl. Eur. 7: 29 (1885), nom. inval.

*Natrix majorica* Gand., Fl. Eur. 7: 29 (1885), nom. inval.

*Natrix uberta* Gand., Fl. Eur. 7: 29 (1885), nom. inval.

*Ochrus oxysepalus* Gand., Fl. Eur. 6: 195 (1885), nom. inval.

*Ononis balearica* Gand., Fl. Eur. 7: 13 (1885), nom. inval.  $\equiv O. minutissima$  subsp. *balearica* (Gand.) Gand., Nov. Consp. Fl. Eur.: 107 (1910), nom. inval.

*Ononis longiuscula* Gand., Fl. Eur. 7: 13 (1885), nom. inval.

***Ononis crispa*** L., Sp. Pl. ed. 2: 1010 (1763);  $\equiv O. natrix$  f. *crispa* (L.) Knoche, Fl. Balear. 2: 65 (1922);  $\equiv O. natrix$  subsp. *crispa* (L.) Font Quer & Marcos ex Marcos in Cavanillesia 8: 24 (1936)

Ind. loc.: "Habitat in Hispaniae monte Mariola prope Valentiam"

Type material: LINN (DEVESA & LÓPEZ GONZÁLEZ, 1997: 253)

Remarks: Name in current use (GREUTER & al., 1989), but restricted to the Balearic Islands. The Linnean protologue reported an erroneous locality, since this plant does not occur in continental Spain (cf. BOLÒS & VIGO 1984: 539; DEVESA & LÓPEZ GONZÁLEZ, 1997: 253). *Ononis crispa* grows on the eastern Balearic Islands

(Minorca, Cabrera), and MUS (1992) excluded its presence from Mallorca where it is replaced by the related *O. crispa* subsp. *zschackei* (F. Herm.) L. Sáez & Rosselló.

**Ononis mitissima** var. **campanulata** J.J. Rodr. in Bull. Soc. Bot. France 25: 238 (1878)

Ind. loc.: "HAB.- Lieux incultes: Son Blanc, Binisequi, Rafal rotj.- Fl. Mai-juin"

Type material: Son Blanc (Minorque), coteaux incultes, 30-V-1874, fr. 20-VI-1876, J.J. Rodríguez (**MPU-Knoche**). **Lectotype here designated** (flowering specimen).

Remarks: The Minorcan taxon shows no obvious differences from typical *Ononis mitissima* L. and should be included within its variation.

*Ononis mitissima* var. *procumbens* P. Palau in Anales Inst. Bot. Cavanilles 11: 507 (1954), nom. inval.; ≡ *O. mitissima* subsp. *procumbens* (P. Palau) Colom, Biogeografía Baleares ed. 2, 1: 199 (1978), comb. inval.

*Ononis natrix* f. *crispa-parvifolia* Knoche, Fl. Balear. 2: 65 (1922), nom. nud.

**Ononis natrix** [subsp. *ramossissima*] var. **fontqueri** Sirjaev ex O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 72 (1974); ≡ *O. natrix* subsp. *fontqueri* (Sirjaev) Romo, Fl. Silvestres Baleares: 145 (1994)

Ind. loc.: "Leg. E. Gros in Ebuso, pr. Sant Antoni, in arenosis altura maris, 6-VI-1918, BC 994"

Type material: **BC** (holotype).

Remarks: Plants from the Balearic archipelago included within the *Ononis natrix* L. complex need further detailed study. This applies to *O. natrix* var. *fontqueri*, which shows intermediate features (gross morphology and indumentum) between *O. natrix* and *O. ramosissima* Desf.

*Ononis natrix* [subsp. *crispa*] var. *quinquefoliolata* Font Quer & Marcos ex Marcos in Cavanillesia 8: 24 (1936), nom. illeg.

**Ononis zschackei** F. Herm. in Verh. Bot. Vereins Prov. Branderburg 54: 250 (1914); ≡ *O. crispa* subsp. *zschackei* (F. Herm.) L. Sáez & Rosselló in Fl. Montiberica 7: 88 (1997)

Ind. loc.: "Am Eingange des Torrent de Pareys sind die Felsen bedeckt"

Type material: To be searched for at GAT.

Remarks: Name in current use, endemic to the island of Mallorca (ALOMAR & al., 1997; ROSELLÓ & al., 1997), but DEVESA & LÓPEZ GONZÁLEZ (1997) subsumed it under typical *Ononis crispa* L.

*Psoralea rodriguezii* Gand., Fl. Eur. 7: 80 (1885), nom. inval.

*Scorpiurus balearica* Gand., Fl. Eur. 7: 90 (1885), nom. inval.

**Scorpiurus margaritae** P. Palau in Anales Inst. Bot. Cavanilles 14: 255 (1957); ≡ *S. muricatus* var. *margaritae* (P. Palau) Domínguez & Galiano in Lagascalia 4: 270 (1974)

Ind. loc.: "Son Rapinya, circa Palma, in segetis, cum *S. subvillosa* et *S. sulcata* convivente. 19 maii 1955, abundans inveni"

Type material: Mallorca, campos-Son Rapinya, 14-V-1955, Palau Ferrer 733 (BC150980). **Lectotype here designated.**

Remarks: In our view the type material belongs to *Scorpiurus sulcatus* L., and it should not be included within *S. muricatus* as reported by DOMÍNGUEZ & GALIANO (1974). These authors reported *S. margaritae* from locations outside the Balearic Islands.

***Scorpiurus muricatus* [subsp. *sulcatus*] f. *subinermis*** P. Palau ex O. Bolòs & Vigo, Fl. Països Catalans 1: 634 (1984)

Ind. loc.: "Cabrera, ermots darrera de Ses Cases, BC 104111"

Type material: BC (holotype).

Remarks: Not worthy of recognition from *Scorpiurus sulcatus* L.

***Scorpiurus oliveri*** P. Palau in Anales Inst. Bot. Cavanilles 11: 486 (1954) [«*oliverii*»]  
≡ *S. sulcatus* var. *oliveri* (P. Palau) Domínguez & Galiano in Lagascalia 4: 274 (1974)

Ind. loc.: "Esta especie fué distribuida a los suscriptores a mi exsiccata de plantas de Baleares, con el número 30 y el binomio *Scorpiurus distensa*..."

Type material: BC (according to PALAU (1976: 59) the sheet BC 150984 is the holotype); BC (isotypes).

Remarks: According to DOMÍNGUEZ & GALIANO (1974) this taxon merits recognition at the varietal level, a view that is not followed here. Plants identified as *Scorpiurus oliveri* have been reported outside the Balearic archipelago (DOMÍNGUEZ & GALIANO, 1974).

***Scorpiurus subvillosa* var. *angustifolia*** Pau in Actas Soc. Esp. Hist. Nat. 29: 65 (1900)

Ind. loc.: "Al cruzar la carretera, entre San Carlos y San Miguel"

Type material: Not traced at MA.

Remarks: Not treated by DOMÍNGUEZ & GALIANO (1974) in their revision of the genus. A conclusive identification of this taxon remains to be done.

***Scorpiurus sulcata* var. *angustifolia*** Pau in Actas Soc. Esp. Hist. Nat. 29: 65 (1900);  
≡ *S. sulcata* f. *angustifolia* (Pau) Knoche, Fl. Balear. 2: 109 (1922)

Ind. loc.: "Al cruzar la carretera, entre San Carlos y San Miguel"

Type material: Not traced at MA.

Remarks: Not treated by DOMÍNGUEZ & GALIANO (1974) in their revision of the genus. A conclusive identification of this taxon needs to be carried out.

*Tragancantha balearica* Gand., Fl. Eur. 6: 53 (1885), nom. inval.

*Tragancantha nitidula* Gand., Fl. Eur. 6: 53 (1885), nom. inval.

***Trifolium lappaceum* var. *involucratum*** Font Quer in Butll. Inst. Catalana Hist. Nat. 17: 52 (1917)

Ind. loc.: "Hab. Rafal Fort (leg. Pons Guerau!)"

Type material: Rafal Fort (Menorca), V-1903, Pons Guerau (**BC** 15836).

**Lectotype here designated** (upper specimen).

Remarks: A poorly defined morphological entity not worthy of recognition from *Trifolium lappaceum* L.

*Trimeniaeus magnus* Gand., Fl. Eur. 6: 60 (1885), nom. inval.

*Trimeniaeus minoricensis* Gand., Fl. Eur. 6: 60 (1885), nom. inval.

*Tripolium minoricense* Gand., Fl. Eur. 6: 19 (1885), nom. inval.

*Vicia atropurpurea* var. *tenella* Porta in Nuovo Giorn. Bot. Ital. 19: 304 (1887), nom. nud.

**Vicia bifoliolata** J.J. Rodr. in Bull. Soc. Bot. France 25: 239 (1878);  $\equiv$  *V. bithynica* subsp. *bifoliolata* (J.J. Rodr.) Gand., Nov. Consp. Fl. Eur.: 132 (1910)

Ind. loc.: "HAB.- Binisarmeña, dans les lieux maritimes, entrelacée avec les Cistes et les Lentisques.- Fl. Avril-mai."

Type material: Binisarmeña, avec les Cistes et les Lentisques, 22-IV-1876, J.J. Rodríguez (**MPU-Knoche**). **Lectotype here designated** (left specimen).

Remarks: Name in current use (ROMERO ZARCO, 1999). Despite other claims (GREUTER & al., 1989) suggesting that *Vicia bifoliolata* should be identified with *V. filicaulis* Webb & Berthel., a Macaronesic endemic taxon (Gran Canaria), its distribution should be restricted to the Balearic archipelago (Minorca).

*Vicia brevidens* Font Quer ex P. Palau in Anales Inst. Bot. Cavanilles 12: 295 (1955), nom. nud.

*Vicia cordata* var. *albiflora* Porta in Nuovo Giorn. Bot. Ital. 19: 304 (1887), nom. nud.

*Vicia heterophylla* [var. *linearis*] f. *albiflora* P. Palau in Anales Inst. Bot. Cavanilles 11: 508 (1954), nom. nud.

*Vicia heterophylla* var. *villosa* Garcías Font in Butll. Inst. Catalana Hist. Nat. 23: 93 (1923), nom. nud.

**Vicia parviflora** var. **major** Pau in Bol. Soc. Esp. Hist. Nat. 1: 210 (1901)

Ind. loc.: "Alcoitx"

Type material: Not traced at MA.

Remarks: No information concerning this taxon is available. Probably not worthy of recognition from typical *Vicia parviflora* Cav.

**Vicia pubescens** var. **minoricensis** Sennen in Bol. Soc. Ibér. Ci. Nat. 26: 124 (1927)

Ind. loc.: "Baleares [sic]: Minorque à Mahon [sic], champs. Leg. Hno. Fernando"

Type material: Baléares: Minorque à Mahon, terres cultivées, 14-V-1918, Hno. Fernando, Pl. Espagne-F. Sennen n.<sup>o</sup> 3359 (**BC** 827369). **Lectotype here designated.** **MA** (isolectotypes).

Remarks: *Vicia pubescens* var. *minoricensis* Sennen cannot be distinguished on morphological grounds from *V. pubescens* (DC.) Link.

*Vicia sativa* f. *tomentosa* Knoche, Fl. Balear. 2: 115 (1922), nom. nud.

*Vicia sennenii* Pau ex Bianor in Butll. Inst. Catalana Hist. Nat. 17: 136 (1917), nom. nud.

*Vulneraria majorica* Gand., Fl. Eur. 6: 16 (1885), nom. inval.

*Vulneraria mediterranea* Gand., Fl. Eur. 6: 16 (1885), nom. inval.

## Fagaceae

**Quercus ilex** var. **frutescens** Willk. in Linnaea 40: 29 (1875)

Ind. loc.: "In quercetis dumetisque prope Lluch"

Type material: Mallorca: in quercetis prope Lluch, 1-V-1873, Willkomm (**COI-Willkomm**). **Lectotype here designated** (right specimen).

Remarks: According to AMARAL FRANCO (1990) this taxon should be adscribed to *Quercus ilex* L. subsp. *ilex*.

## Frankeniaceae

*Frankenia bianorii* Sennen & Pau ex Bianor in Butll. Inst. Catalana Hist. Nat. 17: 134 (1917), nom. nud.;  $\equiv$  *F. hirsuta* f. *bianorii* (Sennen & Pau) Knoche, Fl. Balear. 2: 191 (1922), nom. inval.

*Frankenia laevis* f. *pauciflora* P. Palau in Anales Inst. Bot. Cavanilles 12: 299 (1955), nom. inval.;  $\equiv$  *F. hirsuta* [subsp. *laevis*] f. *pauciflora* (P. Palau) Bonafè, Fl. Mallorca 3: 207 (1979), comb. inval.

**Frankenia laevis** [subsp. *intermedia*] var. **marcosii** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 80 (1974)

Ind. loc.: "Typus: Cabrera, s'Illa des Conills, ubi legit A. Marcos, 9-VI-1933, BC 87351"

Type material: To be searched for at BC. Not traced, but probably on loan.

Remarks: According to SANTOS GUERRA (1993) this variety should be identified with *Frankenia hirsuta* L.

### Fumariaceae

**Fumaria muralis** var. **longipes** Pau ex Font Quer in Bol. Soc. Esp. Hist. Nat. 19: 269 (1919)

Ind. loc.: "Vive en la Isla de Colom, la recogimos el 20 de Abril de 1913"

Type material: Illa de Colóm, Menorca, sitio sombrío en la Gola del Infern, 20-IV-1913, Font Quer (MA 43122). **Lectotype here designated** (single specimen).

Remarks: The type material examined belongs to *Fumaria bicolor* Nicotra.

### Gentianaceae

**Centaurium bianoris** var. **roseum** Zeltner in Rev. Biol. Ecol. Médit. 5: 56 (1978)

Ind. loc.: "Typus in herbario novicastrensi: n° 716. Leg. L. Zeltner, 5-6-1972"

Type material: NEU (holotype).

Remarks: The flower variants of *Centaurium bianoris* are not geographically and ecologically structured. They are probably segregants of the parental genomes of this allopolyploid, and do not merit taxonomic recognition.

**Centaurium bianoris** var. **sulfureum** Zeltner in Rev. Biol. Ecol. Médit. 5: 56 (1978)

Ind. loc.: "Typus in herbario novicastrensi: n° 650. Leg. L. Zeltner, 4-6-1972"

Type material: NEU (holotype).

Remarks: See comments under *Centaurium bianoris* var. *roseum*.

**Centaurium enclusense** O. Bolòs, Molinier & P. Monts., see *Erythraea divaricata* Porta

**Centaurium pulchellum** [subsp. *grandiflorum*] var. **incrassatum** Pignatti in Arch. Bot. (Forlì) 31: 57 (1955)

Ind. loc.: "Abbiamo raccolto questa pianta nelle depressioni umide dietro le dune del litorale sabbioso a Sud di Alcudia il giorno 2/6"

Type material: To be searched for at RO.

Remarks: Not included by ZELTNER (1970) in his account of the genus. Plants from the type locality do not differ from typical *Centaurium pulchellum*.

**Chlora balearica** Pau in Bol. Soc. Esp. Hist. Nat. 1: 211 (1901); ≡ *C. serotina* var. *balearica* (Pau) Pau in Bol. Soc. Esp. Hist. Nat. 1: 211 (1901)

Ind. loc.: "Mezquita, Son Bou, Binisarmeña"

Type material: MA (syntypes).

Remarks: The material included in the protologue is certainly heterogeneous, and the name requires a lectotypification in order to be fully understood.

*Chlora balearica* Sennen in Bol. Soc. Ibér. Ci. Nat. 29: 40 (1930), nom. illeg.

*Chlora emarginata* Gand., Fl. Eur. 16: 1 (1889), nom. inval.

**Chlora perfoliata** var. **ponsii** Pau in Actas Soc. Esp. Hist. Nat. 29: 230 (1900); ≡ Blackstonia perfoliata var. **ponsii** (Pau) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 89 (1983)

Ind. loc.: Not stated [Minorca]

Type material: Barranco San Juan, 26-VI-1899, [Pons Guerau] (MA 93174).

**Lectotype here designated.**

Remarks: The type material is indistinguishable from *Blakstonia perfoliata* subsp. *grandiflora* (Viv.) Maire.

*Erythraea balearica* Gand., Fl. Eur. 16: 13 (1889), nom. inval.

**Erythraea balearica** F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 241 (1914); ≡ *Centaureum balearicum* (F. Herm.) Pignatti in Arch. Bot. (Forlì) 31: 58 (1955)

Ind. loc.: "Die Felseheide bei Palma zeigt auf rotbraunem Boden etwa folgende Zusammensetzung"

Type material: To be searched for at GAT.

Remarks: Treated as a synonym of *Centaureum pulchellum* (Swartz) Druce by KNOCHE (1922).

**Erythraea bianoris** Sennen in Bol. Soc. Ibér. Ci. Nat. 29: 41 (1930); ≡ *Centaureum bianoris* (Sennen) Sennen in Bol. Soc. Ibér. Ci. Nat. 29: 41 (1930); Sennen, Diagn. Nouv.: 175 (1936)

Ind. loc.: "Baléares: Bellver, Marratxi [sic], lieux herbeus [sic]. Leg. F. Bianor"

Type material: **BC** (lectotype; ZELTNER, 1978)

Remarks: Name in current use (ZELTNER, 1978); endemic to the Balearic Islands. *Centaureum bianoris* is believed to be an allopolyploid ( $2n=40$ ) derived from a cross between *C. maritimum* (L.) Fritsch and *C. tenuiflorum* (Hoffmanns. & Link) Fritsch.

**Erythraea compressa** rasse **majorcica** [sic] F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 246 (1914); ≡ *Centaureum majoricum* (F. Herm.) F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 246 (1914)

Ind. loc.: "Wieder ändert sich die Pfanzendecke, wenn wir uns nach Biniaraix oder nach dem Col de Sóller zu begeben."

Type material: To be searched for at GAT.

Remarks: This taxon has not been revisited since its description. Probably of no taxonomic value, but a conclusive identification remains to be done.

**Erythraea discolor** Gand. in Bull. Soc. Bot. France 47: 122 (1900); ≡ *Centaureum discolor* (Gand.) Ronniger, Mitt. Naturw. Ver. Steierm 52: 321 (1916); ≡ *Erythraea maritima* subsp. *discolor* (Gand.) Gand., Nov. Conspl. Fl. Eur.: 336 (1910)

Ind. loc.: "Legi etiam ad pedem montis «Puig de Galatso» in Majorca austro-occid."

Type material: LY

Remarks: Judging from the description *Erythraea discolor* is probably conspecific with *Centaureum bianoris*. If this is confirmed by the examination of the type

material, then *Centaurium discolor* (Gand.) Ronniger would be the earlier available name for the Balearic endemic.

*Erythraea divaricata* Porta in Nuovo Giorn. Bot. Ital. 19: 312 (1887), nom. illeg.; ≡ *E. major* subsp. *divaricata* (Porta) Gand., Nov. Conspl. Fl. Eur.: 336 (1910), nom. inval.; ≡ *Centaurium divaricatum* (Porta) P. Monts. in Collect. Bot. (Barcelona) 3: 410 (1953), comb. inval.; ≡ *C. enclusense* O. Bolòs, Molinier & P. Monts. in Acta Geobot. Barcinon. 5: 60 (1970); ≡ *C. divaricatum* (Porta) Colom, Biogeografía Baleares ed. 2, 1: 191 (1978), comb. inval. ≡ *C. erythraea* subsp. *enclusense* (O. Bolòs, Molinier & P. Monts.) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 89 (1983)

Ind. loc.: "Min[orca]. Individuum unicum florens obvium venit, in summis arenoso-humosis m. Anclusa. 2 Mai."

Type material: To be searched for at FI.

Remarks: The taxonomic status of this plant is very uncertain and requires a detailed study of the type material. KNOCHE (1922) approached this taxon (which was seen and figured by the author) with doubts to *Centaurium pulchellum* (Swartz) Druce. By contrast, MELDERIS (1972) tentatively suggested that *C. enclusense* was probably related to *C. erythraea* subsp. *rhodense* (Boiss. & Reut.) Melderis.

***Erythraea hermanni*** Sennen in Bol. Soc. Ibér. Ci. Nat. 29: 40 (1930); ≡ *Centaurium hermanni* (Sennen) Sennen in Bol. Soc. Ibér. Ci. Nat. 29: 40 (1930); Diagn. Nouv.: 176 (1936); ≡ *C. tenuiflorum* [subsp. *acutiflorum*] var. *hermanni* (Sennen) Zeltner in Bull. Soc. Neuchatel Sci. Nat. 93: 94 (1970); ≡ *C. pulchellum* var. *hermannii* (Sennen) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 89 (1983)

Ind. loc.: "Baléares: Prat, lieux herbeux. leg. F. Bianor"

Type material: Baléares: lieux humides, Prat, 25-VI-1919, Bianor (BC 836581).

**Lectotype here designated** (right specimen).

Remarks: According to ZELTNER (1970), plants from the Iberian peninsula, Southern France, the Balearic Islands, Sardinia and Corsica show morphological features referable to this taxon.

*Erythraea maritima* f. *angustifolia* Knoche, Fl. Balear. 2: 287 (1922), nom. nud.

***Erythraea maritima* var. *erubescens*** Willk. in Linnaea 40: 78 (1876); ≡ *E. maritima* f. *erubescens* (Willk.) Knoche, Fl. Balear. 2: 287 (1922)

Ind. loc.: "Mallorca: in arenosis pinetorum prope cast. Bellver atque juxta Salobrar de Campos. Apr. Majo c. fl."

Type material: Mallorca: in pinetis circa Castell. Bellver, 12-IV-1873. 15-V, Willkomm Herb. balear. n. 218. (**COI-Willkomm**) **Lectotype here designated** (third specimen on left).

Remarks: This plant is a taxonomic synonym of *Centaurium bianoris* (Sennen) Sennen.

*Spicaria balearica* Gand., Fl. Eur. 16: 28 (1889), nom. inval.

## Geraniaceae

*Erodium balearicum* Gand., Fl. Eur. 5: 165 (1885), nom. inval.

*Erodium balearicum* Sennen ex Garcías Font in Butll. Inst. Catalana Hist. Nat. 23: 93 (1923), nom. nud.

*Erodium chamaedryoides* f. *roseum* Warburg in New Phytol. 37: 190 (1938), nom. nud.

*Erodium chium* var. *albiflorum* P. Palau in Anales Inst. Bot. Cavanilles 12: 298 (1955), nom. inval.

*Erodium dryadidolium* Salisb., see **Geranium reichardii**

**Erodium littoreum** var. **multiflorum** Willk., Spanien Balearen: 278 (1876)

Ind. loc.: "Auf dem Gipfel des Puig [de Font Rodones] fand sich auf Sandplätzen eine Form des *Erodium littoreum* Lém., mit mehrblütigen Dolden (var. *multiflorum* mihi!)"

Type material: Menorca: in cacumine montio Puig de Fonte Radonas in arenosis, 2-IV-1873, Willkomm, Herb. balear. n. 120 (**COI-Willkomm**).

Remarks: This variety belongs to *Erodium chium* (L.) Willd. and does not merit further recognition.

*Erodium llorensei* Sennen ex Garcías Font in Butll. Inst. Catalana Hist. Nat. 23: 93 (1923), nom. nud.

**Erodium sennenii** Bianor in Butll. Inst. Catalana Hist. Nat 17: 135 (1917);  $\equiv$  *E. ciconium* f. *sennenii* (Bianor) Bonafè, Fl. Mallorca 3: 97 (1979), comb. inval.

Ind. loc.: "Pont d'Inca et env."

Type material: **BC**, **MA**, **COI** (syntypes).

Remarks: This species should be subsumed under *Erodium ciconium* (L.) L'Her. ex Aiton

*Erodium sennenii* Bianor ex Sennen in Bol. Soc. Ibér. Ci. Nat. 26: 81 (1927), nom. illeg.;  $\equiv$  *E. ciconium* subsp. *sennenii* (Bianor ex Sennen) Romo, Fl. Silvestres Baleares: 183 (1994), nom. inval.

**Erodium × variabile** Leslie in Plantsman 2: 118 (1980)

Ind. loc.: "Plant cultivated at the Royal Horticultural Society's Garden, Wisley, Surrey, 10 July 1979 A.C. Leslie (CGE)"

Type material: CGE.

Remarks: This taxon is believed to be the putative hybrid between *Erodium reichardii* and *E. corsicum* Lém., which has arisen in cultivation (LESLIE, 1980).

*Geranium balearicum* Gand., Fl. Eur. 5: 126 (1885), nom. inval.

*Geranium chamaedryoides* Cav., see **Geranium reichardii** Murray

**Geranium reichardii** Murray in Commentat. Soc. Regiae Sci. Gott. 3: 11, tab. 3 (1780), in Syst. Veg. ed. 14: 618 (1784); ≡ *G. chamaedryoides* Cav., Diss. 4: 197, tab. 76 fig. 2 (1787), nom. illeg.; ≡ *Erodium chamaedryoides* (Cav.) L'Hér., in Aiton, Hort. Kew. 2: 416 (1789), nom. inval.; ≡ *E. dryadidolium* Salisb., Prodr. Stirp. Chap. Allerton: 311 (1796), nom. illeg.; ≡ *E. reichardii* (Murray) DC., Prodr. 1: 649 (1824); ≡ *E. corsicum* subsp. *reichardii* (Murray) Malag., Sin. Fl. Ibér. 46: 722 (1976), comb. inval.

Ind. loc.: “Exemplum hujus vivum debo clmo Reichard, de horto Francofurtensi Senkenbergiano et nova editione Linneani systematis plantarum meritissimo...”

Type material: Not traced.

Remarks: Name in current use (GUITTONNEAU, 1972; BOLÒS & VIGO, 1990); endemic to the Eastern Balearics (Mallorca and Menorca).

*Pailletia balearica* Gand., Fl. Eur. 5: 182 (1885), nom. inval.

## Globulariaceae

**Globularia bianoris** Sennen in Bol. Soc. Ibér. Ci. Nat. 35: 24 (1936)

Ind. loc.: “Baléares: Soller [sic], rochers des montagnes, 900 m. Leg. F. Bianor”

Type material: Baléares: Sóller, rocher des montagnes, 19-IV-1920, Bianor, Pl. Espagne-F. Sennen n.º 4026 (**BC 53809**). **Lectotype here designated**.

Remarks: *Globularia bianoris* is a heterotypic synonym of *Globularia majoricensis* Gand.

*Globularia cambessedesii* Willk., Suppl. Prod. Fl. Hispan.: 140 (1893), nom. illeg.; ≡ *G. vulgaris* subsp. *cambessedesii* (Willk.) Malag., Sin. Fl. Ibérica 96: 1534 (1979), nom. inval.; ≡ *G. vulgaris* subsp. *cambessedesii* (Willk.) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 99 (1983), nom. inval.

Remarks: This name has been traditionally applied to the Balearic plant. However, *Globularia cambessedesii* is illegitimate, and is technically homotypic with *G. valentina* Willk. The earlier legitimate name at the specific level for the plant known as *Globularia cambessedesii* is *G. majoricensis* Gand.

**Globularia majoricensis** Gand. in Bull. Soc. Bot. France 47: 134 (1900); ≡ *G. vulgaris* subsp. *majoricensis* (Gand.) Gand., Nov. Conspp. Fl. Eur.: 239 (1910); ≡ *G. vulgaris* subsp. *majoricensis* (Gand.) O. Bolòs & Molinier in Collect. Bot. (Barcelona) 5: 799 (1958), comb. inval.

Ind. loc.: “In fissuris rupium perpendic. ad Barranco de Soller, Coma den Arbona, Puig Mayor, Puig de Galatso, etc.”

Type material: Baleares, Bco. de Soller, V-1899, M. Gandoher (**MA 115492**). **Lectotype here designated** (upper left specimen).

Remarks: Name not in current use, but it is the earlier legitimate name at the specific level for the endemic plant known as *Globularia cambessedesii* Willk. *Globularia majoricensis* and *G. bianoris* refer to the same entity.

**Globularia spinosa** var. **major** Willk., Rech. Organ. Class. Globular.: 20 (1850); ≡ *G. vulgaris* var. *major* (Willk.) Knoche, Fl. Balear. 2: 402 (1922)

Ind. loc.: Hab. var.  $\beta$  in Hispania, LAMARK! et in montibus insulae Mallorca prope Esporlas, Lluch, etc. CAMBESSIONES!



Fig. 10. Lectotype of *Globularia majoricensis* Gand. (MA).

Type material: Not traced at COI-Willk., B (according to SCHWARZ, 1938). Duplicated material probably held at MPU.

Remarks: As originally described this taxon comprises two taxa of the *Globularia vulgaris* complex. SCHWARZ (1938) typified this taxon on material collected from Mallorca, and this therefore allowed its adscription to the Balearic plant known as *G. majoricensis* Gand.

### Hyacinthaceae

**Brimeura amethystina** var. **duvigneaudii** L. Llorens in Folia Bot. Misc. 4: 55 (1984); ≡ *B. duvigneaudii* (L. Llorens) Rosselló, Mus & Mayol in Anales Jard. Bot. Madrid 49: 294 (1992); ≡ *B. amethystina* subsp. *duvigneaudii* (L. Llorens) L. Llorens in Pla & al., Aprox. Catàleg Flora Illes Balears: 57 (1992)

Ind. loc.: "Majorica, l.d. Penyal Fumat de Formentor, in fissuris rupium. IV. 1979 leg. L. Llorens BC 645144"

Type material: BC (holotype; not traced, probably lost); BC 836586 (isotype).

Remarks: Name in current use (ALMEIDA DA SILVA & al., 2000); endemic to the Eastern Balearic Islands (Mallorca).

**Scilla numidica** subsp. **ebusitana** Romo, Fl. Silvestres Baleares: 325 (1994)

Ind. loc.: "HOLOTYPE: IBIZA, Talaia de Sant Josep, leg. Néstor Torres 17-IX-1983, BC 648031"

Type material: BC (holotype).

Remarks: Gross morphology and karyology does not differ from Balearic and N African herbarium specimens of *Scilla numidica* Poir. and on these grounds it does not seem advisable to treat the pytiusic plant as a separate taxon.

### Hypericaceae

*Androsaemum cambessedesii* Coss. ex Nyman, Consp. Fl. Eur. 1: 131 (1878), nom. nud.

**Hypericum balearicum** L., Sp. Pl.: 783 (1753); ≡ *H. verrucosum* Salisb., Prodr. Stirp. Chap. Allerton: 369 (1796), nom. illeg.; ≡ *Psorophytum undulatum* Spach, Hist. Nat. Veg. Phan. 5: 413 (1836); Spach in Ann. Sci. Nat. Bot. 2 ser. 5: 360 (1836); ≡ *P. balearicum* (L.) Kimura in Kakai & Honda in Nova Fl. Jap. 10: 22 (1951)

Ind. loc.: "Habitat in Majorca"

Type material: LINN 943.1 (lectotype; ROBSON, 1985)

Remarks: Name in current use (RAMOS, 1993); endemic to the Balearic Islands.

**Hypericum balearicum** var. **ochroleucum** F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 242 (1914)

Ind. loc.: "Diese beobachten wir am Wege nach der Calóbra [sic]"

Type material: To be searched for at GAT.

Remarks: Included by RAMOS (1983) within the variation of *Hypericum balearicum* L.

**Hypericum cambessedesii** Coss. ex Barceló, Fl. Baleares: 86 (1880); Coss. ex Marès & Vigin., Cat. Pl. Vasc. Baléares: 330 (1880);  $\equiv$  *Androsaemum cambessedesii* (Coss. ex Barceló) Gand, Nov. Consp. Fl. Eur.: 91 (1910);  $\equiv$  *H. hircinum* subsp. *cambessedesii* (Coss. ex Barceló) Sauvage in Bull. Soc. Sci. Nat. Maroc 38: 127 (1959);  $\equiv$  *H. hircinum* subsp. *cambessedesii* (Coss. ex Barceló) Malag., H. Bianor Educador Botánico Baleares: 149 (1971), comb. inval.;  $\equiv$  *H. hircinum* var. *cambessedesii* (Coss. ex Barceló) Á. Ramos in Trab. Dep. Bot. 12: 49 (1983)

Ind. loc.: "Mallorca: Aumallutx (Camb.), Turixant, Torrente de Pareys, Barranco de Sóller, Gorch-Blau! en el álveo de los torrentes, comun [sic]. (V.[ista]. V[iva].)"

Type material: P (lectotype; SAUVAGE, 1958: 127); K (syntype; ROBSON, 1985).

Remarks: Name in current use (RAMOS, 1993); endemic to the island of Mallorca. The year of effective publication of the work of Barceló where the name was validated was probably 1879, instead 1880. Both Barceló and Marès & Viginineix have been indistinctly used in published works as the authors who validated the name. However, ROBSON (1985) reported that NYMAN (1878) validated the name of Cosson, but this is not true since the name applied by Nyman (*Androsaemum cambessedesii* Coss. ex Nyman) was not validly published. ROBSON (1985) erroneously stated that the holotype of *Hypericum cambessedesii* was held at K [«In insulae Majoris torrente dicto Malluch prope Lluch, 1824, Cambessèdes»].

*Hypericum confine* Gand., Fl. Eur. 5: 93 (1885), nom. inval.

*Hypericum minoricense* Gand., Fl. Eur. 5: 93 (1885), nom. inval.

*Hypericum psammitis* Gand., Fl. Eur. 5: 93 (1885), nom. inval.

*Hypericum tomentosum* var. *glabrescens* Porta in Nuovo Giorn. Bot. Ital. 19: 301 (1887), nom. nud.

*Hypericum verrucosum* Salisb., see **Hypericum balearicum** L.

*Psorophytum delarochei* Gand., Fl. Eur. 5: 98 (1885), nom. inval.

*Psorophytum glaucescens* Gand., Fl. Eur. 5: 98 (1885), nom. inval.

*Psorophytum ellipticum* Gand., Fl. Eur. 5: 98 (1885), nom. inval.

*Psorophytum microphyllum* Gand., Fl. Eur. 5: 98 (1885), nom. inval.

*Psorophytum psammitis* Gand., Fl. Eur. 5: 98 (1885), nom. inval.

*Psorophytum undulatum* Spach, see **Hypericum balearicum** L.

## Iridaceae

*Crocus balearicus* Gand., Fl. Eur. 22: 230 (1890), nom. inval.

***Crocus cambessedesii*** J. Gay in Bull. Sci. Nat. Géol. 25: 320 (1831);  $\equiv$  *C. minimus* f. *cambessedesii* (J. Gay) Knoche, Fl. Balear. 1: 390 (1921);  $\equiv$  *C. minimus* subsp. *cambessedesii* (J. Gay) O. Bolòs, Molinier & P. Monts in Acta Geobot. Barcinon. 5: 96 (1970);  $\equiv$  *C. minimus* subsp. *cambessedesii* (J. Gay) Malag., H. Bianor Educador Botánico Baleares: 149 (1971), comb. inval.;  $\equiv$  *C. minimus* subsp. *cambessedesii* (J. Gay) Malag., Sin. Fl. Ibér. ed. 2, fasc. 110: 1746 (1980), comb. superfl.

Ind. loc.: "Habitat in Majorca"

Type material: K (lectotype; MATHEW, 1983: 39).

Remarks: Name in current use (MATHEW, 1983); endemic to the Eastern Balearics (Mallorca and Menorca).

*Crocus comptemptus* Gand., Fl. Eur. 22: 230 (1890), nom. inval.

***Crocus magontanus*** J.J. Rodr. in Anales Soc. Esp. Hist. Nat. 3: 56 (1874);  $\equiv$  *C. cambessedesii* subsp. *magontanus* (J.J. Rodr.) Gand., Nov. Consp. Fl. Eur.: 457 (1910)

Ind. loc.: "Hab. Prefiere los sitios pedregosos: La Mola, Binisarmeña, San Antonio, inmediaciones de la Mezquita, camino de Adaya [sic]; Forma-nou en Mahon [sic]; Santa Ponsa en Alayor; cerca de la playa de Algajrens, Santa Ana, inmediaciones de la cala de Santa Galdana en Ciudadela.- Noviembre a febrero"

Type material: Binisarmeña (Mahon), sitios pedregosos, 17-XII-1872, Rodriguez (COI-Willkomm). **Lectotype here designated** (upper right specimen).

Remarks: RODRÍGUEZ (1904) reported that his *Crocus magontanus* was indistinguishable from *C. cambessedesii* J. Gay.

*Gladiolus paui* Sennen, Campagn. Bot.: 118 (1936), nom. nud.

*Gynandriris sisyrinchium* f. *parviflora* Pau in Actas Soc. Esp. Hist. Nat. 29: 69 (1990), nom. nud.

***Iris majoricensis*** Barceló, Fl. Baleares: 446 (1881);  $\equiv$  *I. florentina* subsp. *majoricensis* (Barceló) Gand., Nov. Consp. Fl. Eur.: 454 (1910)

Ind. loc.: "Mallorca: Vall d'en March, entre Pollensa y Lluch: raro. (V[ista]. V[iva].)"

Type material: Not traced, probably lost.

Remarks: This plant was certainly described from naturalized *Iris* populations and has not been refound again. Some authors have suggested that it should be identified with garden cultivars of *Iris albicans* Lange (KNOCHE, 1921; WEBB & CHATER, 1980).

***Iris sisyrinchium* var. *major*** Cambess. in Mém. Mus. Hist. Nat. 14: 314 (1827)

Ind. loc.: "Ad margines viarum in Ebuso. Florebat Majo. Hab. in regno Neapolitano (Tenore), Siciliâ (Biv. Bern.), regno Valentino!"

Type material: To be searched for at MPU.

Remarks: Included by GOLDBLATT (1980) within *Gynandriris sisyrinchium* (L.) Parl. without formal recognition.

***Ixia bulbocodium* var. *minima*** Cambess. in Mém. Mus. Hist. Nat. 14: 314 (1827); ≡ *Trichonema bulbocodium* var. *minima* (Cambess.) Barceló, Fl. Baleares: 449 (1881)

Ind. loc.: "In collibus petrosis prope Artam in insulâ Majore"

Type material: To be searched for at MPU.

Remarks: Most probably this taxon should be referred to *Romulea columnae* Sebastiani & Mauri or to *R. asumptionis* Garcias Font, but no firm conclusion could be drawn from the original diagnosis.

*Limniris balearica* Gand., Fl. Eur. 22: 250 (1890), nom. inval.

***Romulea asumptionis*** Garcias Font in Collect. Bot. (Barcelona) 3: 359 (1953); ≡ *R. columnae* subsp. *asumptionis* (Garcias Font) O. Bolòs & Molinier in Collect. Bot. (Barcelona) 5: 788 (1958), comb. inval.; ≡ *R. columnae* subsp. *asumptionis* (Garcias Font) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1215 (1990)

Ind. loc.: "Hab. Baleares: in claris de la garriga, prope l'Ullal, in loco dicto Torre de Canyamel, insulae Majoris, solo argilloso calcareo, ad 30 m. alt."

Type material: terres primes litorals a sa Torre de Canyamel. loc. cla. IV-1950, Garcias Font (**BC 145163**). **Lectotype here designated.**

Remarks: Name in current use (BOLÒS & al., 1990; ALOMAR & al., 1997); endemic to the Balearic archipelago. The inclusion of *Romulea asumptionis* under *R. columnae* Sebastiani & Mauri (even as a synonym, cf. MARAIS, 1980) does not adequately reflect the degree of morphological and anatomical differentiation observed between the two taxa. Further, no intermediate specimens have been detected throughout the Balearic Islands, even when the two taxa grow together. All evidence suggests that *R. asumptionis* should be recognized as an endemic species of its own.

*Romulea balearica* Gand., Fl. Eur. 22: 264 (1890), nom. inval.

*Romulea rollii* var. *lutea* P. Palau in Anales Inst. Bot. Cavanilles 11: 501 (1954), nom. inval.; ≡ *R. rollii* subsp. *lutea* (P. Palau) Colom, Biogeografia Baleares ed. 2, 1: 198 (1978), nom. inval.

## Isoetaceae

*Isoetes balearica* Gand., Fl. Eur. 27: 196 (1891), nom. inval.; ≡ *I. durieuui* subsp. *balearica* (Gand.) Gand., Nov. Conspl. Fl. Eur.: 522 (1910), nom. inval.

*Isoetes tenuicola* Gand., Fl. Eur. 27: 195 (1891), nom. inval.; ≡ *I. velata* subsp. *tenuicola* (Gand.) Gand., Nov. Conspl. Fl. Eur.: 522 (1910), nom. inval.

### Juncaceae

*Juncastrum balearicum* Gand., Fl. Eur. 23: 238 (1890), nom. inval.

***Juncus glandulosus*** Porta in Nuovo Giorn. Bot. Ital. 19: 320 (1887)

Ind. loc.: "M[ajorca]. In locis humosis aquaticis inter Gorch-blau et Lluc. 19 Jun."

Type material: To be searched for at FI.

Remarks: No information concerning this taxon has been made available to us. It is not included by SNOGERUP (1980) in the European account of *Juncus*, but a positive identification of the species remains to be done.

*Juncus spinosus* var. *prolifer* Bianor in Butll. Inst. Catalana Hist. Nat 17: 141 (1917), nom. nud.

*Juncus fontanesii* f. *balearicus* Sennen ex Bonafé, Fl. Mallorca 1: 278 (1977), nom. inval.

*Phylloschoenus balearicus* Gand., Fl. Eur. 24: 203 (1890), nom. inval.

*Phylloschoenus majoricus* Gand., Fl. Eur. 24: 202 (1890), nom. inval.

*Tenageia balearica* Gand., Fl. Eur. 24: 220 (1890), nom. inval.

### Juncaginaceae

*Triglochin balearicum* Gand., Fl. Eur. 23: 166 (1890), nom. inval.

### Lamiaceae

*Chamaedrys balearica* Gand., Fl. Eur. 17: 347 (1889), nom. inval.

*Chamaedrys majorica* Gand., Fl. Eur. 17: 340 (1889), nom. inval.

***Lavandula dentata* var. *balearica*** Gingins, Hist. Nat. Lavandes: 139 (1826)

Ind. loc.: "Var. β. in insulis Balearicis, locis maritimis, Ivicae frequens, (De la Roche.) in monte Mongo prope Dianiam, (Denia) reg. Valenziae. (De la Roche)."

Type material: To be searched for at G-DC.

Remarks: This variety is poorly defined and should not merit taxonomic recognition. In addition, BOLÒS & al. (1996) reported that this var. *balearica* should be identified with var. *dentata* since the type locality given in the protologue of *Lavandula dentata* L. was Calpe (situated not far from Denia, Eastern Iberian Peninsula).

*Mentha aquatica* f. *hirsuta* Knoche, Fl. Balear. 2: 359 (1922), nom. nud.

***Mentha balearica* Sennen & Pau in Bol. Soc. Ibér. Ci. Nat. 33: 64 (1934)**

Ind. loc.: «Hab.- Baléares: Coll de Soller. Leg. F. Bianor»

Type material: : Voie ferrée de Soller (près de Palma), 16-VIII-1913, Bianor, Pl. Espagne-F. Sennen n.<sup>o</sup> 1421 (**BC 50451**). **Lectotype here designated.**

Remarks: This taxon is not worthy of recognition from *Mentha suaveolens* Ehrh.

***Mentha balearica* var. *laxifoliata* Sennen in Bol. Soc. Ibér. Ci. Nat. 33: 65 (1934)**

Ind. loc.: “Baléares: Pont d’Inca. leg. F. Bianor”

Type material: To be searched for at BC.

Remarks: This variety should probably be included within the variation of *Mentha suaveolens*.

***Mentha bianoris* Sennen in Bol. Soc. Ibér. Ci. Nat. 33: 65 (1934)**

Ind. loc.: “Baléares: Pont d’Inca. Leg. F. Bianor”

Type material: Baléares: Pont d’Inca, lieux humides, 23-VIII-1917, Bianor, Pl. Espagne-F. Sennen n.<sup>o</sup> 3176 (**BC 50452**). **Lectotype here designated.**

Remarks: This taxon is not worthy of distinct treatment from *Mentha suaveolens* Ehrh.

***Mentha insularis* var. *balearica* Willk. in Linnaea 40: 61 (1875); ≡ *M. rotundifolia* var. *balearica* (Willk.) Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 18 (1911)**

Ind. loc.: “Menorca: in locis humidis pr. Mahon [sic], Rodriguez [sic]! (Sept. 1873)”

Type material: Biniaixa (Mahon), sitios húmedos, 21-IX-1873, Rodríguez (**COI-Willkomm**). **Lectotype here designated** (single specimen).

Remarks: The lectotype should be included within the variation of *Mentha suaveolens* Ehrh., and further studies might prove that it is referable to *M. suaveolens* subsp. *insularis* (Req.) Greuter.

***Mentha rodriguezii* Malinv. in Marès & Vigin., Cat. Pl. Vasc. Baléares: 335 (1880); ≡ *M. rotundifolia* subsp. *rodriguezii* (Malinv.) Gand., Nov. Consp. Fl. Eur.: 373 (1910); ≡ *M. rotundifolia* var. *rodriguezii* (Malinv. ex Marès & Vigin.) Knoche, Fl. Balear. 2: 358 (1922); ≡ *M. rotundifolia* subsp. *rodriguezii* (Malinv. ex Marès & Vigin.) Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), comb. inval.**

Ind. loc.: “MINORQUE: Hab. barranco de Algendar, bords du torrent”

Type material: To be searched for at MPU.

Remarks: HARLEY (1972) identified this plant with *Mentha × maximiliana* F.W. Schultz, a hybrid arisen from the cross between *M. aquatica* L. and *M. suaveolens* Ehrh.

***Micromeria barceloi* Willk. in Oesterr. Bot. Z. 25: 111 (1875); Willk. in Linnaea 40: 63 (1876); ≡ *M. approximata* subsp. *barceloi* (Willk.) Gand., Nov. Consp. Fl. Eur.: 367 (1910); ≡ *Satureja barceloi* (Willk.) Pau in Actas Soc. Esp. Hist. Nat. 29: 68 (1900)**

Ind. loc.: “Mallorca: in collibus calcareis aridis pr. Palma atque in insula Iviza (Barceló). Floret Decembre”

Type material: Mallorca: in collibus (...) aridis Son Español, Prope Palma, XII-1872, Barceló, Herb. balear. n. 515. (**COI-Willkomm**). **Lectotype here designated** (bottom specimen).

Remarks: *Micromeria barceloi* should be referred to *M. inodora* (Desf.) Benth. (MORALES, 1991).

***Micromeria filiformis* var. *fragilis* Sennen in Bull. Géogr. Bot. 24: 248 (1914)**

Ind. loc.: "Cette variété [sic], bien que plus commune à Soller [sic], se trouve aussi à Palma"

Type material: Collines, près des murs (lieux herbeux) Sóller. 28-VI-1914, Bianor (**BC-Sennen** 836601). **Lectotype here designated**.

Remarks: Not included by MORALES (1991) in his account of the Spanish and Balearic taxa of *Micromeria* Benth. The type material should be included within the variation of highly polymorphic *M. filiformis* (Aiton) Benth.

***Micromeria filiformis* var. *glandulosa* Sennen & Pau in Sennen in Treb. Inst. Catalana Hist. Nat. 3: 193 (1917);**  $\equiv$  *Satureja filiformis* var. *glandulosa* (Sennen & Pau) Sennen in Bol. Soc. Ibér. Ci. Nat. 32: 62 (1933);  $\equiv$  *Micromeria glandulosa* (Sennen & Pau) Sennen in Bol. Soc. Ibér. Ci. Nat. 32: 62 (1933);  $\equiv$  *Satureja glandulosa* (Sennen & Pau) Sennen in Bol. Soc. Ibér. Ci. Nat. 32: 62 (1933);  $\equiv$  *Micromeria filiformis* subsp. *glandulosa* (Sennen & Pau) Bonafè, Fl. Mallorca 4: 56 (1980), comb. inval.

Ind. loc.: "Hab.- Baléares, Soller [sic], fentes des rochers, jusqu'à 900 m. et peut-être plus"

Type material: Baléares: Sóller, fentes des rochers, jusque vers 900 m. 27-VI-1914, Bianor, Pl. Espagne-F. Sennen n.º 2038 (**BC-Sennen** 836600). **Lectotype here designated**.

Remarks: This taxon is poorly defined morphologically and also lacks ecological or geographical distinction. It is better to include it within *Micromeria filiformis* (Aiton) Benth., as did MORALES (1991), as an ecotype growing in rock crevices of southernly expositions.

*Micromeria filiformis* f. *majoricensis* L. Chodat in Bull. Soc. Bot. Genève 15: 181 (1924), nom. nud.

***Micromeria filiformis* var. *rubrifolia* Sennen in Treb. Inst. Catalana Hist. Nat. 3: 193 (1917);**  $\equiv$  *Satureja filiformis* var. *rubrifolia* (Sennen) Sennen in Bol. Soc. Ibér. Ci. Nat. 32: 61 (1933)

Ind. loc.: "Hab.- Baleares [sic]: Soller [sic], murs et collines.- Bianor in schedula"

Type material: Baléares: Sóller, collines, murs, 28-VI-1914, Bianor, Pl. Espagne-F. Sennen n.º 2041 (**BC-Sennen** 836598). **Lectotype here designated**.

Remarks: None of the morphological characters used to distinguish it from *Micromeria filiformis* (Aiton) Benth. appear to be constant. We agree with MORALES (1991) in treating it as a synonym of *M. filiformis* (Aiton) Benth.

*Micromeria ivicensis* Gand., Fl. Eur. 17: 196 (1889), nom. inval.

*Micromeria × knochei* Sennen & Bianor in Bull. Géogr. Bot. 24: 248 (1914), nom. nud.

***Micromeria knochei*** Sennen & Bianor in Sennen in Treb. Inst. Catalana Hist. Nat. 3: 193 (1917); Sennen in Bol. Soc. Ibér. Ci. Nat. 32: 63 (1933); ≡ *Satureja knochei* (Sennen & Bianor) Sennen in Bol. Soc. Ibér. Ci. Nat. 32: 63 (1933)

Ind. loc.: "Hab.- Baléares, collines de Palma"

Type material: Baléares: Collines près de Palma, V-1913, Bianor, Pl. Espagne-F. Sennen n.º 2039 (**BC-Sennen 836597**). **Lectotype here designated.**

Remarks: Not worthy of recognition from *Micromeria microphylla* (Dum d'Urv.) Benth. (MORALES, 1991).

***Micromeria rodriguezii*** Freyn & Janka in Oesterr. Bot. Z. 24: 16 (1874); ≡ *M. nervosa* subsp. *rodriguezii* (Freyn & Janka) Nyman, Consp. Fl. Eur. 3(4): 590 (1881); ≡ *Satureja rodriguezii* (Freyn & Janka) Pau in Actas Soc. Esp. Hist. Nat. 29: 68 (1900); ≡ *Micromeria nervosa* subsp. *rodriguezii* (Freyn. & Janka) Gand., Nov. Consp. Fl. Eur.: 367 (1910); ≡ *M. biflora* var. *rodriguezii* (Freyn & Janka) Knoche, Fl. Balear. 2: 346 (1922); ≡ *Satureja microphylla* subsp. *majoricensis* L. Chodat in Bull. Soc. Bot. Genève 15: 247 (1924), nom. superfl.; ≡ *S. microphylla* [subsp. *majoricensis*] var. *typica* L. Chodat in Bull. Soc. Bot. Genève 15: 247 (1924), nom. illeg.; ≡ *S. rodriguezii* (Freyn & Janka) Briq. ex P. Monts. in Collect. Bot. (Barcelona) 3: 411 (1953), comb. inval.; ≡ *Micromeria biflora* subsp. *rodriguezii* (Freyn & Janka) Malag., H. Bianor Educador Botánico Baleares: 150 (1971), comb. inval.; ≡ *S. biflora* subsp. *rodriguezii* (Freyn & Janka) Knoche ex Colom, Biogeografía Baleares ed. 2, 1: 204 (1978), comb. inval.; ≡ *S. cordata* subsp. *rodriguezii* (Freyn & Janka) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 94 (1983); ≡ *S. cordata* subsp. *rodriguezii* (Freyn & Janka) Greuter & Burdet in Willdenowia 14: 303 (1984), comb. superfl.; ≡ *Micromeria filiformis* subsp. *rodriguezii* (Freyn & Janka) Bonafè, Fl. Mallorca 4: 56 (1980), comb. inval.; ≡ *M. filiformis* subsp. *rodriguezii* (Freyn & Janka) Bonafè ex Greuter, Burdet & Long, Med-checklist 3: 328 (1986); ≡ *Satureja microphylla* subsp. *rodriguezii* (Freyn & Janka) O. Bolòs & Vigo, Fl. Països Catalans 3: 301 (1996); ≡ *S. rodriguezii* (Freyn & Janka) Rivas-Mart., Costa & Loidi in Itinera Geobot. 6: 217 (1992), comb. superfl.; ≡ *Micromeria microphylla* subsp. *rodriguezii* (Freyn & Janka) Romo, Fl. Silvestres Baleares: 261 (1994), comb. superfl.

Ind. loc.: "Hab. in insulis Balearibus. In Menorca: «Varranco del Favarer prope Mahon ad rupes calcareas.» - «In declivibus apricis vallis Son Blanc cum *M. filiformis* Benth.» - «Varranco de Algendar an Kalkfelsen.» In Mallorca: «Bellver bei Palma» - «Stadtmauern von Palma» (leg. Dr. Hegelmaier)"

Type material: To be searched for at B, BP or CL.

Remarks: According to MUS & ROSSELLÓ (1987) *Micromeria rodriguezii* falls within the variation of *M. microphylla* (Dum d'Urv.) Benth. and does not merit any taxonomic recognition.

***Micromeria rodriguezii* var. *acuminifolia*** Sennen in Bol. Soc. Ibér. Ci. Nat. 32: 62 (1933); ≡ *Satureja rodriguezii* var. *acuminifolia* (Sennen) Sennen in Bol. Soc. Ibér. Ci. Nat. 32: 62 (1933)

Ind. loc.: "Baléares: Bords de la route de Palma à Valdemoso [sic] Leg. F. Bianor"

Type material: Fossé - Route de palma à Valldemossa. Soller (Mallorca Baléares), 26-XII-1911, Bianor (**BC-Sennen** 836599). **Lectotype here designated.**

Remarks: The type material does not show any morphological feature supporting its distinction as a separate taxon from *Micromeria microphylla* (Dum d'Urv.) Benth.

***Micromeria rodriguezii* f. *major*** Sennen in Treb. Inst. Catalana Hist. Nat. 3: 192 (1917);  
≡ *M. rodriguezii* var. *major* (Sennen) Sennen in Bol. Soc. Ibér. Ci. Nat. 32: 62 (1933)

Ind. loc.: "Hab.- Baléares, Route de Valdemora [sic] à 6 kilom. de Palma - Bianor in sched."

Type material: Baléares: Route de Valdemora, à 6 km de Palma, 13-VII-1914, Bianor, Pl. Espagne-F. Sennen n.º 2036 (**BC-Sennen** 836596). **Lectotype here designated.**

Remarks: The type material does not show any morphological feature supporting its distinction as a separate taxon from *Micromeria microphylla* (Dum d'Urv.) Benth.

***Nepeta laurentii*** Sennen in Bol. Soc. Ibér. Ci. Nat. 32: 20 (1933); ≡ *N. cataria* f. *laurentii* (Sennen) Font Quer, Flora Hispánica-Herbario Normal, Cent. VII, nº 675 (1951) in sched.; ≡ *N. cataria* f. *laurentii* (Sennen) Font Quer ex Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 94 (1983), comb. superfl.; ≡ *N. cataria* var. *laurentii* (Sennen) Bonafè, Fl. Mallorca 4: 46 (1980), comb. inval.

Ind. loc.: "Baléares: Artá, Corrals de son Samson"

Type material: **BC-Sennen** (lectotype according to UBERA & VALDÉS, 1983: 20).

Remarks: Not recognized as distinct from *Nepeta cataria* L. by UBERA & VALDÉS (1983).

***Origanum balearicum*** Pourr. ex Lange in Vidensk. Meddel. Dansk. Naturhist. Fören. Kjöbenhavn 1863: 5 (1864)

Ind. loc.: "In insulis Balearicis passim (Pourr.!)"

Type material: To be searched for at C and MAF.

Remarks: According to IETSWAART (1980) *Origanum balearicum* Pourr. ex Lange, *O. lusitanicum* Rouy in Naturaliste 12: 92 (1882) and *O. paui* Martínez in Mem. Soc. Esp. Hist. Nat. 14: 463 (1934) are synonyms of *O. × majoricum*.

***Origanum × majoricum*** Cambess. in Mém. Mus. Hist. Nat. 14: 296 (1827), pro sp.;  
≡ *Majorana majorica* (Cambess.) Briq. in Engl. & Prantl, Nat. Pflanzenfam. IV, 3a: 308 (1896); ≡ *Amaracus majoricum* (Cambess.) Samp., Fl. Portug. ed. 2: 511 (1946);  
≡ *Origanum × applii* nothosubsp. *majoricum* (Cambess.) Xifreda in Taxon 39: 524 (1990)

Ind. loc.: "In aridis insulae Majoris prope Incam"

Type material: In aridis insula Majoris propè Incam, 25-V-1825, Cambessedès (**MPU-Knoche**). **Lectotype here designated** (single specimen); K (isotype).

Remarks: Name in current use (FERNANDES, 1971; XIFREDA, 1990). Described from the Balearic Islands, but reported elsewhere in the wild and also in the gardens (IETSWAART, 1980). Earlier claims (MARTÍNEZ, 1935; MARCOS, 1956) suggested that

*Origanum majoricum* is a mere variant of *O. majorana* L. However, more detailed studies lead us to believe that *O. majoricum* is the hybrid between *O. majorana* and *O. vulgare* L. subsp. *virens* (Hoffmanns. & Link) Ietswaart (FERNANDES, 1971; IETSWAART, 1980; XIFREDA, 1990).

*Phlomis balearica* R. Chodat in Bull. Soc. Bot. Genève 11: 61 (1905), nom. nud.

**Phlomis italicica** L., Syst. Nat. ed. 10, 2: 1109 (1759)

Ind. loc.: Not stated

Type material: NICE (neotype; ALZIAR & CAFFERTY, 1997); BM (isotype).

Remarks: Name in current use (GREUTER & al., 1986); endemic to the Eastern Balearics (Mallorca and Menorca).

*Piperella balearica* Gand., Fl. Eur. 17: 197 (1889), nom. inval.

*Piperella minuta* Gand., Fl. Eur. 17: 197 (1889), nom. inval.

*Prasium balearicum* Gand., Fl. Eur. 17: 227 (1889), nom. inval.

*Prasium dilatatum* Gand., Fl. Eur. 17: 227 (1889), nom. inval.

*Prasium insulare* Gand., Fl. Eur. 17: 227 (1889), nom. inval.

**Rosmarinus officinalis** L. var. **palaui** O. Bolòs & Molinier in Collect. Bot. (Barcelona) 5: 757 (1958); ≡ *R. officinalis* subsp. *palaui* (O. Bolòs & Molinier) Malag., Subsp. Var. Geogr.: 23 (1973); ≡ *R. officinalis* subsp. *palaui* (O. Bolòs & Molinier) Bonafé, Fl. Mallorca 4: 68 (1980), comb. inval.; ≡ *R. officinalis* subsp. *palaui* (O. Bolòs & Molinier) Romo, Fl. Silvestres Baleares: 266 (1994), comb. superfl.

Ind. loc.: “Typus: BC 125141, leg. M. Garriga.”

Type material: **BC** (holotype).

Remarks: This is a doubtful taxon requiring further study. Few of the morphological characters used to distinguish it from typical *Rosmarinus officinalis* L. appear to be constant, and only the decumbent habit seems to characterize this plant.

**Satureja rodriguezii** var. **condensata** L. Chodat in Bull. Soc. Bot. Genève 15: 245 (1924); ≡ *S. microphylla* [subsp. *majoricensis*] var. *condensata* (L. Chodat) L. Chodat Bull. Soc. Bot. Genève 15: 247 (1924); ≡ *S. rodriguezii* subsp. *condensata* (L. Chodat) Colom, Biogeografía Baleares ed. 2, 1: 237 (1978), comb. inval.; ≡ *Micromeria filiformis* var. *condensata* (L. Chodat) Bonafé, Fl. Mallorca 4: 56 (1980), comb. inval.

Ind. loc.: “Hab. in siccis maritimis prope Torre den [sic] Pau”

Type material: Torre d'en Pau, III-IV-1921, R. Chodat (**G**). Lectotype, selected here.

Remarks: None of the characters used by CHODAT (1924) to define this variety are present in the individuals growing at the type locality. This taxon should be included within the variation of *Micromeria microphylla* (Dum d'Urv.) Benth.

**Satureja rouyana** Briq., Lab. Alp. Mar.: 442 (1895);  $\equiv$  *Calamintha rouyana* (Briq.) Rouy, Fl. France 11: 336 (1909);  $\equiv$  *C. officinalis* [subsp. *nepeta* var. *confusa*] subvar. *rouyana* (Briq.) Reyn in Monde Pl. 21, 3 ser. 6: 6 (1920);  $\equiv$  *C. rouyana* (Briq.) Pericás & Rosselló in Candollea 42: 397 (1987), comb. superfl.

Ind. loc.: "Baléares... d'après l'exsiccata de Porta et Rigo"

Type material: Balearium insula Majore, in rupium fissuris aglareis subjectis in Mte. Puig Major de Torrella, la casa de la Neu, sol. calcar. 12-1300 m s.m. 6-VIII-1885, Porta & Rigo (G). **Lectotype here designated** (bottom specimen).

Remarks: Name in current use (GREUTER & al., 1986; PERICÁS & al., 1987; BOLÒS & al., 1996); endemic to the Balearic Islands (Mallorca). It has been recently included within the variation of *Calamintha nepeta* (L.) Savi subsp. *nepeta* (MORALES & LUQUE, 1997). However, these authors did not study any type material and all sheets labelled as *C. rouyana* which they studied were misidentifications with *C. nepeta* (Morales, pers. com.).

*Scordium balearicum* Gand., Fl. Eur. 17: 336 (1889), nom. inval.

*Scorodonia lancifolia* Moench, see **Teucrium asiaticum** L.

**Scutellaria balearica** Barceló in Anales Soc. Esp. Hist. Nat. 6: 399 (1877)

Ind. loc.: "Florece en Mayo y Junio en Mallorca, en el monte Puig de Torrella, en sitios sombríos y en consorcio á veces con la *Sibthorpia africana* L. Esta especie me ha sido comunicada por nuestro jóven y estudiioso consocio D. Antonio Crespí, y fué recogida por él mismo en el expresado monte"

Type material: Soller (Majorque), lieux pierreux frais, 12-VI-1878, Crespí (**MPU-Knoche**). **Neotype, here designated**. The original material was not traced at BC, COI-Willkomm, MA, MAF, MPU and P, and it has probably been lost.

Remarks: Name in current use (GREUTER & al., 1986); endemic to the Balearic Islands (Mallorca).

**Scutellaria vigineixi** Marès in Marès & Vigin., Cat. Pl. Vasc. Baleáres: 221 (1880)

Ind. loc.: "MAJORQUE: Rochers du torrent de la couma au bas de la Mamaliouda [sic], au pied nord de la serra de Soller [sic] (15 juin 1852).- Rochers d'Ariant près Pollenza (5 juin 1852)"

Type material: Rochers d'Ariant près Pollenza, Majorque, 5-VI-1852, G. Vigineix (**MPU-Knoche**). **Lectotype here designated**.

Remarks: *Scutelaria vigineixi* was published nearly simultaneously as *Scutellaria balearica*, the earlier available name for the Balearic endemic plant, and to which it should be referred.

**Sideritis romana** var. *ibicensis* Pau in Actas Soc. Esp. Hist. Nat. 28: 214 (1899)

Ind. loc.: "Colinas de la ciudad"

Type material: Not traced at MA, MAF and BC.

Remarks: Probably a mere variant of *Sideritis romana* L. without any taxonomic value. Material of *S. romana* from the island of Eivissa does not differ from other populations of the species.

*Stachys balearica* Gand., Fl. Eur. 17: 307 (1889), nom. inval.

**Stachys lusitanica** var. **balearica** Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 18 (1911);  $\equiv$  *S. lusitanica* var. *balearica* (Sennen & Pau ex Pau) Colom, Biogeografía Baleares ed. 2, 1: 196 (1978), comb. inval.;  $\equiv$  *S. germanica* var. *balearica* (Sennen & Pau ex Pau) Bonafé, Fl. Mallorca 4: 42 (1980), comb. inval.

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: Soller, s.d., Bianor (MA 102950). **Lectotype here designated.**

Remarks: This taxon should be included within the variation of *Stachys germanica* L.

*Stoechas balearica* Gand., Fl. Eur. 17: 130 (1889), nom. inval.

**Teucrium asiaticum** L., Mant. Pl.: 80 (1767);  $\equiv$  *Scorodonia lancifolia* Moench, Methodus: 384 (1794), nom. illeg.;  $\equiv$  *Teucrium lancifolium* (Moench) Boiss., Diag. Orient. ser. 2, fasc. 4: 56-57 (1859), nom. inval.

Ind. loc.: "Habitat in India Orientali? [sic]"

Type material: LINN 722.17 (syntype).

Remarks: Name in current use (GREUTER & al., 1986); endemic to the Eastern Balearic Islands (Mallorca and Menorca). Despite the specific restrictive the name *Teucrium asiaticum* applies to the Balearic plant.

*Teucrium balearicum* Coss. ex Willk., Spanien Balearen: 329 (1876), nom. nud.

**Teucrium capitatum** var. **calycinum** Willk. in Linnaea 40: 67 (1876)

Ind. loc.: "Coll de Sóller [sic], Barceló Jun. 1871"

Type material: Coll de Sóller, VI-1871, Barcelò, (**COI-Willkomm**). **Lectotype here designated** (single specimen). **PH-RODR** (isolectotype)

Remarks: The type material shows affinities both with *Teucrium capitatum* L. and *T. cossonii* D. Wood, and is probably of hybrid origin. Unfortunately this statement cannot be deeply substantiated on the herbarium specimen alone. Further research at the type locality might be useful to provide additional specimens for study.

*Teucrium capitatum* var. *carneum* P. Palau in Anales Inst. Bot. Cavanilles 11: 515 (1954), nom. inval.;  $\equiv$  *T. capitatum* subsp. *carneum* (P. Palau) Colom, Biogeografía Baleares ed. 2, 1: 199 (1978), nom. inval.

*Teucrium capitatum* var. *polycephalum* Bianor in Butll. Inst. Catalana Hist. Nat. 17: 142 (1917), nom. nud.

*Teucrium capitatum* var. *polystachyum* Bianor in Butll. Inst. Catalana Hist. Nat. 17: 142 (1917), nom. nud.

*Teucrium capitatum* var. *spicatum* Rouy Bull. Soc. Bot. France 35: 321 (1888), nom. illeg.

**Teucrium cossonii** D. Wood, see **T. polium** var. **pulverulentum** Barceló

**Teucrium cossonii** subsp. **punicum** Mayol, Mus Rosselló & N. Torres in Boll. Soc. Hist. Nat. Balears 32: 154 (1991)

Ind. loc.: "Typus: Ebussus locus dicto Ses Torretes, pr. Corona, in locis salsis siccis et apertis praesertim ad rupes, 16-VI-1990, leg. M. Mayol, M. Mus, J.A. Rosselló & N. Torres (MA, holo-, isotypi plurimi)"

Type material: MA (holotype).

Remarks: Name in current use (ALOMAR & al., 1997); endemic to the Western Balearics (Eivissa and minor islets). *Teucrium cossonii* subsp. *punicum* and *T. cossonii* f. *vedranense* O. Bolòs & Vigo refer to the same taxon.

**Teucrium dunense** var. **rubriflora** Sennen in Bol. Soc. Ibér. Ci. Nat. 30: 45 (1931)

Ind. loc.: "Baléares: El Arenal, sables maritimes"

Type material: Not traced at BC.

Remarks: No type material has been available to us. We have checked several collections from the type locality which match the original diagnosis. Excepting the flower colour they are identical to the other Balearic populations of *Teucrium dunense* Sennen, and should be included within it.

**Teucrium majorana** var. **procumbens** Willk. in Linnaea 40: 68 (1875)

Ind. loc.: "Mallorca: in glareosis calc. montium Artá septentrionem versus sitorum (e.g. Atalaya Vegà [sic]), d. 25 April. c. flor."

Type material: Mallorca: in monte Atalaya Moreia, in glareosis calcareis declivitatis meridionalis. 23-IV-1873, Willkomm, Herb. balear. n. 315. (COI-Willkomm).

**Lectotype here designated** (bottom specimen).

Remarks: The lectotype does not differ from other Balearic specimens of *Teucrium capitatum*.

**Teucrium majoricum** Rouy in Naturaliste 4: 31 (1882); ≡ *T. polium* subsp. *majoricum* (Rouy) Gand., Nov. Consp. Fl. Eur.: 355 (1910); ≡ *T. polium* var. *majoricum* (Rouy) Knoche, Fl. Balear. 2: 317 (1922); ≡ *T. polium* f. *majoricum* (Rouy) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 92 (1983), comb. inval.; ≡ *T. capitatum* subsp. *majoricum* (Rouy) T. Navarro & Rosúa in Candollea 45: 568 (1988)

Ind. loc.: "Baléares: Majorque, monts de Soller"

Type material: Baleares. Insula Major, montes Soller, V-VI-1881, Boissier (**G**).

**Lectotype here designated** (left specimen).

Remarks: Name in current use (NAVARRO, 1995).

*Teucrium marum* f. *intermedium* Knoche, Fl. Balear. 2: 324 (1922), nom. nud.

**Teucrium marum** var. **spinescens** Porta in Nuovo Giorn. Bot. Ital. 19: 315 (1887); ≡ *T. subspinosum* var. *spinescens* (Porta) Pau in Butll. Inst. Catalana Hist. Nat. 14: 136 (1914); ≡ *T. marum* subsp. *spinescens* (Porta) Valdés-Berm. in Anales Jard. Bot. Madrid 38: 262 (1981); ≡ *T. marum* subsp. *spinescens* (Porta) O. Bolòs & Vigo in

Collect. Bot. (Barcelona) 14: 91 (1983), comb. superfl.;  $\equiv T. subspinosum$  subsp. *spinoscens* (Porta) Romo, Fl. Silvestres Baleares: 253 (1994)

Ind. loc.: "Min[orca]. In nemoribus praedii Son Blanc, versus Canisia. 3 Jul."

Type material: Balearium insula Minore, in pascuis petrosis ad Barranco de Son Blanch, sol. calcar. 8-30 m s.m., Porta & Rigo (G). **Lectotype here designated** (right specimen).

Remarks: The relationships of the *Teucrium marum* complex are far from being understood. In addition, the misidentification of some type specimens have added considerable confusion to the subject. In our view, the lectotype of *T. marum* var. *spinoscens* should be identified with *T. marum* L. subvar. *drosocalyx* Litard., a plant described from Corsica, but also present in Sardinia and the Balearic Islands.

***Teucrium marum* subsp. *occidentale*** Mayol, Mus & Rosselló in Candollea 46: 51 (1991)

Ind. loc.: "Typus: Insulis Balearicis, Majorica: Montis Teix, loco dicto Sa Caseta del Rei Sanxo (31S DD7298), in solo calcareo, 700 m.s.m., 21.7.1989, leg. M. Mayol, M. Mus & J.A. Rosselló (MA, holo; isotypi plurimi)"

Type material: MA (holotype).

Remarks: Name in current use (SANZ & al., 2000). *Teucrium marum* subsp. *occidentale* is a taxonomic synonym of *T. balearicum* (Coss. ex Pau) Castroviejo & Bayón, which in our interpretation is endemic to the Eastern Balearics (Mallorca).

***Teucrium polium* subsp. *pii-fontii*** P. Palau in Anales Inst. Bot. Cavanilles 11: 487 (1954);  $\equiv T. capitatum$  subsp. *pii-fontii* (P. Palau) Malag., Sin. Fl. Ibér. ed. 2, fasc. 102: 1629 (1979);  $\equiv T. polium$  f. *pii-fontii* (P. Palau) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 92 (1983);  $\equiv T. pii-fontii$  (P. Palau) Greuter & Burdet ex Greuter in Willdenowia 15: 80 (1985);  $\equiv T. polium$  var. *pii-fontii* (P. Palau) O. Bolòs & Vigo, Fl. Països Catalans, 3: 239 (1995).

Ind. loc.: "...esta vez hallé otro pie, también único, en el Coll Roig, al empezar la bajada al Avaradero en el primer recodo del camino carrero"

Type material: BC (holotype; PALAU, 1976: 79).

Remarks: A poorly defined taxon requiring further study. This name has been widely and incorrectly applied to several taxa of the *Teucrium polium* complex growing in the Western Mediterranean basin. The reported diagnostic features of *Teucrium polium* subsp. *pii-fontii* no longer work when the variation of the *T. polium* complex in the Balearic Islands is envisaged. All available evidence suggests that this taxon is a mere glabrescent variant of *T. polium* not worthy of taxonomic recognition. However, a final formal adscription needs be made in the context of a regional revision of the complex.

***Teucrium polium* var. *pulverulentum*** Coss. ex Barceló, Fl. Baleares: 375 (1880);  $\equiv T. pulverulentum$  (Coss. ex Barceló) Rouy in Naturaliste 4: 31 (1882), nom. illeg.;  $\equiv T. polium$  subsp. *pulverulentum* (Coss.) Gand., Nov. Conspl. Fl. Eur.: 355 (1910);  $\equiv T. capitatum$  var. *pulverulentum* (Coss. ex Barceló) P. Palau in Anales Inst. Bot. Cavanilles 12: 300 (1955), comb. inval.;  $\equiv T. polium$  subsp. *pulverulen-*

*tum* (Coss. ex Barceló) Malag., Subsp. Var. Geogr.: 24 (1973), comb. inval.; ≡ *T. cossonii* D. Wood in Bot. J. Linn. Soc. 65: 261 (1972); ≡ *T. polium* subsp. *cossonii* (D. Wood) Malag., Sin. Fl. Ibér. ed. 2 fasc. 102: 1627 (1979); ≡ *T. polium* subsp. *cossonii* (D. Wood) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 92 (1983), comb. superfl.; ≡ *T. polium* f. *cossonii* (D. Wood) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 92 (1983)

Ind. loc.: "Mallorca: Puig mayor de Torrella, Coma d'en Arbona, en las grietas de los peñascos"

Type material: The sheet designated as lectotype [P 16746] by NAVARRO & ROSUA (1990: 585) cannot be considered as type material since neither the date of collection [24-VI-1885] nor the locality [Barranco de Soller] conform with the protologue. A correct lectotype [P-COSSON 79443] has been recently designed by NAVARRO (1995: 221).

Remarks: Name in current use (GREUTER & al., 1986; NAVARRO, 1995; BOLÒS & VIGO, 1996).

*Teucrium polium* [subsp. *capitatum*] f. *purpureum* Marcos in Cavanillesia 8: 41 (1936), nom. nud.

***Teucrium polium* [subsp. *cossonii*] f. *vedranense*** O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 92 (1983) ≡ *T. cossonii* subsp. *vedranense* (O. Bolòs & Vigo) L. Llorens in Ecol. Medit. 15: 27 (1990), comb. inval.

Ind. loc.: "Es Vedrà, leg. E. Gros, BC 47352"

Type material: **BC** (holotype).

Remarks: This taxon is conspecific with *Teucrium polium* subsp. *punicum*.

***Teucrium subspinosum*** Pourr. ex Willd., Enum. Pl. 2: 596 (1809); ≡ *T. marum* var. *subspinosum* (Pourr. ex Willd.) Arcang., Comp. Fl. Ital. ed. 2: 442 (1894); ≡ *T. marum* f. *subspinosum* (Willd.) Knoche, Fl. Balear. 2: 325 (1922); ≡ *T. marum* subsp. *subspinosum* (Pourr. ex Willd.) O. Bolòs, Moliner & P. Monts in Acta Geobot. Barcinon. 5: 51 (1970); ≡ *T. marum* subsp. *subspinosum* (Pourr. ex Willd.) Malag., Subsp. Var. Geogr.: 24 (1973), comb. inval.; ≡ *T. marum* subsp. *subspinosum* (Pourr. ex Willd.) Malag., Sin. Fl. Ibér. ed. 2 fasc. 102: 1623 (1979), comb. superfl.

Ind. loc.: "Habitat in insulis Balearibus"

Type material: **B-Willd.** (holotype; CASTROVIEJO & BAYÓN, 1990: 509)

Remarks: This name has long been applied to spinescent shrubs of the *Teucrium marum* L. complex growing in Mallorca, Menorca and Sardinia. The plants described by WILLDENOW (1809) most probably came from Menorca, where they were collected by J. SALVADOR and later sent on to WILLDENOW through the intermediacy of POURRET. The holotype of *T. subspinosum* (B) has no flowers and it is hardly referable to any taxon of the complex. However, the study of additional material from the collections of POURRET (MAF) and SALVADOR (BC), which although not strictly isotypes, are relevant to the interpretation of the taxon, suggests that *T. subspinosum* is a mere variant of *T. marum* subsp. *marum*.

**Teucrium subspinosum** var. **balearicum** Coss. ex Pau in Butll. Inst. Catalana Hist. Nat. 14: 136 (1914);  $\equiv$  *T. balearicum* (Pau) Castroviejo & Bayón in Anales Jard. Bot. Madrid 47: 508 (1990)

Ind. loc.: "La otra forma que existe y poseo de Mallorca y de Menorca, ..."

Type material: Not traced at MA and BC.

Remarks: This name needs a typification since plants of Mallorca and Menorca are referable to different taxa. CASTROVIEJO & BAYÓN (1990) applied this name to the spinescent plants of Mallorca, and in this sense *Teucrium balearicum* is a synonym of *T. marum* subsp. *occidentale*.

**Teucrium valentinum** var. **ibicensis** Pau in Brotéria Ci. Nat. 3: 61 (1934)

Ind. loc.: "La planta que herboricé en Ibiza..."

Type material: Ibiza (Baleares) en los collados y por los caminos, IV-1899, Pau (MA 98292). **Lectotype here designated** (single specimen).

Remarks: The lectotype should be included within the variation of *Teucrium capitatum* L. (R. Morales, pers. com.).

**Teucrium willkommii** Porta in Nuovo Giorn. Bot. Ital. 19: 315 (1887);  $\equiv$  *T. polium* subsp. *willkommii* (Porta) Gand., Nov. Consp. Fl. Eur.: 355 (1910)

Ind. loc.: "M[ajorca]. In pinetis collis Bellver prope Palma. 29 Mai."

Type material: To be searched for at FI.

Remarks: A poorly known taxon of the *Teucrium polium* complex. It is not a name in current use but a precise adscription to the already known taxa is required.

*Thymus capitatus* f. *albiflorus* P. Palau in Anales Inst. Bot. Cavanilles 12: 302 (1955), nom. inval.

*Thymus capitatus* f. *elatius* P. Palau in Anales Inst. Bot. Cavanilles 12: 302 (1955), nom. inval.

*Thymus capitatus* f. *roseolatus* P. Palau in Anales Inst. Bot. Cavanilles 12: 302 (1955), nom. inval.

**Thymus filiformis** Aiton, Hortus Kewensis 2: 313 (1789);  $\equiv$  *Piperella filiformis* (Aiton) C. Presl, Fl. Sicul. 1: xxxvii (1826)  $\equiv$  *Micromeria filiformis* (Aiton) Benth., Lab. Gen. Sp.: 378 (1834);  $\equiv$  *Satureja filiformis* (Aiton) Mutel, Fl. France 3: 13 (1836), nom. illeg.;  $\equiv$  *Satureja filiformis* (Aiton) Nyman, Syll. Fl. Eur.: 102 (1854-1855), nom. illeg.;  $\equiv$  *Clinopodium filiformis* (Aiton) Kuntze Revis. Gen. Pl. 2: 515 (1891);  $\equiv$  *Micromeria biflora* f. *filiformis* (Ait.) Knoche, Fl. Balear. 2: 348 (1922)  $\equiv$  *Satureja cordata* susp. *filiformis* (Aiton) Litard. in Candollea 14: 150 (1953);  $\equiv$  *Micromeria biflora* subsp. *filiformis* (Aiton) Malag., H. Bianor Educador Botánico Baleares: 150 (1971), comb. inval.;  $\equiv$  *S. microphylla* subsp. *filiformis* (Aiton) O. Bolòs & Vigo, Fl. Països Catalans 3: 301 (1996)

Ind. loc.: "Nat. of the Balearic Islands"

Type material: To be searched for at K.

Remarks: Name in current use (MORALES, 1991). Described from the Balearic Islands, but it is also present in several Western Mediterranean islands (Corsica and Sardinia).

**Thymus herba-barona** subsp. **bivalens** Mayol, L. Sáez & Rosselló in Fl. Montiberica 8: 61 (1998)

Ind. loc.: "Holotypus: Insulae Balearicae, Majorica, serra d'Alfàbia, Bunyola, 31SDD7699, 950 msm., die 8-VIII-1989, J. Gradille, M. Mayol, M. Mus & J.A. Rosselló legerunt, BC 808332, (Isotypi: MA 486823; Herb. L. Sáez; BCF)"

Type material: **BC** (holotype); **MA, BCF** (isotypes)

Remarks: Name in current use (MAYOL & al., 1998); endemic to the Balearic Islands (Mallorca).

**Thymus richardii** Pers., Syn. Pl. 2: 130 (1806);  $\equiv$  *Origanum richardii* (Pers.) Kuntze, Revis. Gen. Pl. 2: 528 (1891);  $\equiv$  *T. serpyllum* var. *richardii* (Pers.) Knoche, Fl. Balear. 2: 354 (1922);  $\equiv$  *T. sepyllum* subsp. *richardii* (Aiton) Malag., H. Bianor Educador Botánico Baleares: 150 (1971);  $\equiv$  *T. serphyllum* subsp. *richardi* (Pers.) Malag., Subsp. Var. Geogr.: 21 (1973), comb. superfl.;  $\equiv$  *T. serpyllum* subsp. *richardii* (Pers.) Knoche ex Colom, Biogeografía Baleares ed. 2, 1: 209 (1978), comb. inval.;  $\equiv$  *T. serpyllum* subsp. *richardii* (Pers.) Malag., Sin. Fl. Ibér. ed. 2 fasc. 99: 1573 (1979), comb. superfl.

Ind. loc.: "Hab. in ins. Balearicis. Ant. Richard"

Type material: **P-Lamarck** (holotype).

Remarks: Name in current use (JALAS, 1972; GREUTER & al., 1986). According to JALAS (1971) *Thymus richardii* subsp. *richardii* also grows on the Balkan Peninsula and this name should take priority over *T. aureopunctatus* (G. Beck) K. Mal?.

**Thymus richardii** var. **ebusitanus** Font Quer in Cavanillesia 7: 77 (1935);  $\equiv$  *T. richardi* subsp. *ebusitanus* (Font Quer) Jalas in Bot. J. Linn. Soc. 64: 264 (1971);  $\equiv$  *T. ebusitanus* (Font Quer) Romo, Fl. Silvestres Baleares: 266 (1994)

Ind. loc.: "Hab. in Ebuso: Cala de Santa Agnès, Gros, majo mense et 15 junii 1918, legit; spec. n. 50516 et 50517 Herbarii Mus. Barc."

Type material: **BC** (lectotype; JALAS, 1971: 264).

Remarks: Name in current use (JALAS, 1971; GREUTER & al., 1986); endemic to the Western Balearic Islands (Eivissa).

## Linaceae

**Linum angustifolium** var. **elatius** Marès & Vigin., Cat. Pl. Vasc. Balèares: 329 (1880)

Ind. loc.: "MAJORQUE: [...] Montée de Pradoncellas [sic], entre Pollenza et Ariant"

Type material: Montée de Praduncellas; chemin d'Ariant, 5-VI-1852, G.V. [G. Vigineix] (**MPU-Knoche**). Lectotype here designated.

Remarks: Not worthy of recognition from *Linum bienne* Mill.

*Linum strictum* var. *racemosum* P. Palau in Collect. Bot. (Barcelona) 1: 319 (1947), nom. nud.

***Linum strictum* var. *racemosum*** P. Palau in Treb. Inst. Catalana Hist. Nat. 7: 61 (1976)

Ind. loc.: “[Cabrera] Typus: BC 104176”

Type material: BC (holotype).

Remarks: This variety falls within the variation of *Linum strictum* L. subsp. *strictum*.

*Linum strictum* var. *microcarpa* P. Palau in Collect. Bot. (Barcelona) 1: 319 (1947), nom. nud.

*Radiola balearica* Gand., Fl. Eur. 5: 30 (1885), nom. inval.

*Radiola violascens* Gand., Fl. Eur. 5: 31 (1885), nom. inval.

### Lobeliaceae

*Laurentia balearica* Gand., Fl. Eur. 15: 8 (1888), nom. inval.

***Laurentia minuta* f. *balearica*** Wimmer in Ann. Naturhist. Mus. Wien 56: 334 (1948); ≡ *Solenopsis minuta* subsp. *balerica* (F.E. Wimmer) Meikle in Kew Bull. 34: 374 (1979)

Ind. loc.: “Balearen: Majorca, Quellen und Bett des Barranco de Soller [sic] (E. Bourgeau n. 2770! Barcelo [sic] y Combis! - W. Del. Cambr.) Type: Majorca, Barranco de Soller, 4 July, 1869, Bourgeau 2770”

Type material: W (holotype); K (isotype).

Remarks: *Laurentia minuta* f. *balearica* and *Lobelia minima* refer to the same taxon, see further comments under the latter.

***Lobelia minima*** Sims in Curtis's Bot. Mag. 46: t. 2077 (1819); ≡ *Solenopsis minuta* var. *minima* (Sims.) C. Presl, Prodr. Monogr. Lobel.: 32 (1836); ≡ *Laurentia minuta* var. *minima* (Sims) A. DC. in DC., Prodr. 7(2): 410 (1839); ≡ *Solenopsis minima* (Sims) M.B. Crespo, L. Serra & A. Juan in Pl. Syst. Evol. 210: 224 (1998)

Ind. loc.: “Native of the Cape of Good-Hope. Communicated by Mr. COLVILLE, from his renowned nursery in the King's road”

Type material: According to CRESPO & al. (1996: 119) the lectotype is the illustration (t. 2077) provided with the protologue.

Remarks: Although *Lobelia minima* was said to be described from material coming from South Africa, MEIKLE (1979) and CRESPO & al. (1996, 1998) have identified it with plants growing in Mallorca. Despite the claims of CRESPO & al. (1998) there is no convincing evidence to recognize the Balearic plant as a separate taxon from *Solenopsis minuta* (L.) C. Presl.

### Lythraceae

*Lythrum balearicum* Gand., Fl. Eur. 9: 71 (1886), nom. inval.

### Malvaceae

**Althaea balearica** J.J. Rodr., Fl. Menorca: 24 (1904);  $\equiv$  *A. officinalis* subsp. *balearica* (J.J. Rodr.) Gand., Nov. Consp. Fl. Eur.: 87 (1910)

Ind. loc.: “Prado marítimo de Tirant”

Type material: Not traced at MPU and PH-RODR.

Remarks: KNOCHE (1922) and PAIVA & NOGUEIRA (1993) identified this taxon with *Althaea officinalis* L.

**Althaea hirsuta** var. **pumila** Cambess. in Mém. Mus. Hist. Nat. 14: 225 (1827)

Ind. loc.: “In montosis insulae Majoris circa Esporlas”

Type material: Dans les champs sur le penchant du coteaux qui domine l'habitation de Mr Trias à Esporlas, 18-V-1825 (Cambessedès) (**MPU-Knoche**). **Lectotype here designated**.

Remarks: Not worthy of recognition from typical *Althaea hirsuta* L.

*Lavatera balearica* Gand., Fl. Eur. 5: 42 (1885), nom. inval.

*Lavatera cretica* var. *microphylla* Bianor in Butll. Inst. Catalana Hist. Nat 17: 142 (1917), nom. nud.

**Lavatera minoricensis** Cambess. in Mém. Mus. Hist. Nat. 14: 334 (1827);  $\equiv$  *Malva minoricensis* (Cambess.) J.J. Rodr. in Anales Soc. Esp. Hist. Nat. 3: 13 (1874);  $\equiv$  *Lavatera triloba* var. *minoricensis* (Cambess.) Baker in J. Bot. (London) 28: 241 (1890);  $\equiv$  *Althaea minoricensis* (Cambess.) Borbás in Magyar Bot. Lapok 2: 302 (1903);  $\equiv$  *Lavatera triloba* [subsp. *pallescens*] f. *minoricensis* (Cambess.) R. Fernandes in Feddes Repert. 74: 20 (1967);  $\equiv$  *L. triloba* var. *minoricensis* (Cambess.) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 81 (1974), comb. superfl.

Ind. loc.: “Crescit in insulâ Minore (Hern.)”

Type material: In. Minoria, VI-1825 (Cambessedès) (**MPU-Knoche**). **Lectotype here designated** (right specimen).

Remarks: This taxon is a synonym of *Lavatera triloba* L. subsp. *pallescens* (Moris) Nyman, a plant restricted to Sardinia and Menorca (FERNANDES, 1967, 1968).

*Lavatera olbia* f. *parviflora* Garcías Font in Butll. Inst. Catalana Hist. Nat. 23: 93 (1923), nom. nud.

**Lavatera rigoi** Porta in Nuovo Giorn. Bot. Ital. 19: 300 (1887);  $\equiv$  *L. micans* subsp. *rigoi* (Porta) Gand., Nov. Consp. Fl. Eur.: 88 (1910)

Ind. loc.: “M[allorca]. In collibus aridis prope Soller, perrara. 28 Jul.”

Type material: To be searched for at FI.

Remarks: Identified as *Lavatera trimestris* L. by Knoche (1922) and later certified by FERNANDES (1993b).

**Malva sylvestris** var. **canescens** J. Gay ex Cambess. in Mém. Mus. Hist. Nat. 14: 225 (1827)

Ind. loc.: "Ad vias in insulâ Majore prope Alcudiam [...] Ell est commune aux environs de Montpellier"

Type material: Ile Majorque, Alcudia, 17-IV-1825 (Cambessedès) (**MPU-Knoche**). **Lectotype here designated.**

Remarks: Not worthy of distinct treatment from *Malva sylvestris* L.

*Olbia insularis* Gand., Fl. Eur. 5: 46 (1885), nom. inval.

*Olbia majorica* Gand., Fl. Eur. 5: 48 (1885), nom. inval.

*Olbia punctata* Gand., Fl. Eur. 5: 49 (1885), nom. inval.

## Myrtaceae

**Myrtus communis** var. **balearica** Sennen & Teodoro in Bull. Soc. Dendrol. France 69: 17 (1929)

Ind. loc.: "Soller [sic] (baléares) 1917-15-XI; leg. F. BIANOR"

Type material: Sóller, Port. Collines, 15-IX-1917, Bianor (**BC-Sennen** 836786).

**Lectotype here designated.**

Remarks: Not worthy of recognition from *Myrtus communis* L.

*Myrtus communis* f. *macrocarpa* P. Palau in Anales Inst. Bot. Cavanilles 12: 299 (1955), nom. inval. [sense descr. llat.]

*Myrtus communis* var. *alcoverii* Bonafè, Fl. Mallorca 3: 216 (1979), nom. inval.

*Myrtus communis* var. *micromicrophylla* P. Palau in Anales Inst. Bot. Cavanilles 11: 513 (1954), nom. inval.

## Oleaceae

**Olea europaea** var. **latifolia** P. Palau in Anales Inst. Bot. Cavanilles 11: 514 (1954)

Ind. loc.: "Ipsam in parvula Insula «de Fonoll» dicta, die 31 maio 1948 inveni"

Type material: S'Illa des Fonoi, 31-V-1948, Palau Ferrer (**BC** 104214).

**Lectotype here designated.**

Remarks: No single feature distinguishes this taxon from typical *Olea europaea* L.

*Phillyrea angustifolia* var. *bianoris* Sennen in Bull. Soc. Dendrol. France 69: 51 (1929), nom. inval.

**Phillyrea angustifolia** f. **brevifolia** Pau in Actas Soc. Esp. Hist. Nat. 29: 230 (1900)

Ind. loc.: “[Minorca]”

Type material: Borrassos Nous (Alaior), 9 agosto 1897, Pons Guerau (MA 92468). **Lectotype, here selected.**

Remarks: A morphological variant of *Phillyrea angustifolia* L. devoid of any taxonomic recognition.

*Phillyrea angustifolia* f. *buxifolia* Knoche, Fl. Balear. 2: 281 (1922), nom. nud.

*Phillyrea balearica* Gand., Fl. Eur. 15: 209 (1888), nom. inval.

*Phillyrea barceloi* subsp. *knochii* Sennen in Bull. Soc. Dendrol. France 69: 62 (1929), nom. inval.

*Phillyrea media* var. *balearica* Sennen in Bull. Soc. Dendrol. France 69: 55 (1929), nom. inval.

**Phillyrea media** var. **rodriguezii** P. Monts. in O. Bolòs, Molinier & P. Monts. in Acta Geobot. Barcinon. 5: 21 (1970); ≡ *P. latifolia* var. *rodriguezii* (P. Monts. in O. Bolòs, Molinier & P. Monts.) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 89 (1983)

Ind. loc.: “Minorica, Ciutadella, Artrutx, inter Sa Marjal Nova et Cala en Turqueta, ubi legit P.Montserrat 5-XI-1954, BC 602986”

Type material: **BC** (holotype).

Remarks: A little known taxon requiring further study. Populations of *Phillyrea media* L. from Menorca apparently do not differ from those growing in Mallorca and continental Spain. The late M.A. Cardona informs us that she found a polyploid cytotype in *P. media* from Menorca. However, this requires further verification.

*Phillyrea recondita* Gand., Fl. Eur. 15: 206 (1888), nom. inval.

*Phillyrea rosmarinifolia* var. *viridifolia* Sennen in Bull. Soc. Dendrol. France 69: 52 (1929), nom. inval.

## Onagraceae

*Epilobium hirsutum* f. *villosum* Knoche, Fl. Balear. 2: 221 (1922), nom. nud.

## Orchidaceae

*Aceras anthrophorum* var. *balearica* R. Chodat in Bull. Soc. Bot. Genève 11: 88 (1905), nom. nud.

*Anacamptis balearica* Gand., Fl. Eur. 23: 111 (1890), nom. inval.

*Ophrys balearica* Gand., Fl. Eur. 23: 52 (1890), nom. inval.

**Ophrys balearica** Delforge in Mém. Soc. Roy. Bot. Belgique 11: 15 (1990); ≡ *O. bertolonii* subsp. *balearica* (Delforge) L. Sáez & Rosselló in Fl. Montiberica 7: 88 (1997)

Ind. loc.: "Hispania, Baleares, Majorica, inter Felanitx et Campos, apud Ca's Porradeint, alt. 150 m, 10.04.1985, leg. P. Delforge in herb. P. Delforge sub n 850"

Type material: PH-DELF (holotype).

Remarks: Name in current use (DELFORGE, 1990; ALOMAR & al., 1997; ROSELLÓ & al., 1997); endemic to the Balearic Islands.

**Ophrys bertolonii** f. *triloba* Renz in Feddes Repert. Spec. Nov. Regni Veg. 28: 260 (1930)

Ind. loc.: "Balearen"

Type material: Not traced.

Remarks: This taxon should be referred to *Ophrys balearica* Delforge.

*Ophrys × emmae* Keller ex Wettstein in Orchidee (Hamburg) 21: 163 (1970), nom. inval.

**Ophrys × heraultii** G. Keller ex Schrenk in Senckenberg. Biol. 52: 171 (1971)

Ind. loc.: "Habitat: Hispaniae in insula Maiorica inter Campos et Felanitx, in pineti margine una cum parentibus, 29.3.1970 (W.-J. SCHRENK, Holotypus FR)"

Type material: FR (holotype).

Remarks: Name in current use. This taxon is believed to be the wild hybrid between *Ophrys speculum* Link subsp. *speculum* and *O. tenthredinifera* Willd. (SCHRENK-JÜRGEN, 1971). This hybrid has also been found in Southern Sardinia (SCRUGLI & GRASSO, 1982).

*Ophrys minoricensis* Gand., Fl. Eur. 23: 55 (1890), nom. inval.

*Ophrys rodriguezii* Gand., Fl. Eur. 23: 42 (1890), nom. inval.

*Orchis longicornu* var. *balearica* L. Chodat in Bull. Soc. Bot. Genève 15: 179 (1924), nom. nud.; ≡ *O. longicornu* race *balearica* (L. Chodat) L. Chodat in Bull. Soc. Bot. Genève 15: 199 (1924), nom. inval.; ≡ *O. longicornu* subsp. *balearica* (L. Chodat) Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), comb. inval.

**Orchis longicruris** subsp. **longipenis** Font Quer & P. Palau ex P. Palau in Collect. Bot. (Barcelona) 4: 209 (1954)

Ind loc.: "In nemore Xorrigó, circa Algaida, die 4 aprilis 1954 inveni"

Type material: Bosque de Xorrigó (Algaida), 4-IV-1954, Palau Ferrer 683 (MA 345561). **Lectotype here designated.**

Remarks: This taxon should be included in the synonymy of *Orchis italica* Poir.

*Orchis olbiensis* var. *balearica* L. Chodat in Bull. Soc. Bot. Genève 15: 179 (1924), nom. nud.

*Orchis olbiensis* f. *majoricensis* L. Chodat in Bull. Soc. Bot. Genève 15: 181 (1924), nom. nud.

**Ophrys speculum** var. **lutescens** J.J. Rodr., Fl. Menorca: 137 (1904)

Ind. loc.: "Torre-petxina [sic] de Ciudadela"

Type material: Not traced at PH-RODR.

Remarks: No information concerning this taxon is available. Recent work on the orchid flora of Menorca did not report it (GRUBE, 1986), and no special forms of *Ophrys speculum* Link have been detected on that island.

*Ophrys × spuria* Keller ex Reinhardi in Orchidee (Hamburg) 21: 166 (1970), nom. inval.

*Serapias balearica* Gand., Fl. Eur. 23: 138 (1890), nom. inval.; ≡ *S. parviflora* subsp. *balearica* (Gand.) Gand., Nov. Consp. Fl. Eur.: 460 (1910), nom. inval.

*Serapias falcata* Gand., Fl. Eur. 23: 138 (1890), nom. inval.

*Serapias insularis* Gand., Fl. Eur. 23: 138 (1890), nom. inval.

*Serapias mediterranea* Gand., Fl. Eur. 23: 135 (1890), nom. inval.

**Serapias parviflora** f. **lutescens** Renz in Feddes Repert. Spec. Nov. Regni Veg. 28: 261 (1930)

Ind. loc.: "Im Wold (Pinus marittima) von Belveder [sic] in der Umgebung von Palma und in der Umgebung von Soller [sic] (gegen den Col de Soller [sic], Ende April"

Type material: Not traced.

Remarks: No information concerning this taxon has been available to us, and the name is not in current use. Plants of *Serapias parviflora* L. from the localities given in the protologue do not differ in any morphological feature from other Balearic plants.

## Orobanchaceae

*Orobanche balearica* Gand., Fl. Eur. 18: 304 (1889), nom. inval. ≡ *O. foetida* subsp. *balearica* (Gand.) Gand., Nov. Consp. Fl. Eur.: 391 (1910), nom. inval.

**Orobanche balearica** Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 18 (1911)

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: No specimens of this taxon agreeing with the protologue have been traced at BC-Sennen.

Remarks: Locotype material collected by Bianor and labelled as *Orobanche balearica* by Sennen (BC) is not worthy of distinct treatment from *O. hederae* Duby.

*Orobanche coronopus* Bianor in Butll. Inst. Catalana Hist. Nat 17: 142 (1917), nom. nud.

### Oxalidaceae

*Oxalis balearica* Gand., Fl. Eur. 5: 199 (1885), nom. inval.

### Paeoniaceae

**Paeonia corallina** var. **cambessedesii** Willk. in Oesterr. Bot. Z. 25: 113 (1875); Willk. in Linnaea 40: 133 (1876); ≡ *P. cambessedesii* (Willk.) Willk. in Willk. & Lange, Prodr. Fl. Hispan. 3: 976 (1880); ≡ *P. corallina* subsp. *cambessedesii* (Willk.) Gand., Nov. Consp. Fl. Eur.: 20 (1910); ≡ *P. corallina* rasse *cambessedesii* (Willk.) F. Herm. in Verh. Bot. Vereins Prov. Branderburg 54: 248 (1914); ≡ *P. mascula* var. *cambessedesii* (Willk.) P. Palau in Treb. Inst. Catalana Hist. Nat. 7: 44 (1976), comb. inval.; ≡ *P. mascula* subsp. *cambessedesii* (Willk.) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 65 (1974)

Ind. loc.: "In locis herbidis solo pingui Balearium, praecipue in insulae Majoris regione montana int. alt. c. 300 et 800 met., Aprilii et Majo c. flor. et fruct. immaturis"

Type material: Mallorca: Puig gross de Ternelles pr. Pollenza, in glareosis lateris boreal. in parte superiore, haut frequ. 26-IV-1873, Willkomm, Herb. balear. n. 89. (**COI-Willkomm**) Lectotype here designated.

Remarks: Name in current use (STERN, 1946; MUÑOZ GARMENDIA & NAVARRO, 1993); endemic to the Eastern Balearic Islands (Mallorca, Menorca and Cabrera).

### Papaveraceae

**Papaver setigerum** var. **cylindrocarpum** Fedde in Engl., Pflanzenr. 40 (IV.104): 342 (1909); ≡ *P. sommiferum* f. *cylindrocarpum* (Fedde) Knoche, Fl. Balear. 2: 4 (1922)

Ind. loc.: "Balearen: Felder auf Cabrera (G.V[igineix]. 1855 in herb. Montp.!)"

Type material: MPU (holotype; cf KADEREIT 1986).

Remarks: Included by KADEREIT (1986) within *P. somniferum* L. subsp. *setigerum* (DC.) Corb.



Fig. 11. Lectotype of *Paeonia cambessedesii* Willk. (COI-Willkomm).

### Pinaceae

*Pinus ceciliae* A. Llorens & L. Llorens in Bol. Soc. Hist. Nat. Baleares 17: 51 (1972), nom. inval.;  $\equiv$  *P. halepensis* var. *ceciliae* (A. Llorens & L. Llorens) L. Llorens in Mediterranea 3: 116 (1979), comb. inval.

**Pinus ceciliae** A. & L. Llorens ex L. Llorens in *Folia Bot. Misc.* 4: 55 (1984); ≡ *P. halepensis* var. *ceciliae* (A. Llorens & L. Llorens) L. Llorens ex O. Bolòs & Vigo, *Fl. Països Catalans* 1: 197 (1984); ≡ *P. halepensis* var. *ceciliae* (A. Llorens & L. Llorens) Llorens ex Rosselló & N. Torres in *Candollea* 47: 67 (1992), comb. superfl.

Ind. loc.: "Majorica, l.d. Son Albertí versus Marina de Llucmajor, 12.7.1969, leg. L. Llorens, BC 645145"

Type material: Not traced at BC.

Remarks: A poorly known taxon requiring further study. It is very closely related to *Pinus halepensis* Mill. to which it is linked by intermediate specimens. Neither ecological nor geographical distinction from *P. halepensis* is evidenced. Recent work covering the Mediterranean pines included it under the synonymy of *P. halepensis* (GREUTER & al., 1984; AMARAL FRANCO, 1986).

## Plantaginaceae

*Arnoglossum balearicum* Gand., *Fl. Eur.* 19: 74 (1890), nom. inval.

*Coronopus balearicus* Gand., *Fl. Eur.* 19: 103 (1890), nom. inval.

*Coronopus sarcachizus* Gand., *Fl. Eur.* 19: 103 (1890), nom. inval.

*Coronopus violascens* Gand., *Fl. Eur.* 19: 103 (1890), nom. inval.

**Plantago albicans** f. **minor** Gand. in *Bull. Soc. Bot. France* 47: 140 (1900)

Ind. loc.: "Formentera"

Type material: To be searched for at LY.

Remarks: No information concerning this taxon has been available to us. This form is probably devoid of any taxonomic value. Specimens of *Plantago albicans* L. from Formentera do not differ from those growing in other Mediterranean places.

**Plantago bellardii** var. **leptocephala** Willk. in *Linnaea* 40: 58 (1875)

Ind. loc.: "Mallorca: in arenosis pinetorum c. castell. Bellver, d. 12 Apr. c. flor."

Type material: Mallorca: in arenosis pinetorum circa castellum Bellver, 12-IV-1873, Willkomm, Herb. balear. n. 219. (**COI-Willkomm**) **Lectotype here designated** (the 7th on left specimen).

Remarks: The lectotype falls within the variation of *Plantago bellardii* All.

**Plantago lagopus** var. **melanocephala** Font Quer in *Asoc. Esp. Progr. Ci. Oporto* 6: 24 (1921); ≡ *P. lagopus* f. *melanocephala* (Font Quer) Knoche, *Fl. Balear.* 2: 410 (1922); ≡ *P. lagopus* subvar. *melanocephala* (Font Quer) Pilger, *Pflanzenr. IV.269* (Heft 102): 335 (1937)

Ind. loc.: "Formentera: La Mola, Gros, 14-V-18. Ibiza: Puig den [sic] Serra, F.Q. 26-III-18"

Type material: Formentera: La Mola, Gros, 14-V-1918 (**BC** 54706). **Lectotype here designated.**

Remarks: This plant is not worthy of recognition from typical *Plantago lagopus* L.

***Plantago majoricensis* Willk, see *P. purpurascens* Willk.**

*Plantago purpurascens* Willk. in Oesterr. Bot. Z. 25: 110-111 (1875); Willk. in Linnaea 40: 58 (1876), nom. illeg.; ≡ *P. macrorhiza* subsp. *purpurascens* (Willk.) Nyman, Consp. Fl. Eur. 4: 617 (1881), nom. inval.; ≡ *P. coronopus* subsp. *purpurascens* (Willk.) Pilger in Feddes Repert. Spec. Nov. Regnii Veg. 28: 303 (1930), nom. inval.; ≡ *P. weldenii* subsp. *purpurascens* (Willk.) Greuter & Burdet in Willdenowia 12: 199 (1982), nom. inval.; ≡ *P. majoricensis* Willk., Ill. Fl. Hispan. 1: 4, tab. 4A (1881); ≡ *P. macrorhiza* subsp. *majoricensis* (Willk.) Gand., Nov. Consp. Fl. Eur.: 399 (1910); ≡ *P. coronopus* var. *majoricensis* (Willk.), O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 99 (1983)

Ind. loc.: "M[allorca]. In collibus calcareis ad portum oppidi. Sóller, die 3. Maji c. flor."

Type material: Mallorca: in solo saxoso arido collium calcario prope portum de Sóller. 3-V-1873 Willkomm, Herb. balear. n. 413. (**COI-Willkomm**). **Lectotype here designated** (right specimen).

Remarks: This taxon, together with the Balearic specimens belonging to *Plantago coronopus* L. s.l. requires further study. Remarkably, little work has been conducted on *P. majoricensis* and most of the nomenclatural changes made involving it have not been substantiated by a proper taxonomic study.

***Plantago psyllium* var. *dubia* Knoche, Fl. Balear. 2: 414 (1922)**

Ind. loc.: "MAJORQUE: 5<sup>g</sup> B<sup>7</sup>"

Type material: Pollenza, 17-V-1907, Knoche 2237 (**MPU-Knoche**). **Lectotype here designated** (single specimen).

Remarks: The lectotype has to be identified with *P. afra* L.

*Psyllium balearicum* Gand., Fl. Eur. 19: 85 (1890), nom. inval.

*Psyllium ivicense* Gand., Fl. Eur. 19: 84 (1890), nom. inval.

## Plumbaginaceae

***Limonium alcudianum* Erben in Mitt. Bot. Staatssamml. München 28: 398 (1989)**

Ind. loc.: "Typus: Majorca: La Albufera, Bahia [sic] de Alcudia, 19.5.1988, BRULLO, PAVONE & LLORENS (Holotypus: M; Isotipi: CAT, herb. ERBEN)"

Type material: M (holotype); CAT, Herb. Erben (isotypes).

Remarks: Name in current use (ERBEN, 1993), but a revision of the related *Limonium camposanum* Erben and the *L. minoricense* Erben group is needed to clarify taxonomic boundaries.

**Limonium antonii-llorensii** L. Llorens in Lazaroa 8: 31 (1986) ≡ *L. auriculae-ursifolium* subsp. *antonii-llorensii* (L. Llorens) O. Bolòs & Vigo, Fl. Països Catalans 3: 88 (1996)

Ind. loc.: "Mallorca. Colònia de Sant Jordi (Campos). Entre Arthrocnemum, a les voreres dels estanys, 24.07.1976. Leg. A. & Ll. Llorens (Holotypus: Herb. Llorens; Isotypus BC 639569)"

Type material: UIB (holotype).

Remarks: Name in current use (ERBEN, 1993); endemic to the Eastern Balearics (Mallorca). The sheet designed as isotype (BC 639569) by Llorens (1986a) cannot be considered as type material since the date of recolection (4-VII-1972) does not conform to the protologue.

**Limonium artruchium** Erben in Mitt. Bot. Staatssamml. München 28: 361 (1989)

Ind. loc.: "Typus: Minorca: Cap Artrutx, 14.5.1988, BRULLO & PAVONE (Holotypus: M; Isotypi: CAT, herb. ERBEN)"

Type material: M (holotype); CAT (isotype).

Remarks: Name in current use (ERBEN, 1993), but its status as a separate microspecies within the *Limonium minoricense* group seems poorly justified.

**Limonium barceloi** Gil & L. Llorens in Anales Jard. Bot. Madrid 49: 51 (1991)

Ind. loc.: "MALLORCA: In paludibus sabulosis salsis, l.d. Ses Fontanelles (Ca'n Pastilla-Palma), 12-IX-1983. Leg. Ll. Llorens. Holotypus in Herbario Universitatis Balearicarum; isotypus in MA."

Type material: UIB (holotype); MA 498774 (isotype).

Remarks: ERBEN (1993) listed it as a hybrid between *Limonium gibertii* (Sennen) Sennen and *L. boirae* L. Llorens & Tébar. This interpretation has no sound taxonomic basis. *L. barceloi* probably merits recognition as a separate microspecies on morphological grounds, but karyological and molecular work is needed to substantiate this.

**Limonium boirae** L. Llorens & Tébar in Anales Jard. Bot. Madrid 45: 177 (1988); ≡ *L. auriculae-ursifolium* subsp. *boirae* (L. Llorens & Tébar) O. Bolòs & Vigo, Fl. Països Catalans 3: 88 (1996)

Ind. loc.: "Typus: In paludibus salsis l.d. Prat des Magalluf, 4-VII-1976. Legerunt A. & L. Llorens; Herb. Llorens. (Holotypus in herb. Universitatis Insularum Balearicum.)"

Type material: UIB (holotype).

Remarks: Name in current use (ERBEN, 1993); endemic to the Eastern Balearics (Mallorca).

**Limonium bolosii** Gil & L. Llorens in Anales Jard. Bot. Madrid 49: 54 (1991)

Ind. loc.: "MALLORCA: In rupestribus maritimis, l.d. Farola de Capdepera, 28-IX-1988. Legerunt L. Gil et Ll. Llorens. Holotypus in Herbario Universitatis Balearicarum; isotypus in MA."

Type material: UIB (holotype), MA 498775 (isotype).

Remarks: A poorly known taxon closely related to *Limonium biflorum* (Pignatti) Pignatti requiring further study. ERBEN (1993) pointed out that *L. bolosii* is of hybrid

origin between *L. biflorum* and *L. pseudodictyocladon* L. Llorens. However, morphological observations do not favour such a hypothesis.

**Limonium bonafei** Erben in Mitt. Bot. Staatssamml. München 30: 465 (1991)

Ind. loc.: "Typus: Mallorca: Cala Algar. Dunas solidificadas cerca del mar, 13.7.1990, Maria & J. ORELL (Herb. Balearicum No. 257) (Holotypus: Herbarium Institut F. Systematische Botanik d. Universität München; Isotypen: Herb. ERBEN, Herb. ORELL)"

Type material: M (holotype); Herb. Erben, Herb. Orell (isotypes).

Remarks: Name in current use (ERBEN, 1993), but its recognition as a distinctive microspecies within the *Limonium fontqueri* group requires further convincing study.

**Limonium camposanum** Erben in Mitt. Bot. Staatssamml. München 28: 394 (1989)

Ind. loc.: "Typus: Mallorca: Banda defora dels camps de Salicornia, Salobre [sic] de Campos, 09.76, A. & Ll. Llorens (Holotypus: M; Isotypus: herb. ERBEN, herb. LLORENS)"

Type material: M (holotype); Herb. Erben, UIB (isotypes).

Remarks: Name in current use (ERBEN, 1993). This taxon is poorly defined within the Balearic members of *Limonium* subsect. *Densiflorae* Boiss., and requires further study. It shows strong similarities to *L. alcudianum* and these two taxons are probably conspecific.

*Limonium × capdeperae* Pignatti in Arch. Bot. (Forli) 31: 97 (1955), nom. inval.

**Limonium caprariense** subsp. **multiflorum** Pignatti in Arch. Bot. (Forli) 31: 81 (1955)

Ind. loc.: "Exs. Sennen Pl. Esp. 2052 - Portopí, Palma 14.7.1914, BIANOR, sub St. minuta var. microphylla Boiss.; Sennen Pl. Esp. 2053 - Portopí, Palma 14.7.1914, BIANOR, sub St. minuta var. dissitiflora Boiss. [...] MENORCA: Autour du Ciudadela 15.5.1855, VIGINEIX, MPU; Villa Carlos, en el Porret 4.12.1913, FONTQUER, BCG. MALLORCA: (vedi sopra Exs.). IBIZA: Cala Selada [sic] 25.3.1918, FONT QUER, BCG; Estany del Peix i la Pedrera 23.7.1920, GROS, BCG. FORMENTERA: Platja del Migjorn 13.5.1918, GROS, BCG; Estany Pudent i Trucadòs 20.7.1920, GROS, BCG; ibid. id. id., PAV."

Type material: **BC** (syntype).

Remarks: Subsumed under *Limonium scorpioides* Erben by ERBEN (1993). The material given in the protologue is probably heterogeneous and requires an accurate typification, which should be linked to a revision of the *L. minutum* complex, to which *L. caprariense* subsp. *multiflorum* should be included.

**Limonium caprariense** [subsp. *multiflorum*] f. **elegans** Pignatti in Arch. Bot. (Forli) 31: 81 (1955)

Ind. loc.: "IBIZA: Espardell (parva insula prope Ebusum) 19.5.1920, GROS, BCG; ibid. id. id., PAV. FORMENTERA: Estany Pudent i els Trucadòs 20.7.1920, GROS, BCG"

Type material: Not traced at BC.

Remarks: Not included by ERBEN (1993) in his revision of the Spanish and Balearic taxa of *Limonium*. Most probably this taxon should be included within the variation of *L. minutum*, as the specimens seen at the type localities should be adscribed to this taxon.

**Limonium carregadorense** Erben in Mitt. Bot. Staatssamml. München 28: 364 (1989)

Ind. loc.: "Typus: Mallorca: Punta del Carregador, 28.8.1988, BRULLO, LLORENS & MINISALE (Holotypus: M; Isotypi: CAT, herb. ERBEN)"

Type material: M (holotype); CAT, G (isotypes).

Remarks: Name in current use (ERBEN, 1993); endemic to the Eastern Balearics (Mallorca).

**Limonium carvalhoi** Rosselló & L. Sáez in Anales Jard. Bot. Madrid 56: 24 (1998)

Ind. loc.: "Insulae Baleares, Majorica, loco dicto Sa Porrassa (31SDD57), in paludibus argillosis salsis, ubi M. Mus et J.A. Rosselló, 28-XII-1992, legerunt (BCC 5002)"

Type material: BCC (holotype).

Remarks: Name in current use (ROSSELLÓ & al, 1998); endemic to the Eastern Balearics (Mallorca).

**Limonium connivens** Erben in Mitt. Bot. Staatssamml. München 28: 353 (1989)

Ind. loc.: "Typus: Mallorca: Alcudia: nordöstlich von Alcúdia, Es Mal Pas; Felsküste, 2-8 m, 10.10.1989, ERBEN, MORALES VALVERDE & ROSELLÓ (Holotypus: M; Isotypi: MA, Herb. ERBEN)."'

Type material: M (holotype); MA 489096 (isotype).

Remarks: Name in current use (ERBEN, 1993). Its taxonomic distinctiveness within the *Limonium companyonis* (Gren. & Billot) Kuntze complex seems doubtful and merits further study.

**Limonium dragonericum** Erben in Mitt. Bot. Staatssamml. München 28: 345 (1989)

Ind. loc.: "Typus: Baleares: Isla Dragonera, 31S DD4182, 17.6.1980, E. Valdés-Bermejo no. 5696 et al. (Holotypus: MA; Isotypi: M, MA, herb. ERBEN)"

Type material: MA 507300 (holotype); M, MA, Herb. Erben (isotypes)

Remarks: Name in current use (ERBEN, 1993), but its specific recognition has no sound taxonomic basis. Contrary to earlier interpretations (ERBEN, 1989) this taxon should be related to the *Limonium minutum* complex, notably to the forms named *L. pseudebusitanum* Erben.

**Limonium ejulabilis** Rosselló, Mus & Soler, Anales Jard. Bot. Madrid 51: 201 (1994)

Ind. loc.: "Typus: Insulis Balearibus, Majorica, locus dictus Es Prat de Magalluf in paludibus argillosis sasis ubi 18-VIII-1993 M. Mus et J.A. Rosselló legerunt (VAB 933797 holotypus; MA, G, Herb. Erben isotypi)"

Type material: VAB (holotype).

Remarks: Name in current use (ROSELLÓ & al., 1993). Previously confused with *Limonium cossonianum* Kuntze (LLORENS, 1986), a diploid taxon which is absent from the flora of Mallorca.

**Limonium escarrei** L. Llorens & Tébar in Anales Jard. Bot. Madrid 45: 173 (1988); ≡ *L. minutum* subsp. *escarrei* (Llorens & Tébar) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1214 (1990)

Ind. loc.: "Typus: Capdepera, in rupestribus maritimis ad Punta des Faralló de cala Gat, 7-IX-1972. Legerunt A. & Ll. Llorens; Herb. Llorens (Holotypus in herb. Universitatis Insularum Balearicum.)"

Type material: UIB (holotype).

Remarks: ERBEN (1993) reported it as a hybrid between *Limonium balearicum* (Pignatti) Brullo and *L. virgatum* (Willd.) Fourr. Morphological observations from plants at the type locality suggest that *L. escarrei* originated at this place by hybridization processes. However, an accurate identification of its parental taxa remains to be done.

**Limonium formenterae** L. Llorens in Lazaroa 8: 72 (1986); ≡ *L. delicatulum* subsp. *formenterae* (L. Llorens) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1214 (1990)

Ind. loc.: "Typus: Formentera, Voltans de les Salines Marroig. Terres halo-gui-  
xoses. 23-07-1979. Leg. Ll. Llorens (Holotypus: Herb. Llorens, Isotypus: MAF, BC)"

Type material: UIB (holotype); MAF, BC 645069 (isotypes).

Remarks: Included under the synonymy of *Limonium biflorum* by ERBEN (1993). In our view, this is a wrong interpretation of the morphological features exhibited by *L. formenterae*, which should be restored as an endemic taxon of Formentera.

*Limonium × garciae* Pignatti in Arch. Bot. (Forli) 31: 98 (1955), nom. inval.

*Limonium × gougemolsii* Pignatti in Arch. Bot. (Forli) 31: 100 (1955), nom. inval.

**Limonium gougetianum** subsp. **balearicum** Pignatti in Arch. Bot. (Forli) 31: 87 (1955); ≡ *L. gymnesicum* Erben in Mitt. Bot. Staatsm. München 22: 204 (1986); ≡ *L. girardianum* subsp. *balearicum* (Pignatti) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1214 (1990)

Ind. loc.: "MENORCA: Ciudadela (Marés); Villa Carlos (Pau) - Canasia 14.5.1903, FONT QUER, BCG; Puerto de Mahon agosto 1912, FONT QUER, BCG; Cala Figuera 12.7.1913, FONT-QUER, BCG; ibid. 23.9.1913, BCG; Puerto de Mahon 22.11.1913, FONT-QUER, BCG; S. Esteban 19.5.1919, FONT-QUER, BCG. MALLORCA: Roques marit. al Corp-mari de Sa Colonia (Artà) 22.6.1932, GARCIA-FONT, BCG; terres litorales a Sa Colonia 22.6.1932, GARCIA-FONT n° 1273, PAV; terres arenosas del litoral a l'Agulla 7.7.1932, GARCIA-FONT n° 1291, PAV; La Colonia de Artà 14.7.1932, GARCIA-FONT 1273, PAV; terres arenosas del litoral en el Carregador 17.7.1932, GARCIA-FONT n° 1266, PAV; Capdepera, terr.

arenoses alla Cala dels Tomarells [sic] 17.7.1932, GARCIAS-FONT, BCG; La Colonia de Artà, roq. lit. de la Cala dels Cans 10.7.1950, GARCIAS-FONT, BCG; ibid. litoral a l'ombra dels Tomarells 10.7.1950, GARCIAS-FONT, BCG; estanque a La Colonia de Campos, frequente 6.6.1952, PIGNATTI, PAV."

Type material: **BC** (lectotype; ERBEN, 1986: 204).

Remarks: Name in current use (ERBEN, 1993), endemic of Mallorca. Most of the specimens reported in the protologue belong to other species.

**Limonium gougetianum** [subsp. *balearicum*] f. **intermedium** Pignatti in Arch. Bot. (Forli) 31: 88 (1955)

Ind. loc.: "MALLORCA: La Colonia di Alcudia 17.7.1909, KNOCHE, MPU; La Colonia de Artà terres arenoses del litoral sett. 1919, GARCIAS-FONT, BCSEN; ibid. 29.7.1949, GARCIAS-FONT, BCG; Faru [sic] de Capdepera 8.7.1922, GARCIAS-FONT, BCSEN; terres i roques litorals de Morell a Artà 14.7.1932, GARCIAS-FONT n° 1272, PAV; Capdepera roq. marit. a la Cala de Sa Font agosto 1949, GARCIAS-FONT, BCG; entre les roques del litoral al Rin del Carregador 6.7.1950, GARCIAS-FONT n° 1266, PAV."

Type material: **BC** (syntypes), MPU (syntype), RO (syntype).

Remarks: Not included by ERBEN (1993) in his revision of the Spanish and Balearic taxa of *Limonium*. The material included in the protologue is certainly heterogeneous, and the name requires a lectotypification to be fully understood.

**Limonium gougetianum** [subsp. *balearicum*] var. **latifolium** Pignatti in Arch. Bot. (Forli) 31: 89 (1955)

Ind. loc.: "MENORCA: In maritimis Minorcae lug. 1825, HERNANDEZ in erb. Cambessèdes, MPU; Isole Baleari a Porto Maone août 1829, com. Gussone, NAP; Autour de la Ciudadela 15.5.1855, VIGINEIX, MPU; S. Esteban, 13.7.1913, FONT-QUER, BCG; S. Esteban, Villa Carlos 19.5.1919, FONT-QUER, BCG. MALLORCA: Majorque à la Curia Vieja 21.5.1892 (? errore di data?), MARES et VIGINEIX, MPU; La Colonia de Artà agosto 1921, GARCIAS-FONT, BCSEN; terres arenoses al Corp-marì 22.6.1932, GARCIAS-FONT, BCG; litoral a la Colonia de Artà 10.7.1950, GARCIAS-FONT, BCG; ibid. id. id. n° 1274, PAV; estanque a la Colonia de Campos 6.6.1952, PIGNATTI, PAV."

Type material: **BC** (syntypes), MPU (syntypes), NAP (syntype), RO (syntype).

Remarks: Not included by ERBEN (1993) in his revision of the Spanish and Balearic taxa of *Limonium*. The material included in the protologue is certainly heterogeneous, and the name requires a lectotypification to be fully understood.

**Limonium gougetianum** [subsp. *balearicum*] f. **procerum** Pignatti in Arch. Bot. (Forli) 31: 88 (1955)

Ind. loc.: "MALLORCA: Estanque a la Colonia de Campos 6.6.1952, PIGNATTI, PAV."

Type material: To be searched for at RO.

Remarks: Not included by ERBEN (1993) in his revision of the Spanish and Balearic taxa of *Limonium*. This taxon should probably be referred to *L. camposanum* or *L. antoni-llorensii*, but an examination of the type material is required.

**Limonium gougetianum** [subsp. *balearicum*] f. **pseudominutum** Pignatti in Arch. Bot. (Forli) 31: 89 (1955)

Ind. loc.: "MALLORCA: terres arenoses del litoral: Corp-marì de Artà 22.6.1932, GARCIAS-FONT n° 1271, PAV."

Type material: To be searched for at RO.

Remarks: No information concerning this taxon is available. Not included by ERBEN (1993) in his revision of the Spanish and Balearic taxa of *Limonium*.

**Limonium grosii** L. Llorens in Lazaroa 8: 76 (1986); ≡ *L. girardianum* subsp. *grosii* (L. Llorens) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1214 (1990)

Ind. loc.: "Typus: Formentera. Estany des Peix (vers Estanyets). Terres halo-arenoses, 22.07.79. Leg.: Ll. Llorens (Holotypus: Herb. Llorens; Isotypus: BC, MAF)"

Type material: UIB (holotype); MAF (isotype).

Remarks: Name in current use (ERBEN, 1993); endemic to the Western Balearics. The sheet designed as isotype (BC 645068) by LLORENS (1986b) can not be considered as type material since the date of collection (22-VII-1982) does not conform to the protologue.

**Limonium gymnesicum** Erben, see ***L. gougetianum*** subsp. ***balearicum*** Pignatti

**Limonium heterospicatum** Erben in Mitt. Staatssamml. München 28: 383 (1989)

Ind. loc.: "Typus: Ibiza: San Francisco, bei der Pumpstation an der Saline, 26.10.1971, KUHBIER & FINSCHOW 1274 (Holotypus: BREM)"

Type material: BREM (holotype).

Remarks: Name in current use (ERBEN, 1993). However, a morphological, karyological and molecular study of the *Limonium gibertii* complex (CEBRIAN & al., unpublished data) does not support its distinctiveness as a separate microspecies from *L. gibertii* (Sennen) Sennen, s.str.

**Limonium inexpectans** L. Sáez & Rosselló in Anales Jard. Bot. Madrid 54: 286 (1996)

Ind. loc.: "Insulae baleares, Majorica, ubi loco dicto Son Matías (Magalluf, 31S DD67), in pallidibus argilosis salsis, die 4-VIII-1995, J.M. González, J.A. Rosselló & L. Sáez legerunt (BCC)"

Type material: BCC (holotype).

Remarks: Name in current use (SÁEZ & ROSELLÓ, 1996); endemic to the Eastern Balearics (Mallorca).

**Limonium leonardi-llorensii** L. Sáez, Carvalho & Rosselló in Anales Jard. Bot. Madrid 56: 34 (1998)

Ind. loc.: "Insulae Baleares, Majorica, loco dicto Punta Negra (31S DD6175), in saxosis maritimis, die 18-VIII-1995 L. Sáez legit (BCC-5015)"

Holotypus: BCC (holotype).

Remarks: Name in current use (SÁEZ & al., 1998); endemic to the Eastern Balearics (Mallorca). Previously confused with *L. marisolii* L. Llorens (LLORENS, 1986).

**Limonium magallufianum** L. Llorens in Lazaroa 8: 47 (1986)

Ind. loc.: "Terrenys argilosos del Prat de Magalluf (Mallorca), 14.08.1972. Leg. A. i Ll. Llorens (Holotypus: Herb. Llorens; Isotypus: MAF y BC)"

Type material: UIB (holotype); BC (isotype), not traced; MAF (isotype).

Remarks: Name in current use (ERBEN, 1993); endemic to the Eastern Balearics (Mallorca).

**Limonium majoricum** Pignatti in Arch. Bot. (Forlì) 31: 89 (1955); ≡ *L. auriculae-ursifolium* subsp. *majoricum* (Pignatti) Malag., Sin. Fl. Ibér. ed. 2, fasc. 63: 992 (1976); ≡ *L. girardianum* subsp. *majoricum* (Pignatti) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1214 (1990)

Ind. loc.: "MALLORCA: Artà, terres i roques marítimes a Sa Colonia, 14.7.1932, GARCIAS- FONT nº 773 PAV."

Type material: To be searched for at RO; BC (isotype).

Remarks: Name in current use (ERBEN, 1993); endemic to the Eastern Balearics (Mallorca).

*Limonium × mansanetii* A. Llorens & L. Llorens in Bol. Soc. Hist. Nat. Baleares 17: 59 (1972), nom. inval.

**Limonium marisolii** L. Llorens in Lazaroa 8: 51 (1986)

Ind. loc.: "In saxosis maritimis, L. d. Punta dels Esparrals (Punta Llobera. Marina de llucmajor), 15.07.71. Leg. A. et L. Llorens. (Holotypus: Herb. Llorens; Isotypus: BC et MAF)"

Type material: UIB (holotype); BC (isotype), not traced; MAF (isotype).

Remarks: Name in current use (ERBEN, 1993); endemic to the Eastern Balearics (Mallorca).

**Limonium migjornense** L. Llorens in Lazaroa 8: 57 (1986); ≡ *L. delicatulum* subsp. *migjornense* (L. Llorens) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1214 (1990)

Ind. loc.: "Typus: In paludibus gypsaceis argilloso-salsis. L. d. Colònia de Sant Jordi (Campos, Mallorca), 14.08.1976. Leg. A. i Ll. Llorens (Holotypus: Herb. Llorens; Isotypus: BC et MAF)"

Type material: UIB (holotype); BC (isotype, not traced); MAF (isotype).

Remarks: Name in current use (ERBEN, 1993); endemic to the Eastern Balearics (Mallorca). The sheet designated as isotype (BC 639568) by LLORENS (1986a) can not be considered as type material since the date of collection does not conform to the protologue.

**Limonium minoricense** Erben in Mitt. Bot. Staatssamml. München 28: 368 (1989)

Ind. loc.: Biniparratchet (Mah n), Julio 1901, C. Pau (Herb. Hisp.) Holotypus: MA; Isotypi: MA, herb. ERBEN

Type material: **MA** 506568 (holotype); **MA** (isotypes).

Remarks: Name in current use (ERBEN, 1993). The relationships of *Limonium minoricense* are far from being understood. This taxon is probably conspecific with *L. saxicolum* Erben, but a complete revision of the Balearic members of *Limonium* subsect. *Densiflorae* Boiss. is required to substantiate its taxonomic status.

**Limonium minutiflorum** subsp. **balearicum** Pignatti in Arch. Bot. (Forl ) 31: 85 (1955);  $\equiv$  *L. balearicum* (Pignatti) Brullo in Bot. Not. 133: 288 (1980);  $\equiv$  *L. min-*

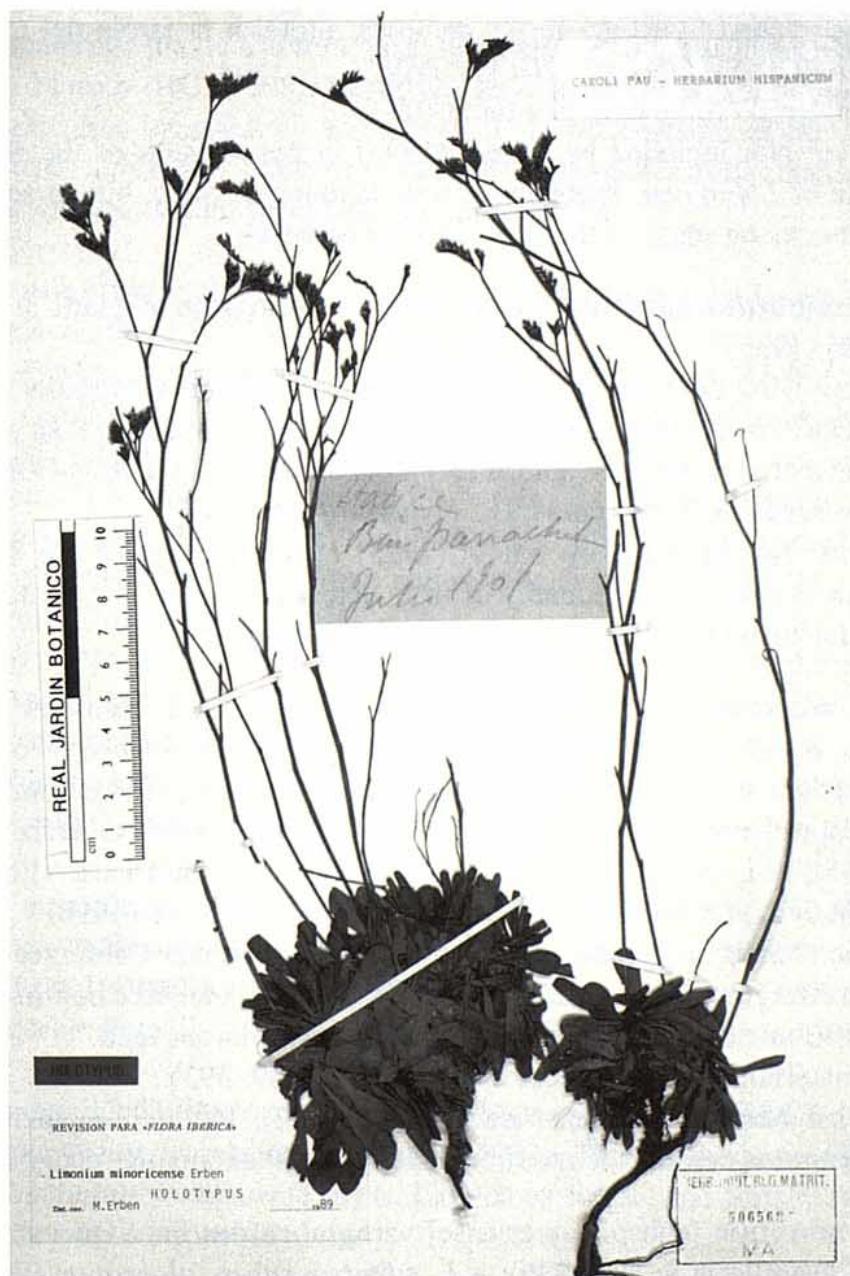


Fig. 12. Holotype of *Limonium minoricense* Erben (MA).

tum [subsp. *caprariense*] var. *balearicum* (Pignatti) O. Bolòs & Vigo, Fl. Països Catalans 3: 78 (1996)

Ind. loc.: "MALLORCA: Roques marítimes a n'Rebassò [sic] (Capdepera-Artà) agosto 1949, GARCIAS-FONT nº 1268, PAV; ibid. id. id. nº 1268 bis, PAV; Espadats en el triquet del Moro (Artà) lug. [sic] 1950, GARCIAS-FONT nº 1286, PAV."

Type material: To be searched for at RO.

Remarks: Name in current use (ERBEN, 1993). No clear morphological discontinuities exist within *Limonium balearicum* and the other taxa belonging to the *L. minutum* complex, and its taxonomic status seems doubtful.

**Limonium minutiflorum** [subsp. *balearicum*] f. **pulvinare** Pignatti in Arch. Bot. (Forli) 31: 86 (1955); ≡ *L. minutiflorum* [subsp. *balearicum*] var. *pulvinare* (Pignatti) Malag., Sin. Fl. Ibér. ed. 2, fasc. 63: 991 (1976)

Ind. loc.: "MALLORCA: Terres arenoses; litoral a la farola del Cap de Pera 6.7.1950, GARCIAS-FONT nº 1264 bis, PAV."

Type material: To be searched for at RO.

Remarks: Not included by ERBEN (1993) in his revision of the Spanish and Balearic taxa of *Limonium*. Probably of little taxonomic value, but an accurate adscription of this taxon requires the study of type material.

**Limonium minutiflorum** [subsp. *balearicum*] f. **minimum** Pignatti in Arch. Bot. (Forli) 31: 86 (1955)

Ind. loc.: "MALLORCA: Capdepera: roques marítimes del Carregador agosto 1949 GARCIA-FONT nº 1268 bis, PAV; ibid. id. id., BCG; ibid., Cala de sa Font agosto 1949, GARCIAS-FONT nº 1268, PAV; ibid. a La Farola 6.7.1950, GARCIAS-FONT, BCG"

Type material: RO (syntypes); BC (syntype), not traced.

Remarks: Not included by ERBEN (1993) in his revision of the Spanish and Balearic taxa of *Limonium*. Probably of little taxonomic value, but an accurate adscription of this taxon requires the study of type material.

**Limonium minutum** subsp. **caprariense** Font Quer & Marcos ex Marcos in Cavanillesia 8: 37 (1936); ≡ *Statice minuta* subsp. *caprariensis* (Font Quer & Marcos) P. Palau in Anales Inst. Bot. Cavanilles 11: 494 (1954), comb. inval.; ≡ *Limonium caprariense* (Font Quer & Marcos ex Marcos) Pignatti in Arch. Bot. (Forli) 31: 77 (1955); ≡ *L. minutum* [subsp. *caprariense*] var. *caprariense* (Font Quer & Marcos ex Marcos) O. Bolòs & Vigo, Fl. Països Catalans 3: 78 (1996)

Ind. loc.: "Hab. in rupibus maritimis, calcareis, insulae Cabrerae, Punta d'Es Castell, Cap Xuriguer, Punta d'Es Pavellons, L'Anciola, etc., nec non in parva insula s'Illa d'Es Conís dicta, ubi ab initio mense julio A. Marcos legit."

Type material: BC 87306 (lectotype; ERBEN, 1989: 392).

Remarks: Name in current use (ERBEN, 1993), but a re-evaluation of the *Limonium minutum* complex is required to support its taxonomic recognition.

**Limonium minutum** [subsp. *caprariense*] var. **glabratum** Font Quer & Marcos ex Marcos in Cavanillesia 8: 37 (1936); ≡ *L. minutum* subsp. *glabratum* (Font Quer & Marcos ex Marcos) Colom, Biogeografía Baleares ed. 2, 1: 199 (1978), comb. inval.

Ind. loc.: "Hab in parva insula Na Pobra dicta."

Type material: Na Pobre (illeta al nord de Cabrera), roques marítimes, 8-VI-1933, A. Marcos (**BC** 87307). **Lectotype here designated** (single specimen).

Remarks: Included within the synonymy of *Limonium caprariense* by ERBEN (1993). The type material does not differ from other specimens of the *L. minutum* complex occurring on the Cabrera islets.

**Limonium minutum** [subsp. *caprariense*] f. **grandifolium** Font Quer & Marcos ex Marcos in Cavanillesia 8: 37 (1936);  $\equiv$  *L. caprariense* f. *grandifolium* (Font Quer & Marcos ex Marcos) Pignatti in Arch. Bot. (Forli) 31: 80 (1955), comb. inval.

Ind. loc.: "Hab. in rupibus maritimis, calcareis, insulae Cabrerae, Punta d'Es Castell, Cap Xuriguera, Punta d'Es Pavellons, L'Anciola, etc., nec non in parva insula s'Illa d'Es Conís dicta, ubi ab initio mense julio A. Marcos legit."

Type material: Illa de Cabrera, prop des Caló de's Forn, roques marítimes, 28-IV-1933, A. Marcos (**BC** 87308). **Lectotype here designated** (single specimen).

Remarks: Not included by ERBEN (1993) in his revision of the Spanish and Balearic taxa of *Limonium*. The type material does not differ from other specimens of the *L. minutum* complex occurring on the Cabrera islets.

**Limonium minutum** [subsp. *caprariense*] f. **minutifolium** Font Quer & Marcos ex Marcos in Cavanillesia 8: 37 (1936, 15 december);  $\equiv$  *L. caprariense* f. *minutifolium* (Font Quer & Marcos ex Marcos) Pignatti in Arch. Bot. (Forli) 31: 79 (1955), comb. inval.;  $\equiv$  *L. caprariense* f. *minutifolium* (Font Quer & Marcos) Pignatti in Arch. Bot. (Forli) 31: 207 (1960)

Ind. loc.: "Hab. in rupibus maritimis, calcareis, insulae Cabrerae, Punta d'Es Castell, Cap Xuriguera, Punta d'Es Pavellons, L'Anciola, etc., nec non in parva insula s'Illa d'Es Conís dicta, ubi ab initio mense julio A. Marcos legit."

Type material: Not traced at BC.

Remarks: Not included by ERBEN (1993) in his revision of the Spanish and Balearic taxa of *Limonium*. We have not seen any type material, but a study of *Limonium* collections collected in the localities given in the protologue suggests that this taxon has no taxonomic value. It should be adscribed to the plants called *L. caprariense*, but the status of the latter is uncertain.

**Limonium muradense** Erben in Mitt. Bot. Staatssamml. München 30: 468 (1991)

Ind. loc.: "Mallorca: Cala Murada, terreno rocoso cerca del mar, 9.9.1990, H. RIGO, Maria & J. ORELL (Herb. Balearicum E-58-8) Holotypus: Herbarium Institut f. Systematische Botanik d. Universität München; Isotipos: Herb. ERBEN, Herb. ORELL.

Type material: M (holotype); PH-ERBEN (isotype), **PH-ORELL** (isotype).

Remarks: Name in current use (ERBEN, 1993). This taxon shows strong similarities with *Limonium fontqueri* (Pau) L. Llorens ex Erben, and further studies might prove that they are conspecific.

**Limonium orellii** Erben in Mitt. Bot. Staatssamml. München 30: 462 (1991)

Ind. loc.: "Typus: Mallorca: Cala de Deià. Torrent, 20.7.1990, J. ORELL (Herb. Balearicum No. 1206) (Holotypus: Herbarium Institut f. Systematische Botanik d. Universität München; Isotyphen: Herb. Erben, Herb. Orell)"

Type material: M (holotype); PH-ERBEN (isotype), **PH-ORELL** (isotype).

Remarks: Name in current use (ERBEN, 1993). Its taxonomic distinctiveness within the *Limonium companyonis* (Gren. & Billot) Kuntze complex seems doubtful and needs further study.

**Limonium ovalifolium** f. **biflorum** Pignatti in Arch. Bot. (Forli) 31: 95 (1955); ≡ *L. ovalifolium* subsp. *biflorum* (Pignatti) Pignatti in Arch. Bot. (Forli) 31: 207 (1960); in Collect. Bot. (Barcelona) 6: 319 (1962); ≡ *L. biflorum* (Pignatti) Pignatti in Bot. J. Linn. Soc. 64: 368 (1971); ≡ *L. delicatulum* subsp. *biflorum* (Pignatti) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1214 (1990)

Ind. loc.: "MALLORCA: Terres arenoses vers la farola del Cap de Pera lug. 1922, GARCIAS-FONT n° 1261, PAV; ibid. 6.7.1950, GARCIAS-FONT n° 1261 bis, PAV; Ca in Simoneta a la Torre d'en Moutro 20.7.1950, GARCIAS-FONT, n° 784, PAV."

Type material: To be traced at RO.

Remarks: Name in current use (ERBEN, 1993). As here circumscribed this taxon is endemic to the Eastern Balearics (Mallorca and Menorca). See further comments under *Limonium formenterae*.

*Limonium palaui* L. Llorens in Lazaroa 8: 79 (1986), nom. nud.

**Limonium portopetranum** Erben in Mitt. Bot. Staatssamml. München 30: 471 (1991)

Ind. loc.: "Typus: Mallorca, Porto Petro, rocas maritimas, 9.9.1990, J. RIGO & J. ORELL (Herb. Balearicum No. P.P. 1) (Holotypus: Herbarium Institut f. Systematische Botanik d. Universität München; Isotyphen: Herb. ERBEN, Herb. ORELL)"

Type material: M (holotype); PH-ERBEN (isotype), **PH-Orell** (isotype).

Remarks: A poorly defined taxon within the *Limonium minutum* complex, probably no worthy of recognition. We could not find any single feature which discriminated *L. portopetranum* from other Balearic populations identified as *L. minutum*.

**Limonium pseudarticulatum** Erben in Mitt. Bot. Staatssamml. München 28: 342 (1989); ≡ *L. articulatum* subsp. *pseudarticulatum* (Erben) O. Bolòs & Vigo, Fl. Països Catalans 3: 94 (1996)

Ind. loc.: "Mallorca: Artà: Cala Carregador, auf Steinig-sandigen Flächen am Meer, 0-5 m, 10.10.1989, ERBEN, MORALES VALVERDE & ROSSELLÓ (Holotypus: M; Isotypi: MA, Herb. ERBEN)"

Type material: M (holotype); **MA** (isotype).

Remarks: Name in current use (ERBEN, 1993). Closely related to *Limonium fontqueri* to which it probably should be subsumed.

**Limonium pseudebusitanum** Erben in Mitt. Bot. Staatssamml. München 28: 409 (1989); ≡ *L. minutum* var. *pseudebusitanum* (Erben) O. Bolòs & Vigo, Fl. Països Catalans 3: 94 (1996)

Ind. loc.: "Punta dels Esparrells [sic] (Cap Blanc - Llucmajor), 7.73, LLORENS (Holotypus: M; Isotypi: herb. ERBEN; herb. LLORENS).

Type material: M (holotype); PH-ERBEN (isotype), UIB (isotype).

Remarks: Name in current use (ERBEN, 1993). Intermediate specimens linking *Limonium pseudobusitanum* to *L. minutum* (L.) Chaz. are countless, supporting the view that the extreme morphological polymorphism seen in the Balearic Islands merely reflects a phenotypic plasticity which should not receive taxonomic recognition.

*Limonium pseudodictyocladum* Greuter & Burdet, see **L. virgatum** subsp. **pseudodictyocladum** Pignatti

*Limonium × pseudodivaricatum* Pignatti in Arch. Bot. (Forlì) 31: 100 (1955), nom. inval.

*Limonium × pseudosmithii* Pignatti in Arch. Bot. (Forlì) 31: 97 (1955), nom. inval.

**Limonium retusum** L. Llorens in Lazaroa 8: 80 (1986); ≡ *L. delicatulum* subsp. *retusum* (L. Llorens) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1214 (1990)

Ind. loc.: "Typus: Salines Marroig (Formentera) Terres halo-guixoses de les voreres del estanys, 23.07.1979. Leg. Ll. Llorens. (Holotypus [no hi ha els dos punts?] Herb. Llorens; Isotypus: BC, MAF)"

Type material: UIB (holotype); BC (isotype, not trace), MAF (isotype).

Remarks: The name is in current use (ERBEN, 1993), but there is convincing evidence that it might be conspecific with *Limonium formenterae*. The sheet annotated as isotype by this author at BC (BC 645066) can not be considered as type material since the date of collection does not conform with the protologue.

**Limonium saxicolum** Erben in Mitt. Bot. Staatssamml. München 28: 402 (1989)

Ind. loc.: "Typus: Puerto de Mahón, rocas marítimas, Statice no. 10, Agosto 1912, P. Font Holotypus: MA"

Type material: MA 506566 (holotype).

Remarks: A species of doubtful taxonomic value, probably conspecific with *Limonium minoricense* Erben.

**Limonium scorpioides** Erben in Mitt. Bot. Staatssamml. München 28: 387 (1989)

Ind. loc.: "Typus: Formentera: Stany del Pudent [sic], IV.1973, T. TARAZONA (Holotypus: MA, Isotypus: herb. ERBEN)"

Type material: MA 506567 (holotype).

Remarks: The type material, and additional specimens from Formentera, do not differ from other populations of the Balearic Islands included within *Limonium minutum* (L.) Chaz.

**Limonium tamarindanum** Erben in Mitt. Bot. Staatssamml. München 28: 372 (1989)

Ind. loc.: "Typus: Menorca: Ciudadela, playas en cala Bosc, ca. 8 m, 13.9.1971, MONTSERRAT Holotypus: MA 348881, Isotypus: JACA 699871"

Type material: **MA** 348881 (holotype); **JACA** 699871 (isotype)

Remarks: Name in current use (ERBEN, 1993). Its taxonomic singularity within the *Limonium fontqueri* group should be further investigated.

**Limonium tenuicaule** Erben in Mitt. Bot. Staatssamml. München 28: 376 (1989)

Ind. loc.: "Typus: Mallorca, Artà: Còloma [sic] de St. Pere, Punta d'es Barracas, Felsküste, 2-15 m, 10.10.1989, ERBEN, MORALES VALVERDE & ROSSELLÓ (Holotypus: M; Isotipi MA, Herb. ERBEN)"

Type material: M (holotype); **MA** 489202, Herb. Erben (isotypes).

Remarks: A member of the *Limonium minutum* complex requiring further study. This taxon does not significantly differ from other populations of this complex and should probably be subsumed within the variation of *L. minutum* (L.) Chaz.

**Limonium validum** Erben in Mitt. Bot. Staatssamml. München 28: 357 (1989)

Ind. loc.: "Magalluf, Terrenys argelosos [sic] del Prat (Mallorca), 08.76, A. & LI. LLORENS (Holotypus: M; Isotipi: Herb. ERBEN, Herb. LLORENS)"

Type material: M (holotype); **UIB** (isotype)

Remarks: Name in current use (ERBEN, 1993). Its taxonomic distinctiveness within the *Limonium companyonis* (Gren. & Billot) Kuntze complex seems doubtful and merits further study.

**Limonium virgatum** [subsp. *virgatum* var. *virgatum*] f. **pseudocaspium** Pignatti in Arch. Bot. (Forli) 31: 74 (1955)

Ind. loc.: "Exs.: Sennen Pl. Esp. 1783 sub. var. reticulata Boiss.- Baleares, Portopí 12.7.1913, BIANOR [...] MALLORCA: Terres litorals a l'Agulla (península d'Artà) 7.7.1932, GARCIAS-FONT n° 1290, PAV."

Type material: **BC** (syntypes).

Remarks: The materials cited in the protologue apparently belong to different entities, so a careful typification remains to be done. The specimens from Portopí are intermediate between a taxon of the *Limonium minutum* group and *L. virgatum* (Willd.) Fourr. The other syntype shows denser spikes and also looks to be of hybrid origin. A taxon closer to *L. virgatum* or *L. pseudarticulatum* might have been involved in its genesis.

**Limonium virgatum** [subsp. *divaricatum*] f. **minus** Pignatti in Arch. Bot. (Forli) 31: 76 (1955)

Ind. loc.: "MALLORCA: Litoral, entre les graves de la punta del Carregador 9.8.1953, GARCIAS-FONT n° 1278, PAV."

Type material: To be searched for at RO.

Remarks: No information concerning this taxon is available, and the study of the type material is imperative before adscribing it to any member of the *Limonium virgatum* group.

**Limonium virgatum** [subsp. *divaricatum*] f. **multiflorum** Pignatti in Arch. Bot. (Forli) 31: 76 (1955)

Ind. loc.: "MENORCA: Cala Mezquita 12.9.1913, FONT QUER, BCG"

Type material: Cala Mezquita (Mahón), peñascos marítimos, 12-IX-1913, Font Quer (BC 54065). **Lectotype here designated** (single specimen).

Remarks: This taxon should be referred to *Limonium fontqueri*.

*Limonium virgatum* subsp. *pseudodyctiocladon* Pignatti in Nuovo Giorn. Bot. Ital. 66: 562 (1959), nom. inval.; ≡ *L. oleifolium* subsp. *pseudodyctiocladon* (Pignatti) Pignatti in Bot. J. Linn. Soc. 64: 366 (1971)

**Limonium virgatum** subsp. ***pseudodyctiocladon*** Pignatti in Arch. Bot. (Forli) 36: 206 (1960); ≡ *L. pseudodyctiocladon* L. Llorens in Lazaroa 8: 60 (1986); ≡ *L. pseudodyctiocladon* Greuter & Burdet in Willdenowia 16: 450 (1987), nom. superfl.; ≡ *L. virgatum* subsp. *pseudodyctiocladon* (L. Llorens) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1214 (1990), nom. illeg.

Ind. loc.: "Typus: Alla punta del Corregador [sic] de Capdepera, 14-8-1954, GARCÍAS-FONT"

Type material: To be searched for at RO.

Remarks: Name in current use (LLORENS, 1986a; ERBEN, 1993); endemic to the Eastern Balearics (Mallorca).

*Limonium × viretianum* Pignatti in Arch. Bot. (Forli) 31: 99 (1955), nom. inval.

*Limonium × virgitanum* Pignatti in Arch. Bot. (Forli) 31: 99 (1955), nom. inval.

*Limonium × virgolsii* Pignatti in Arch. Bot. (Forli) 31: 97 (1955), nom. inval.

*Limonium × virgolsii* f. *pseudotremolsii* Pignatti in Arch. Bot. (Forli) 31: 98 (1955), nom. inval.

*Limonium × virgolsii* f. *pseudovirgatum* Pignatti in Arch. Bot. (Forli) 31: 98 (1955), nom. inval.

*Limonium × virgolsii* f. *pseudomajus* Pignatti Arch. Bot. (Forli) 31: 207 (1960), nom. inval.

*Limonium × virgutiflorum* Pignatti in Arch. Bot. (Forli) 31: 99 (1955), nom. inval.

**Limonium wiedmannii** Erben in Mitt. Bot. Staatssamml. München 22: 206 (1986)

Ind. loc.: "Typus: Balearen: Formentera, in den Salinen, August 1978, WIED-MANN (Holo- und Isotypus: M)"

Type material: M (holotype); M (isotype).

Remarks: Name in current use (ERBEN, 1993); endemic to the Western Balearics (Formentera).

*Statice balearica* Gand., Fl. Eur. 19: 29 (1890), nom. inval.

**Statice bianorii** Sennen & Pau in Bull. Géogr. Bot. 23: 47 (1913);  $\equiv$  *S. duriuscula* var. *bianorii* (Sennen & Pau) Sennen & Pau in Sennen in Bol. Soc. Ibér. Ci. Nat. 35: 31 (1936);  $\equiv$  *Limonium duriusculum* var. *bianorii* (Sennen & Pau) Malag., H. Bianor Educador Botánico Baleares: 137 (1971), comb. inval.;  $\equiv$  *Limonium duriusculum* subsp. *bianorii* (Sennen & Pau) Malag., Subsp. Var. Geogr.: 13 (1973);  $\equiv$  *L. duriusculum* var. *bianorii* (Sennen & Pau) Malag., Sin. Fl. Ibér. ed. 2 fasc. 63: 992 (1976), comb. inval.;  $\equiv$  *L. bianorii* (Sennen & Pau) Erben in Mitt. Bot. Staatssamml. München 28: 350 (1989)

Ind. loc.: "Báleares: Rochers des bords de la mer, près Soller"

Type material: **BC** (isotype).

Remarks: Name in current use (ERBEN, 1993). Its taxonomic distinctiveness within the *Limonium companyonis* (Gren. & Billot) Kuntze complex seems doubtful and requires further study.

**Statice bonnati** Sennen in Bol. Soc. Ibér. Ci. Nat. 35: 29 (1936);  $\equiv$  *Limonium bonnati* (Sennen) Erben in Mitt. Bot. Staatssamml. München 28: 413 (1989) [«bonnetii»]

Ind. loc.: "Baléares: Palma, carrières du Coll. [sic] d'en Rabassa [sic]. leg. F. Bianor"

Type material: **BC** (lectotype; ERBEN, 1989: 413); MA (isotype), MAF (isotype).

Remarks: Not worthy of recognition from *Limonium gibertii* (Sennen) Sennen.

*Statice cucullata* Gand., Fl. Eur. 19: 33 (1890), nom. inval.

**Statice densiflora** var. **balearica** Huter, Porta & Rigo in Oesterr. Bot. Z. 57: 431 (1907)

Ind. loc.: "Balear. ins. Minere [sic], in rupestribus maritimis prope Cindadela [sic]"

Type material: Not traced. Probably at FI.

Remarks: No information concerning this taxon is available. It should probably be referred to the *Limonium minoricense* complex, but the study of the type material is required.

*Statice duriuscula* f. *naine* Knoche, Fl. Balear. 2: 275 (1922), nom. nud.

*Statice duriuscula* f. *parvifolia* Knoche, Fl. Balear. 2: 275 (1922), nom. nud.

*Statice duriuscula* var. *perennis* Garcías Font in Butll. Inst. Catalana Hist. Nat. 17: 119 (1917), nom. nud.

*Statice duriuscula* f. *robustior* Garcías Font in Butll. Inst. Cat. Hist. Nat. 17: 119 (1917), nom. nud.

**Statice ebusitana** Font Quer in Butll. Inst. Catalana Hist. Nat. 25: 100 (1925);  $\equiv$  *Limonium ebusitanum* (Font Quer) Font Quer ex Marcos in Cavanillesia 8: 25, 37 (1936);  $\equiv$  *L. inarimense* subsp. *ebusitanum* (Font Quer) Pignatti in Arch. Bot. (Forli) 31: 1955 (1955);  $\equiv$  *L. minutum* [subsp. *caprariense*] var. *ebusitanum* (Font Quer) O. Bolòs & Vigo, Fl. Països Catalans 3: 78 (1996)

Ind. loc.: "Hab. in rupestribus scopulorum «Les Bledes», pr. Ebusum, ubi Gros, d. 13 junii, invenit"

Type material: **BC** (lectotype; ERBEN, 1989: 406).

Remarks: According to ERBEN (1993) this name should only be applied to plants growing at the type locality. On morphological grounds, plants from the Bledes islets do not differ from the other Balearic populations of the *Limonium minutum* complex.

**Statice fontqueri** Pau in Butll. Inst. Catalana Hist. Nat. 14: 142 (1914);  $\equiv$  *Limonium fontqueri* (Pau) L. Llorens in Folia Bot. Misc. 4: 56 (1984), comb. inval.;  $\equiv$  *L. virgatum* subsp. *fontqueri* (Pau) O. Bolòs, Vigo, Masalles & Ninot, Fl. Manual Països Catalans: 1214 (1990);  $\equiv$  *L. fontqueri* (Pau) L. Llorens ex Erben in Castrov. & al. (eds.) Fl. Iber. 3: 123 (1993)

Ind. loc.: "Peñascos marítimos de Calamezquita (Mahón: 12 Sept. 1913)"

Type material: Cala Mezquita (Mahón), peñascos marítimos, 12-IX-1913, Font Quer (**BC** 54089). **Lectotype here designated; MA** (isolectotype).

Remarks: Name in current use (ERBEN, 1993). According to LLORENS (1984) this taxon occurs on Mallorca, Menorca and the isle of Corsica but this view is not followed by ERBEN (1993), who reported it as a Minorcan endemic, and ARRIGONI & DIANA (1993), who excluded it from the flora of Corsica.

*Statice ivicensis* Gand., Fl. Eur. 19: 27 (1890), nom. inval.

*Statice minoricensis* Gand., Fl. Eur. 19: 24 (1890), nom. inval.;  $\equiv$  *S. densiflora* subsp. *minoricensis* (Gand.) Gand., Nov. Consp. Fl. Eur.: 394 (1910), nom. inval.

**Statice minuta** L., Mant. Pl.: 59 (1767);  $\equiv$  *Limonium minutum* (L.) Chaz., Dict. Jard., Suppl. 2: 35 (1790);  $\equiv$  *L. minutum* (L.) Fourr. in Ann. Soc. Linn. Lyon 17: 141 (1869), comb. superfl.;  $\equiv$  *L. minutum* (L.) Kuntze, Revis. Gen. Pl. 2: 395 (1891), comb. superfl.;  $\equiv$  *Statice virgata* var. *minuta* (L.) Knoche, Fl. Balear. 2: 277 (1922)

Ind. loc.: "Habitat ad Mare Mediterraneum"

Type material: **LINN** 395.16 (lectotype; ERBEN, 1988)

Remarks: Name in current use (ERBEN, 1993). According to ERBEN (1988) the name should be strictly applied to the Balearic plants. Other populations from Southern France previously referred to as *Limonium minutum* should be named *L. pseudominutum* Erben.

**Statice minuta** var. **balearica** Martelli, Riv. Crit. Statice: 13 (1887)  $\equiv$  *S. minuta* f. *balearica* (Martelli) Martelli, Riv. Crit. Statice: 13 (1887)

Ind. loc.: "Abita.- Nell'isola Minorca, alle Baleari, (Porta e Rigo!)"

Type material: To be searched for at FI.

Remarks: According to ERBEN (1993) this taxon should be adscribed to *Limonium minutum*.

**Statice minuta** var. **dissitiflora** Boiss. in Alph. DC., Prodomus 12: 655 (1848);  $\equiv$  *Limonium minutum* var. *dissitiflorum* (Boiss. in Aph. DC.) Salmon in J. Bot. 53: 335 (1915)

Ind. loc.: "In Corsicâ ad Bonifacio (Sieber ! Soleiro !), insulis Balearibus (herb. Fauché), Catalauniâ ad Montjouy (herb. Boiss.)"

Type material: **G-Boiss** (syntype).

Remarks: The material included in the herbarium of Boissier is heterogeneous and applies to several entities. The balearic specimens should probably be referred to *Limonium minutum* (L.) Chaz., but an accurate lectotypification of the taxon is required.

**Statice minuta** var. **microphylla** Boiss. in Alph. DC., Prodr. 12: 655 (1848);  $\equiv$  *Limonium minutum* var. *microphyllum* (Boiss. in Aph. DC.) Salmon in J. Bot. 53: 335 (1915)

Ind. loc.: "In Galliâ australi ! Balearibus !"

Type material: **G-Boiss** (syntype).

Remarks: The material included in the herbarium of Boissier is heterogeneous and applies to several entities. The balearic specimens should probably be referred to *Limonium minutum* but an accurate lectotypification of the taxon is required.

**Statice ovalifolia** var. **balearica** Wangerin in Feddes Repert. Spec. Nov. Regni Veg. 17: 400 (1921)

Ind. loc.: "Balearen: Insel Minorca, auf Kalkfelsen des Strandes beim Hafen Mahon [sic] (leg. Porta et Rigo, flühend am 13.Juli 1885, herb. Berol. et Vrat.)"

Type material: To be searched for at B.

Remarks: According to ERBEN (1993) this taxon belongs to *Limonium biflorum*.

**Statice tenoreana** var. **minoricensis** Pau in Butll. Inst. Catalana Hist. Nat. 14: 142 (1914)

Ind. loc.: "Villa Carlos"

Type material: Not traced.

Remarks: No information concerning this taxon is available. The name is not in current use and it has not been included by ERBEN (1993) in his revision of the Spanish and Balearic taxa of *Limonium*.

**Statice virgata** var. **gracillima** J.J. Rodr., Fl. Menorca: 111 (1904);  $\equiv$  *S. × gracillima* (J.J. Rodr.) Rouy in Rev. Bot. Syst. Géogr. Bot. 1: 181 (1909);  $\equiv$  *S. virgata* f. *gracillima* (J.J. Rodr.) Knoche, Fl. Balear. 2: 276 (1922)

Ind. loc.: "Puerto de Mahón cerca de Villa-Cárcel, Canasía, Rodr.; peñascos marítimos de la Mezquita, Porta"

Type material: **PH-RODR** (syntype).

Remarks: This taxon should be included within the variation of *Limonium virgatum*.

## Poaceae

*Aegilops balearica* Gand., Fl. Eur. 25: 9 (1891), nom. inval.;  $\equiv$  *A. ventricosa* subsp. *balearica* (Gand.) Gand., Nov. Conspl. Fl. Eur.: 509 (1910), nom. inval.

**Agrostis barceloi** L. Sáez & Rosselló in Bot. J. Linn. Soc. 133: 361 (2000)

Ind. loc.: "Holotype. INSULAE BALEARICAE, MAJORICA: In praeruptis rupium umbrosis calcareis septentrionalibus loco dicto Puig Major de Son Torrella, ad 1400 m, 31SDE8206, ubi L. Sáez LS 5132 14.viii.1998 legit (BC 852322)"

Type material: **BC** (holotype); **BCC, W, PH**- SÁEZ (isotypes).

Remarks: Name in current use (SÁEZ & ROSELLÓ, 2000); endemic to the Balearic Islands (Mallorca). This tetraploid species ( $2n=28$ ) belongs to the *Agrostis alpina* group, and it is related to *A. schleicheri* Jord. & Verl. mainly on morphological and anatomical grounds.

*Agropyrum balearicum* Bianor in Butll. Inst. Catalana Hist. Nat 17: 141 (1917), nom. nud.

*Aira balearica* Gand., Fl. Eur. 25: 61 (1891), nom. inval.

*Anthoxanthum balearicum* Gand., Fl. Eur. 25: 113 (1891), nom. inval.

*Anthoxanthum odoratum* var. *inodorum* J.J. Rodr. nom nud., in sched. (COI-Willkomm)

**Avena barbata** var. **humilis** Willk. in Linnaea 40: 10 (1875)

Ind. loc.: "In glareosis dumosis pinetorum c. castell. [sic] Bellver"

Type material: Mallorca: in pinetis juxta castell. Bellver, 12-IV-1873, Willkomm, Herb. balear. n. 214. (COI-Willkomm). **Lectotype here designated** (middle specimen).

Remarks: Not worthy of recognition from *Avena barbata* L.

**Avena crassifolia** Font Quer in Butll. Inst. Catalana Hist. Nat. 20: 189 (1920);  $\equiv$  *A. bromoides* [subsp. *australis* var. *pruinosa*] subvar. *crassifolia* (Font Quer) St. Yves in Candollea 4: 486 (1931);  $\equiv$  *Avenula crasifolia* (Font Quer) Holub in Folia Geobot. Phytota. (Praha) 11: 295 (1976);  $\equiv$  *A. pruinosa* subsp. *crassifolia* (Font Quer) Malag., Sin. Fl. Ibér. ed. 2, fasc. 119: 1900 (1980), comb. inval.;  $\equiv$  *A. bromoides* subsp. *crassifolia* (Font Quer) O. Bolòs, Masalles & Vigo in Collect. Bot. (Barcelona) 17: 96 (1987);  $\equiv$  *Helictotrichon crassifolium* (Font Quer) Röser, Dissert. Bot. 145: 123 (1989)

Ind. loc.: "Hab. in rupestribus maritimis insulae Ebusae, l.d. Cala d'Aubarca, Cala de Lladalt, Cala de les Torretes"

Type material: **G** (lectotype; RÖSER, 1989); **BC** (isolectotype); **LISE** (isolectotype); **G** (syntype).

Remarks: Name in current use (ROMERO ZARCO, 1984); endemic to the Western Balearic Islands (Eivissa).

**Avenastrum bromoides** [subsp. *australis* var. *parlatorii*] subvar. **fallax** Pignatti in Arch. Bot. (Forlì) 31: 52 (1955)

Ind. loc.: "...presso Alcudia in una vasta macchia con vegetazione del Cistion ladaniferi, l'I/6"

Type material: To be searched for at RO.

Remarks: Not included by ROMERO ZARCO (1984) in his taxonomic revision of the genus.

**Brachypodium sylvaticum** var. **multiflorum** Willk. ex J.J. Rodr. in Anales Soc. Esp. Hist. Nat. 3: 67 (1874); Willk. in Oesterr. Bot. Z. 40: 183 (1890)

Ind. loc.: "Matorrales en las arenas de la Mezquita, lados del torrente de la Canasía.- Mayo"

Type material: Not traced at COI-Willkomm; to be searched for at PH-RODR.

Remarks: Not included in the revision of the genus by SAINT-YVES (1934). Probably not meritig taxonomic recognition from *Brachypodium sylvaticum* L.

*Briza balearica* Gand., Fl. Eur. 25: 178 (1891), nom. inval.

*Briza maxima* var. *monostachya* Bianor in Butll. Inst. Catalana Hist. Nat 17: 141 (1917), nom. nud.

*Bromus balearicus* Gand., Fl. Eur. 25: 195 (1891), nom. inval.;  $\equiv$  *B. macrostachys* subsp. *balearicus* (Gand.) Gand., Nov. Conspl. Fl. Eur.: 501 (1910), nom. inval.

**Bromus demissus** Porta in Nuovo Giorn. Bot. Ital. 19: 305 (1887)  $\equiv$  *B. fasciculatus* subsp. *demissus* (Porta) Gand., Nov. Conspl. Fl. Eur.: 500 (1910)

Ind. loc.: "M[ajorca]. In pascuis editioribus m. Puig major de Torrella, rarissimus. 8 Jun."

Type material: To be searched for at FI.

Remarks: No information concerning this taxon is available. Not treated by SMITH (1980) in his European account of the genus.

**Bromus madritensis** f. **minor** Gand. in Bull. Soc. Bot. France 47: 136 (1900)

Ind. loc.: "Puig Mayor"

Type material: To be searched for at LY.

Remarks: Probably of no taxonomic value, but pending study of the type material.

*Cynosurus balearicus* Gand., Fl. Eur. 25: 263 (1891), nom. inval.

*Cynosurus echinatus* var. *purpureus* P. Palau in Anales Inst. Bot. Cavanilles 11: 500 (1954), nom. inval.;  $\equiv$  *C. echinatus* subsp. *purpureus* (P. Palau) Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), nom. inval.

**Cynosurus portae** f. **rubens** Gand. in Bull. Soc. Bot. France 47: 136 (1900)

Ind. loc.: "Puig Mayor"

Type material: To be searched for at LY.

Remarks: Plants from the type locality are referable to *Cynosurus elegans* Desf., to which all described taxa from this site (*C. portae* f. *rubens* and *C. pygmaeus*) should probably be referred.

**Cynosurus pygmaeus** Porta in Nuovo Giorn. Bot. Ital. 19: 322 (1887);  $\equiv$  C. elegans subsp. pygmaeus (Porta) Gand., Nov. Consp. Fl. Eur.: 489 (1910)

Ind. loc.: "M[ajorca]. In pascuis editissimis borealibus m. Puig major de Torrella. 24 Jun."

Type material: To be searched for at FI.

Remarks: See comments under *Cynosurus portae* f. *rubens*.

*Dactylis balearica* Gand., Fl. Eur. 25: 271 (1891), nom. inval.

**Dactylis hispanica** f. **viridifolia** Pau in Bol. Soc. Esp. Hist. Nat. 1: 214 (1901)

Ind. loc.: "Canasia, Rafal Fort"

Type material: Rafal Fort, 9-V-1900, [Pons Guerau] (MA 10746). **Lectotype here designated** (single specimen).

Remarks: A variant of *Dactylis glomerata* L. subsp. *hispanica* (Roth) Nyman of no taxonomic value.

**Dactylis ibicensis** Gand. in Bull. Soc. Bot. France 47: 139 (1900);  $\equiv$  D. *hispanica* subsp. *ibicensis* (Gand.) Gand., Nov. Consp. Fl. Eur.: 499 (1910);  $\equiv$  D. *glomerata* f. *ibicensis* (Gand.) Knoche, Fl. Balear. 1: 318 (1921);  $\equiv$  D. *glomerata* subsp. *ibicensis* (Gand.) Rosselló & L. Sáez, **comb. nov.**

Ind. loc.: "Hab. copiose in olivibus ad sierra Escandills insulae Ibizae"

Type material: Not traced

Remarks: Name in current use. ROSELLÓ & SÁEZ (1998) created the new name *Dactylis glomerata* subsp. *nestorii* Rosselló & L. Sáez to replace the illegitimate *Dactylis glomerata* subsp. *ibicensis* Stebbins & Zohary. At that time the authors were not aware of the combination *D. hispanica* subsp. *ibicensis* (Gand.) Gand. This name renders superfluous the proposal of *D. glomerata* subsp. *nestorii* and a new combination is necessary to accommodate *D. ibicensis* Gand at the subspecific level under *D. glomerata*.

*Dactylis glomerata* subsp. *ibicensis* Stebbins & Zohary in Univ. Calif. Publ. Bot. 31: 12 (1959), nom. illeg.;  $\equiv$  *D. glomerata* subsp. *nestorii* Rosselló & L. Sáez in Anales Jard. Bot. Madrid 56: 396 (1998), nom. superfl.

Remarks: See comments under *Dactylis ibicensis* Gand. for the nomenclature of the Balearic plant.

*Dactylis glomerata* subsp. *nestorii* Rosselló & L. Sáez, see *D. glomerata* subsp. *ibicensis* Stebbins & Zohary

**Desmazeria balearica** Willk. in Oesterr. Bot. Z. 40: 184 (1890);  $\equiv$  Catapodium loliaceum var. *balearicum* (Willk.) Font Quer in Bol. Soc. Esp. Hist. Nat. 19: 273 (1919);  $\equiv$  C. *mari-*num var. *balearicum* (Willk.) Paunero in Anales Inst. Bot. Cavanilles 25: 214 (1965);  $\equiv$  C. *balearicum* (Willk.) H. Scholz in Bot. Chron. 13: 96 (2000).

Ind. loc.: "In arenosis maritimis Balearium (in insula Minoris ditione la canasia Rodrigu! [sic] 1875, ad insulae Majoris portum Soller [sic], Porta et Riga [sic] 1885, ad rupes maritimas prope Alcudia, Cambess. ?)"

Type material: Not traced at COI-Willkomm; to be searched for at PH-RODR and FI.

Remarks: Name in current use. This species occurs in countries bordering the Mediterranean Sea and on the Atlantic coast of Spain (SCHOLZ, 2000). Included by STACE (1980) under the variability of *Desmazeria marina* (L.) Druce.

*Desmazeria balearica* Gand., Fl. Eur. 25: 278 (1891), nom. inval.

*Desmazeria megastachya* Gand., Fl. Eur. 25: 277 (1891), nom. inval.; ≡ *D. lolacea* subsp. *megastachya* (Gand.) Gand., Nov. Consp. Fl. Eur.: 511 (1910), nom. inval.

*Drymonaetes fenas* Gand., Fl. Eur. 25: 333 (1891), nom. inval.

*Eragrostis balearica* Gand., Fl. Eur. 25: 293 (1891), nom. inval.

**Festuca balearica** Guatt ex Zuccagni in Roem., Collectanea: 125 (1806)

Ind. loc.: Not stated.

Type material: To be searched for at FI.

Remarks: No information concerning this taxon has been available to us. The species is not included in the European account of the genus (MARKGRAF-DANNENBERG, 1980). The only species of *Festuca* occurring naturally on the Balearic Islands is *F. arundinacea* Schreb., and most probably *F. balearica* should be referred to it.

*Heuffleia balearica* Gand., Fl. Eur. 25: 135 (1891), nom. inval.

**Hordeum rubens** Willk. in Oesterr. Bot. Z. 25: 109 (1875); Willk. in Linnaea 40: 13 (1876); ≡ *H. murinum* subsp. *rubens* (Willk.) Gand., Nov. Consp. Fl. Eur.: 509 (1910); ≡ *H. murinum* f. *rubens* (Willk.) Knoche, Fl. Balear. 1: 334 (1921)

Ind. loc.: "Mallorca: in cultis et ruderatis oppidi Sóller, die 6 Maji jam fere defloratum"

Type material: Mallorca: in oppido Soller ad muros, in cultis, ruderatis, 5-V-1873, Willkomm, Herb. balear. n. 444. (**COI-Willkomm**) **Lectotype here designated** (the second specimen on right).

Remarks: Identified with *Hordeum murinum* L. subsp. *murinum* by HUMPHRIES (1980).

*Melica bauhinii* f. *balearica* Bonafé, Fl. Mallorca 1: 168 (1977), nom. inval.

*Melica minuta* var. *latifolia* Coss. ex Marès & Vigin., Cat. Pl. Vasc. Baléares: 308 (1880), nom. nud.

**Melica rimarum** Gand. in Bull. Soc. Bot. France 47: 124 (1900); ≡ *M. minuta* subsp. *rimarum* (Gand.) Gand., Nov. Consp. Fl. Eur.: 499 (1910)

Ind. loc.: "[Puig de Galatzó] In fissuris rupium verticalium vers. 900 m. alt."

Type material: To be searched for at LY.

Remarks: No information concerning this taxon is available. It should probably be referred to *Melica minuta* L., which grows at the type locality.

*Poa annua* var. *spiciformis* P. Palau in Anales Inst. Bot. Cavanilles 12: 257 (1955), nom. inval.

**Poa balearica** Porta in Nuovo Giorn. Bot. Ital. 19: 324 (1887); ≡ *P. trivialis* subsp. *balearica* (Porta) Gand., Nov. Consp. Fl. Eur.: 506 (1910); ≡ *P. trivialis* f. *balearica* (Porta) Knoche, Fl. Balear. 1: 310 (1921); ≡ *P. trivialis* var. *balearica* (Porta) O. Bolòs & Molinier in Collect. Bot. (Barcelona) 5: tab. 7 (1958), comb. inval.

Ind. loc.: "M[ajorca]. Ad pedes rupium praeruptarum m. Coma den Arbona. 7 Jun."

Type material: Balearum insula Majore, Coma den Arbona montium ad Soller sol. calcar. 1000 m, 7-VI-1885, Porta & Rigo (G). **Lectotype here designated** (second on left specimen).

Remarks: According to HERNÁNDEZ CARDONA (1976, 1978) *Poa balearica* is cospecific with *P. flaccidula* Boiss. & Reut.

**Poa trivialis** var. *flaccida* Willk. ex J.J. Rodr., Fl. Menorca: 152 (1904)

Ind. loc.: "Barranco de Son Blanc en sitios frescos"

Type material: Not traced at COI-Willkomm; to be searched for at PH-RODR.

Remarks: Not included in the revision of the Spanish and Balearic taxa by HERNÁNDEZ CARDONA (1978).

**Poa trivialis** rasse **majorcica** F. Herm. in Verh. Bot. Vereins Prov. Branderburg 54: 247 (1914); ≡ *P. trivialis* f. *majorcica* (F. Herm.) Knoche, Fl. Balear. 1: 310 (1921)

Ind. loc.: "Ich konnte, teils bei Palma, teils sonst auf der Insel, folgende festsstellen"

Type material: To be searched for at GAT.

Remarks: Not included in the revision of the Spanish and Balearic taxa by HERNÁNDEZ CARDONA (1978).

*Schlerochoa racemosa* Sennen in Bull. Géogr. Bot. 24: 249 (1914), nom. nud.; ≡ *Scleropoa rigida* f. *racemosa* (Sennen) Bianor in Butll. Inst. Catalana Hist. Nat 17: 141 (1917), nom. inval.

*Serrafalcus balearicus* Gand., Fl. Eur. 25: 217 (1891), nom. inval.

*Sesleria balearica* Sennen ex Garcías Font in Butll. Inst. Catalana Hist. Nat. 23: 101 (1923), nom. nud.

**Sesleria caerulea** var. **australis** F. Herm. in Verh. Bot. Vereins Prov. Branderburg 54: 248 (1914)

Ind. loc.: "Der Aufstieg zum Puig mayor"

Type material: To be searched for at GAT.

**Remarks:** The only taxon of *Sesleria* inhabiting the Balearic Islands is *Sesleria insularis* Sommier subsp. *insularis*, which grows in abundance at the crevices of the type locality, and to which we are confident *S. caerulea* var. *australis* should be referred.

***Stipa tortilis* var. *macrostachya*** Font Quer in Bol. Soc. Esp. Hist. Nat. 19: 272 (1919)

Ind. loc.: "En Santa Ponsa de Alayor"

Type material: Sta. Ponsa de Alayor, 30-V-1913, Font Quer 132 (BC 67691).

**Lectotype here designated** (single specimen).

**Remarks:** The lectotype belongs to *Stipa capensis* Thunb. var. *capensis*.

*Trachinia balearica* Gand., Fl. Eur. 25: 166 (1891), nom. inval.

*Trachinia insularis* Gand., Fl. Eur. 25: 167 (1891), nom. inval.

***Trisetum balearicum*** Gand. in Bull. Soc. Bot. France 47: 141 (1900)

Ind. loc.: "Hab. in collibus et pinetis siccis maritimis, tam ad Sabina quam ad San Francisco"

Type material: To be searched for at LY.

**Remarks:** Not included by JONSELL (1980) in his account of the European taxa of *Trisetum*.

***Trisetum bidentatum*** Pau in Actas Soc. Esp. Hist. Nat. 28: 214 (1899)

Ind. loc.: "Entre Ibiza y Santa Eulalia"

Type material: Not traced at MA.

**Remarks:** According to KNOCHE (1921) this species was in fact *Avellinia micheii* (Savi) Parl., the plant included by JONSELL (1980) in his account of the European taxa of *Trisetum*.

***Triticum ovatum* var. *intermedium*** F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 252 (1914)

Ind. loc.: "Ich konnte, teils bei Palma, teils sonst auf der Insel, folgende feststellen"

Type material: To be searched for at GAT.

**Remarks:** VAN SLAGEREN (1995: 424) erroneously reported the effective publication of this taxon to KNOCHE (1921). This taxon was included by VAN SLAGEREN (1995) in the synonymy of *Aegilops ovata* L.

## Polygalaceae

*Salypoga balearica* Gand., Fl. Eur. 3: 167 (1884), nom. inval.

*Microlophium balearicum* Gand., Fl. Eur. 3: 169 (1884), nom. inval.

### Polygonaceae

*Avicularia balearica* Gand., Fl. Eur. 19: 259 (1890), nom. inval.

**Polygonum romanum** subsp. **balearicum** Raffaelli & Villar in Collect. Bot. (Barcelona) 17: 50 (1987)

Ind. loc.: “Baleares: Pont d’Inca torrent de Barbará 1917-30-VIII. leg. F. Bianor”

Type material: **BC** (holotype, paratype); FI (paratype); JACA (paratype).

Remarks: Name in current use (VILLAR, 1990); endemic to the Eastern Balearics. Recently also reported from Menorca (FRAGA, 1998).

*Rumex balearicus* Gand., Fl. Eur. 19: 287 (1890), nom. inval.

### Polypodiaceae

*Polypodium australe* f. *lobatum* Bonafè, Fl. Mallorca 1: 59 (1977), nom. inval.

*Polypodium balearicum* Gand., Fl. Eur. 27: 151 (1891), nom. inval.

### Primulaceae

**Coris monspeliensis** [subsp. *fontqueri*] var. **ebositana** Masclans in Collect. Bot. (Barcelona) 7: 755 (1968)

Ind. loc.: “Cap del Jueu, Eivissa, GROS & FONT QUER”

Type material: **BC** (holotype).

Remarks: This taxon requires further study. The treatment of Spanish and Balearic plants of *Coris monspeliensis* made by MASCLANS (1968) was based on a narrow taxonomic concept which tended to overemphasize local morphological variants. Plants from the western Balearics do not significantly differ from those growing in the E of the Iberian peninsula (GÓMEZ, 1997), referred to as *C. monspeliensis* subsp. *fontqueri* Masclans but show several discriminant features from those growing on the Eastern Balearics.

**Cyclamen balearicum** Willk. in Oesterr. Bot. Z. 25: 111 (1875); Willk. in Linnaea 40: 75 (1876); ≡ *C. repandum* race *balearicum* (Willk.) Rouy in Rouy & Foucaud, Fl. France 10: 189 (1908); ≡ *C. europaeum* subsp. *balearicum* (Willk.) Gand., Nov. Consp. Fl. Eur.: 328 (1910); ≡ *C. repandum* var. *balearicum* (Willk.) F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 245 (1914); ≡ *C. hederifolium* subsp. *balearicum*

(Willk.) Schwartz in Gartenflora n. f. 1: 22 (1938);  $\equiv C. repandum$  subsp. *balearicum* (Willk.) Malag., Subsp. Var. Geogr.: 5 (1973), comb. inval.

Ind. loc.: In solo pingui saxoso Balearium abundat atque in insula Majore ad summa montium cacumina usque adscendit. Floret Martio-Majo.

Type material: Mallorca: in nemoribus pr. Miramar, 16-IV- 1873, Willkomm, Herb. balear. n. 20. (**COI-Willkomm**). **Lectotype here designated** (bottom right specimen).

Remarks: Name in current use (GREY-WILSON, 1988). This plant was described from the Balearic archipelago, but was later found at several localities in Southern France (Gard, H rault).

**Lysimachia minoricensis** J.J. Rodr. in Bull. Soc. Bot. France 25: 240 (1878);  $\equiv L.$  ephemereum subsp. *minoricensis* (J.J. Rodr.) Gand., Nov. Conspp. Fl. Eur.: 327 (1910)

Ind. loc.: HAB.- Lieux frais du barranco de se [sic] Vall.- Fl. Juin.

Type material: La Vall (Minorque), lieux frais, 1-IX-1876, J.J. Rodr guez (**MPU-Knoche**). **Lectotype here designated**.

Remarks: Name in current use (VILLAR, 1997). This species is extinct in the wild and is cultivated at several Botanical Gardens in Europe and North America.

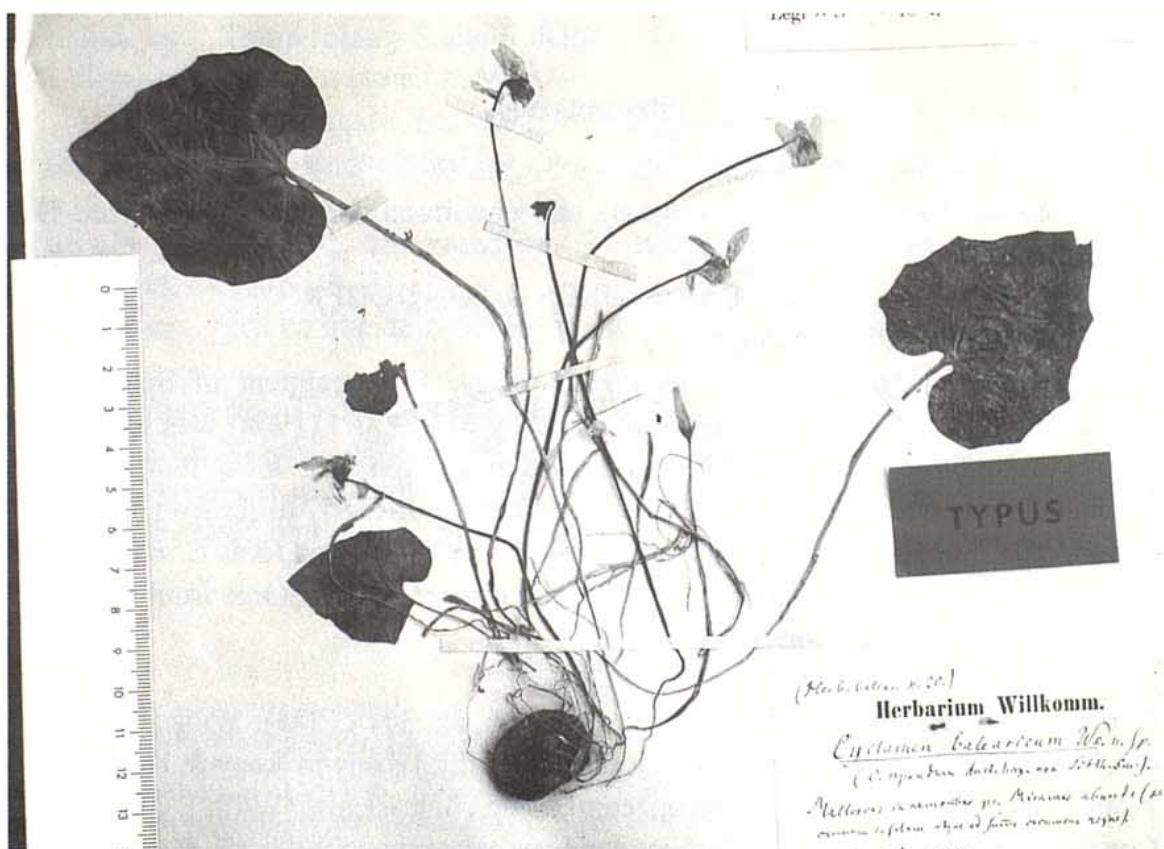


Fig. 13. Lectotype of *Cyclamen balearicum* Willk. (COI-Willkomm).

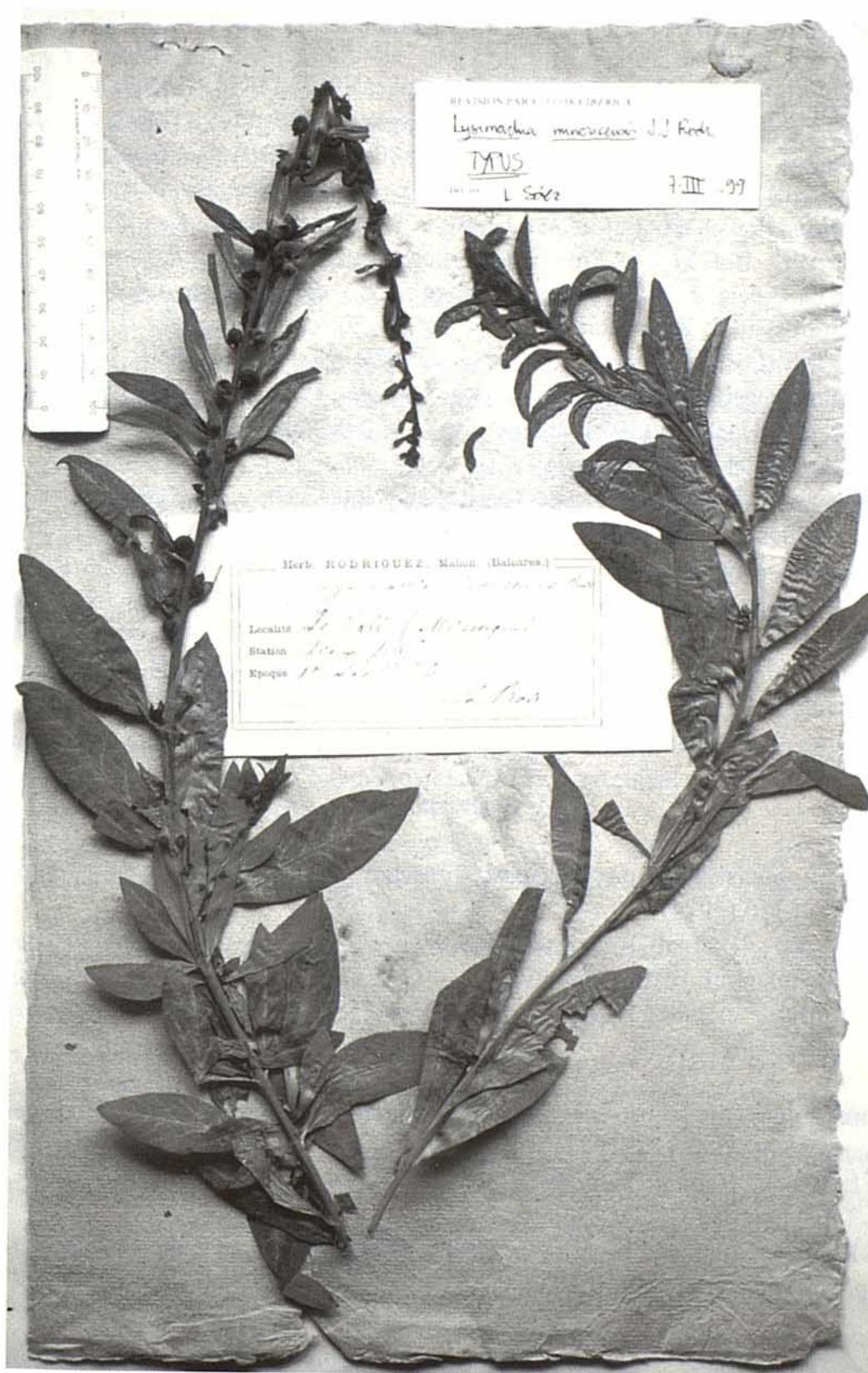


Fig. 14. Lectotype of *Lysimachia minoricensis* J.J. Rodr. (MPU-Knoche).

*Primula argyrotricha* Gand., Fl. Eur. 15: 279 (1888), nom. inval.

*Primula balearica* Gand., Fl. Eur. 15: 280 (1888), nom. inval.

**Primula vulgaris** var. **balearica** Willk. in Linnaea 40: 75 (1876); ≡ *P. grandiflora* var. *balearica* (Willk.) Marès & Vigin., Cat. Pl. Vasc. Baleáres: 180 (1880); ≡ *P. acaulis* var. *balearica* (Willk.) Pax in Bot. Jahrb. Syst. 10: 181 (1889); ≡ *P. balearica* (Willk.) Gand. in Bull. Soc. Bot. France 47: 136 (1900); ≡ *P. vulgaris* subsp. *balearica* (Willk.) Gand., Nov. Consp. Fl. Eur.: 328 (1910); ≡ *P. vulgaris* rasse *balearica* (Willk.) F. Herm. in Verh. Bot. Vereins Prov. Branderburg 54: 249 (1914); ≡ *P. acaulis* var. *alba* Knoche, Fl. Balear. 2: 262 (1922), nom. illeg.; ≡ *P. vulgaris* subsp. *balearica* (Willk.) Sm & Forrest in J. Roy. Hort. Soc. 54: 21 (1929), comb. superfl.; ≡ *P. balearica* (Willk.) Los.-Losinsk. in Izv. Akad. Nauk SSSR, Ser. 7, Otd. Mat. Nauk 2: 304 (1933), comb. superfl. [n.v.]; ≡ *P. vulgaris* var. *alba* (Knoche) Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), nom. inval.; ≡ *P. acaulis* subsp. *balearica* (Willk.) Greuter & Burdet in Willdenowia 15: 42 (1989)

Ind. loc.: "Mallorca: Puig de Torella [sic], inter saxa in solo pingui excavatum graminosarum in cacumine septentrionem versus sitarum ad alt. 1500 met. copiose, d. 5. Majo c. flor."

Type material: Not traced at COI-Willk.; LE (syntype, cf. FENDERSON, 1986).

Remarks: Name in current use (KRESS, 1997); endemic to the Balearic Islands (Mallorca). FENDERSON (1986) reported type material at LE and GH. This, however, is erroneous, since neither the collectors nor the dates agree with the protologue.

## Raflessiaceae

**Cytinus hypocistis** subsp. **pityusensis** Finschow in Veröff. Überseemus. Bremen, Reihe A, 4: 110 (1974)

Ind. loc.: "Habitat: Torre de Sal Rossa"

Type material: BREM (holotype).

Remarks: Included by VILLAR (1997) as a synonym of *Cytinus hypocistis* L. subsp. *macranthus* Wettst.

**Cytinus hypocistis** [subsp. *pityusensis*] f. **solaris** Finschow in Veröff. Überseemus. Bremen, Reihe A, 4: 110 (1974)

Ind. loc.: "Habitat: Torre de Sal Rossa"

Type material: BREM (holotype).

Remarks: Included by VILLAR (1997) as a synonym of *Cytinus hypocistis* L. subsp. *macranthus* Wettst.

## Ranunculaceae

*Batrachium balearicum* Gand. Fl. Eur. 1: 271 (1883), nom. inval.

*Batrachium minoricense* Gand. Fl. Eur. 1: 261 (1883), nom. inval.

**Clematis balearica** Rich., Observ. Phys. 13: 127 (1779);  $\equiv$  *C. cirrhosa* var. *balearica* (Rich.) Cambess. in Mém. Mus. Hist. Nat. 14: 201 (1827);  $\equiv$  *Cheiropsis balearica* (Rich.) Spach, Monogr. Phanerog. 7: 262 (1839);  $\equiv$  *Clematis cirrhosa* var. *balearica* (Rich.) J.J. Rodr., Cat. Pl. Vasc. Menorca: 1 (1865-1868), comb. superfl.;  $\equiv$  *C. cirrhosa* var. *balearica* (Rich.) Willk. in Willk. & Lange, Prodr. Fl. Hispan. 3: 624 (1878), comb. superfl.;  $\equiv$  *C. cirrhosa* subsp. *balearica* (Rich.) O. Kuntze in Verh. Bot. Vereins Prov. Brandenburg 26: 144 (1885);  $\equiv$  *C. cirrhosa* f. *balearica* (Rich.) Maire, Flore Afr. Nord 11: 104 (1964)

Ind. loc: "Cette plante fut envoyée des Isles Baléares, en 1761, par M. Antonie Richard..."

Type material: Not traced, probably held at P.

Remarks: Plants of *Clematis cirrhosa* L. from the Balearic Islands show a noticeable polymorphism involving mainly foliar features. No clear-cut separation based on discrete morphological entities is advisable, and most of the variation probably has no genetic basis. According to TUTIN (1964) no special taxon occurs on the Balearic Islands.

*Clematis balearica* Lam., Encycl. 2: 43 (1786), nom. illeg.;  $\equiv$  *Atragene balearica* (Lam.) Pers., Syn. Pl. 2: 98 (1806), nom. inval.

*Clematis balearica* Pers., Syn. Pl. 2: 99 (1806), nom. illeg.

**Clematis calycina** Aiton, Hort. Kew., 2: 259 (1789);  $\equiv$  *C. polymorpha* var. *calycina* (Aiton) Viv., Flora Corsicae Spec. Nov.: 9 (1824), nom. inval.

Ind. loc.: "Nat. of Minorca"

Type material: To be searched for at K.

Remarks: Included within the variation of *Clematis cirrhosa* L. (TUTIN, 1964).

**Clematis cirrhosa** [subsp. *balearica*] var. **foliato-bracteata** O. Kuntze in Verh. Bot. Vereins Prov. Brandenburg 26: 144 (1885)

Ind. loc.: Sicilia (!Gasparrini, herb. lugd), Menorca"

Type material: To be searched for at NY.

Remarks: See comments under *Clematis balearica* Rich.

**Clematis cirrhosa** [subsp. *balearica*] var. **minima** O. Kuntze in Verh. Bot. Vereins Prov. Brandenburg 26: 144 (1885)

Ind. loc.: "Majorca (!1825 Cambessedes, mus. paris.)"

Type material: To be searched for at P.

Remarks: See comments under *Clematis balearica* Rich.

**Clematis cirrhosa** [subsp. *balearica*] var. **purpurascens** O. Kuntze in Verh. Bot. Vereins Prov. Brandenburg 26: 144 (1885);  $\equiv$  *C. cirrhosa* f. *purpurascens* (Willk.) Maire, Flore Afr. Nord 11: 103 (1964)

Ind. loc.: "Insulae balearicae"

Type material: Not traced.

Remarks: See comments under *Clematis balearica* Rich.

**Clematis cirrhosa** var. **pedicellata** DC, Prodr. 1: 9 (1824);  $\equiv$  Clematis pedicellata Sweet, Hort. Brit.: 2 (1827)  $\equiv$  C. balearica subsp. pedicellata (Sweet) Gand., Nov. Consp. Fl. Eur.: 4 (1910)

Ind. loc. diu: "Insulâ Mayorcâ. (v.s.) "

Type material: To be searched for at G.

Remarks: See comments under *Clematis balearica* Rich.

**Delphinium pentagynum** subsp. **formenterense** N. Torres, L. Sáez, Rosselló & C. Blanché in Bot. J. Linn. Soc. 133: 372 (2000)

Ind. loc.: "Holotype. Illes Balears: Formentera, torrent de cala Saona, 31S CC68, 25 m s.n.m., pradells terofítics i herbassaars de les clarianes de la garriga, 16.v.1992, leg. J.A. Rosselló & al. MA 625063 Isotypes. BCF s/n and L. Sáez Herb. Pers s/n."

Type material: **MA** (holotype); **BCF** (isotype), **PH-SAEZ** (isotype).

Remarks: Name in current use (TORRES & al., 2000); endemic to the Western Balearics (Formentera).

*Echinella balearica* Gand. Fl. Eur. 1: 254 (1883), nom. inval.

*Ficaria balearica* Gand. Fl. Eur. 1: 128 (1883), nom. inval.

*Fumaria majorica* Gand. Fl. Eur. 1: 345 (1883), nom. inval.

**Helleborus corsicus** [subsp. *lividus*] var. **pictus** Schiffn. in Nova Acta Ksl. Leop.-Carol. Deutschen Akademie der Naturforscher 56(1): 63 (1890)

Ind. loc.: "Schedae Herb. Willkomm"

Type material: To be searched for at COI-Willk.

Remarks: This taxon is poorly defined morphologically. The alleged discriminating characters are not constant and have been seen scattered in most populations of *Helleborus lividus* Aiton.

**Helleborus foetidus** var. **balearicus** L. Chodat in Bull. Soc. Bot. Genève 15: 205 (1924)  $\equiv$  *H. foetidus* subsp. *balearicus* (L. Chodat) Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), comb. inval.  $\equiv$  *H. foetidus* subsp. *balearicus* (L. Chodat) Romo, Fl. Silvestres Baleares: 100 (1994)

Ind. loc.: "Teixt [sic] supra Valdemoso leg. R. Chodat et H. Guyot 1913."

Type material: Teixt, III-1913, R. Chodat & H. Guyot (**G**). **Lectotype here designated** (single specimen).

Remarks: Recent taxonomic treatments included this taxon within the variation of *Helleborus foetidus* L., without giving formal recognition (NIETO FELINER, 1986).

**Helleborus lividus** Aiton in Curtis's Bot. Mag. 2: tab 72 (1789, january); Aiton, Hort. Kew. 2: 272 (1789, august-september);  $\equiv$  *H. corsicus* susp. *lividus* (Aiton) Schiffner

in Nova Acta Ksl. Leop.-Carol. Deutschen Akademie der Naturforscher 56(1): 63 (1890), nom. inval.;  $\equiv$  *H. trifolius* subsp. *lividus* (Aiton) Briq., Prodr. Fl. Corse 1: 582 (1910);  $\equiv$  *H. trifolius* var. *lividus* (Aiton) Knoche, Fl. Balear. 1: 477 (1921)

Ind. loc.: Not stated.

Type material: The coloured plate in the protologue (lectotype; YEO, 1986).

Remarks: Name in current use (NIETO FELINER, 1996); endemic to the Eastern Balearic Islands (Mallorca and Cabrera). For an account of the nomenclature of this taxon see NIETO FELINER (1983) and YEO (1986).

***Helleborus × sternii*** Turrill in Curtis's Bot. Mag. 171: t. 291 (1957)  $\equiv$  *H. lividus* not-*hosubsp. sternii* (Turrill) Yeo in Taxon 39: 157 (1986)

Ind. loc.: Not reported.

Type material: K (holotype; YEO, 1986).

Remarks: This nothospecies is a hybrid obtained in cultivation between the Balearic *Helleborus lividus* subsp. *lividus* and the Corsican *H. lividus* subsp. *corsicus* (Briq.) Yeo.

*Nigella balearica* Gand. Fl. Eur. 1: 152 (1883), nom. inval.

*Paeonia balearica* Gand. Fl. Eur. 1: 153 (1883), nom. inval.

*Paeonia dulcamareifolia* Gand. Fl. Eur. 1: 153 (1883), nom. inval.

*Ranunculus aquatilis* var. *parvipetalis* Knoche, Fl. Balear. 1: 484 (1921), nom. nud.

***Ranunculus arvensis*** var. ***hystrix*** Porta in Nuovo Giorn. Bot. Ital. 19: 296 (1887);  $\equiv$  *R. arvensis* f. *hystrix* (Porta) Knoche, Fl. Balear. 1: 494 (1921)

Ind. loc.: "M[ajorca]. In agris prope Soller. 16 Jul."

Type material: To be traced at FI.

Remarks: Included within *Ranunculus arvensis* L. by COOK & al. (1986) without giving formal recognition.

***Ranunculus balearicus*** Freyn in Oesterr. Bot. Z. 26: 158 (1876)

Ind. loc.: "Hab. in insulis Balearicis praesertim in insula Menorca communis."

Type material: To be searched for at B.

Remarks: According to COOK & al. (1986) *Ranunculus balearicus* should be identified with *R. macrophyllus* Desf.

*Ranunculus balearicus* Sennen in Bol. Soc. Ibér. Ci. Nat. 25: 58 (1926), nom. illeg.

***Ranunculus barceloi*** Grau see *R. chaerophyllum* var. *balearicus*

***Ranunculus chaerophyllos*** var. ***balearicus*** Barceló, Fl. Baleares: 12 (1879);  $\equiv$  *R. barceloi* Grau in Mitt. Bot. Staatssamml. München 20: 54 (1984);  $\equiv$  *R. paludosus* subsp. *barceloi* (Grau) O. Bolòs & Vigo, Fl. Països Catalans 2: 820 (1990), comb.

ival.;  $\equiv$  *R. macrophyllus* subsp. *barceloi* (Grau) Romo, Fl. Silvestres Baleares: 110 (1994);  $\equiv$  *R. paludosus* subsp. *barceloi* (Grau) L. Sáez, Rosselló & N. Torres in Fl. Montiberica 7: 88 (1997)

Ind. loc.: "Mallorca: Pont-Gros cerca de Palma! Puig del Teix (Willk.)-Formentera La Mola, San Francisco ! (V[ista].V[iva].)"

Type material: Not traced at COI-Willk. GRAU (1984) reported the sheet "Mallorca: Pont Gros cerca de Palma, Willkomm" as the type material, but he did not mention the herbarium where it was held.

Remarks: Name in current use (GRAU, 1984; COOK & al., 1986; ROSELLÓ & al., 1997). COOK & al. (1986) restricted the use of *Ranunculus barceloi* to the plants growing on Mallorca. This was not followed by ROSELLÓ & al. (1997) who included the populations of Eivissa and Formentera as also belonging to this taxon.

#### ***Ranunculus dorflerianus* Gand. in Jahrestat. Wiener Bot. Tauchanst. 1900: 33 (1900)**

Ind. loc.: "Hab. Baleares: Mallorca. Rarissima in rupe quoddam versus cacumen montis Puig Mayor de Torela [sic] ad partem septentrionalem. alt. 1420 m."

Type material: Mallorca: Puig de Torrella: in fissuris rupium tam rarus quad vin aut vix legi potest al. 4200', 25-V-1899, Gandoger (MA 41299). **Lectotype here designated** (bottom specimen).

Remarks: This taxon cannot be distinguished from *Ranunculus weyleri* Marès ex Willk.

#### ***Ranunculus monspeliacus* var. *pugetii* P. Palau in Ibiza, 2<sup>a</sup> época, 1: 27 (1953)**

Ind. loc.: "Habitat in agris siccis, prope S. Antonio, ubi aprilis 1950 legi"

Type material: Not traced, probably lost.

Remarks: This is an obscure taxon not included in any taxonomic treatment of the genus. From the description alone it is difficult to point out its affinities. However, topotype material should be adscribed to *Ranunculus paludosus* subsp. *barceloi* (Grau) L. Sáez, Rosselló & N. Torres, the only taxon of the genus growing there.

#### ***Ranunculus parviflorus* var. *pellucidus* Marès & Vigin., Cat. Pl. Vasc. Baléares: 8 (1880)**

Ind. loc.: " MAJORQUE: [...] - Sollerich, au nord d'Alaro [sic]. la ermita d'Arta [sic]. Autour de la fon [sic] de la Couma [sic] et de la fon [sic] de la Piquetta [sic], à la serra de Soller [sic], à 800 mètres d'altitude, le 11 juin 1850."

Type material: Fon de la piqueta de la Serra (Soller) 11-VI-1850, G. Vigineix (**MPU-Knoche**). **Lectotype here designated**.

Remarks: This variety is not worthy of recognition from typical *Ranunculus parviflorus* L.

*Ranunculus weyleri* Marès & Vigin. ex Marès in Bull. Soc. Bot. France 12: 232 (1865), nom. nud.

***Ranunculus weyleri* Marès ex Willk.** in Linnaea 40: 131 (1876); Marès & Vigin., Cat. Pl. Vasc. Baléares: 5 (1880);  $\equiv$  *R. balbisii* subsp. *weyleri* (Marès) Gand., Nov. Consp. Fl.

Eur.: 12 (1910);  $\equiv R. balbisii$  subsp. *weyleri* (Marès ex Willk.) O. Bolòs & Font Quer in Collect. Bot. (Barcelona) 6: 355 (1962), comb. superfl.;  $\equiv R. cymbalarifolius$  subsp. *weyleri* (Marès ex Willk.) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 65 (1974)

Ind. loc.: "Mallorca: in fissuris rupium montis Puig de Torella [sic] ad alt. 1340 met. raro, d. 5 Maji nondum florens. Specimina florentia mecum communicavit cl. Barcelò [sic]"

Type material: To be searched for at COI-Willk.

Remarks: Name in current use (COOK & al., 1986); endemic to the Balearic Islands (Mallorca).

**Ranunculus weyleri f. longipetalum** Pau in Butll. Inst. Catalana Hist. Nat. 11: 16 (1911)

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: Not traced.

Remarks: Judging from the diagnosis, and from the variation exhibited by *Ranunculus weyleri* Marès ex Willk., little value should be given to this taxon.

**Ranunculus weyleri f. minoripetalum** Pau in Butll. Inst. Catalana Hist. Nat. 11: 16 (1911)

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: Not traced.

Remarks: The comments given under *Ranunculus weyleri f. longipetalum* Pau equally apply to this taxon.

## Resedaceae

*Tereianthus balearicus* Gand. Fl. Eur. 3: 133 (1884), nom. inval.

## Rhamnaceae

*Alaternus angustatus* Gand., Fl. Eur. 5: 233 (1885), nom. inval.

*Alaternus balearica* Duhamel ex Steud., Nomencl. Bot. ed. 1: 47 (1840), nom. nud.

*Alaternus majoricus* Gand., Fl. Eur. 5: 234 (1885), nom. inval.

**Rhamnus alaternus** var. **balearicus** DC., Prodr. Syst. 2: 23 (1825)

Ind. loc.: Not stated.

Type material: **G-Boiss** (syntype).

Remarks: According to CHODAT (1909) the morphology and leaf anatomy of the type specimen belongs to *Rhamnus alaternus* L.

*Rhamnus alaternus* var. *balearica* Anon. ex Loudon, Arbr. Frut. Brit. 2: 530 (1838), nom. illeg.

***Rhamnus alaternus* var. *ferruginea*** Texidor in Restaurador Farm. 28: 54 (1872)

Ind. loc.: “[...] la β en las Baleares, Menorca (Casall!) é Ibiza (Tremols!)”

Type material: To be searched for at MAF.

Remarks: This variety probably refer to a mere variation of *Rhamnus alaternus* L., but the referred material from Menorca may also belong to *R. ludovici-salvatoris* R. Chodat.

***Rhamnus alaternus* var. *latifolius*** Cambess. in Mém. Mus. Hist. Nat. 14: 230 (1827)

Ind. loc.: “In montibus insulae Majoris prope Valldemossam, Esporlas frequens”

Type material: montibus frequens. Esporlas, 26-III-1825, Cambessedès (MPU-Knoche). **Lectotype here designated** (single specimen).

Remarks: This taxon does not show any relevant morphological feature supporting its recognition from typical *Rhamnus alaternus* L.

***Rhamnus balearicus*** Link, Handbuch 3: 121 (1831)

Ind. loc.: “Im südl. Europa”

Type material: To be searched for at BR, C, FI, H, LIV, P, PH and W.

Remarks: Probably conspecific with *Rhamnus alaternus* L.

*Rhamnus balearicus* Willk. in Oesterr. Bot. Z. 25: 112 (1875); Willk. in Linnaea 40: 104 (1875), nom. illeg.; ≡ *R. alaternus* subsp. *balearicus* (Willk.) Gand., Nov. Conspl. Fl. Eur.: 99 (1910), nom. inval.

***Rhamnus bourgeanus*** Gand. in Bull. Soc. Bot. France 47: 135 (1900); ≡ *R. oleoides* var. *bougeanus* (Gand.) Pau in Brotéria Ci. Nat. 3: 63 (1934); ≡ *R. lycioides* subsp. *bougeanus* (Gand.) Malag., Subsp. Var. Geogr.: 12-13 (1973)

Ind. loc.: “Hab. Coma den Arbona ad rupes verticales parce.”

Type material: To be searched for at LY.

Remarks: The taxon belonging to the *Rhamnus lycioides* L. complex growing on the mountains of Mallorca has been described under different names (*R. bourgeanus*, *R. lycioides* var. *balearicum* Sennen & Pau ex Pau, *R. lycioides* var. *prostrata* Willk.). Its taxonomic distinction (like other poorly defined taxa from the E of the Iberian peninsula) seems highly questionable. GREUTER & al. (1989) included this taxon, with doubts, under *R. lycioides* subsp. *oleoides* (L.) Jahandiez & Maire but a thorough revision of the complex is mandatory before a final decision can be taken.

***Rhamnus × jacobi-salvadorii*** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 82 (1974)

Ind. loc.: “Majorica, Cas Català, in Cneoro-Ceratonieto, 20 m alt., ubi legit O. de Bolòs, 23-VI-1954, BC 135896”

Type material: **BC** (holotype).

Remarks: This taxon was believed to be the hybrid between *Rhamnus alaternus* and *R. ludovici-salvatoris*. However, the study of the holotype ROSELLÓ & MUS (1988) showed that on morphological, anatomical and biochemical grounds *R. × jacobi-salvadorii* is merely a form of *R. alaternus*.

**Rhamnus ludovici-salvatoris** R. Chodat in Bull. Soc. Bot. Genève 2 ser. 1: 242 (1909); ≡ *R. ludovici salvatoris* var. *typica* L. Chodat in Bull. Soc. Bot. Genève 15: 229 (1924), nom. inval.; ≡ *R. alaternus* subsp. *ludovici-salvatoris* (R. Chodat) Rivas-Mart. in Anales Acad. Farmacia 28: 372 (1962)

Ind. loc.: "Majorque"

Type material: Iles Baléares: de Pollensa à Castel dels Reis, 1904, R. Chodat (**G**). **Lectotype here designated** (left specimen).

Remarks: Name in current use (TUTIN, 1968e); endemic to the Eastern Balearic Islands (Mallorca and Menorca). The reported localities from continental Spain and Eivissa do not belong to this species and should be referred to *Rhamnus alaternus*.

**Rhamnus ludovici-salvatoris** var. *garcia-fontis* L. Chodat in Bull. Soc. Bot. Genève 15: 229 (1924)

Ind. loc.: "Hab. Puig Campani ubi leg. cl. Garcia Font"

Type material: **G** (holotype).

Remarks: The characters given by CHODAT (1924) to discriminate this variety are not reliable. We have not found any morphological feature supporting the distinction of this taxon from *Rhamnus ludovici-salvatoris*.

**Rhamnus lycioides** var. *balearicum* Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 17 (1911)

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: To be searched for at MA; not traced at BC.

Remarks: See comments under *Rhamnus bourgeanus*.

**Rhamnus lycioides** var. *prostrata* Willk., Spanien Balearen: 295 (1876)

Ind. loc.: "...an den Hängen des Galatzókegels auch eine niedergestreckte intricate Form von *Rhamnus lycioides* L. (var. *prostrata* mihi!) vor welche im obersten Theile ganz niedriege platte, dem unterliegenden Gestein angedrückte Polster bildet"

Type material: Mallorca: Puig de Galatzó in parte superiore, ad cacumen usque caespites prostratos in glareosis rupiumque fissuris formans. Legi d. 17-IV-1873, Willkomm, Herb. balear. n. 284. (**COI-Willkomm**). **Lectotype here designated** (bottom specimen).

Remarks: See comments under *Rhamnus bourgeanus* Gand.

*Rhamnus rotundifolius* Desf. ex Mont de Courset in Bot. Cult. ed. 2, 6: 260 (1811), nom. illeg.

## Rosaceae

*Agrimonia balearica* Gand., Fl. Eur. 8: 1 (1886), nom. inval.

**Amelanchier ovalis** subvar. **comafredensis** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 68 (1974);  $\equiv$  *A. ovalis* subsp. *comafredensis* (O. Bolòs & Vigo) L. Llorens & Tébar in Pla & al., Aprox. Catàleg Flora Illes Balears: 57 (1992);  $\equiv$  *A. ovalis* subsp. *comafredensis* (O. Bolòs & Vigo) Romo, Fl. Silvestres Baleares: 130 (1994), comb. superfl.

Ind. loc.: "Majorica: Puig de Maçanella, supra Coma Freda, 1250 m, exp N, in Aceri-Buxeto balearicae, leg. A. et O. de Bolòs, 12-VII-1956, BC 137166"

Type material: BC (holotype).

Remarks: Not recognized by MUÑOZ GARMENDIA & al. (1998), who treat it as belonging to *Amelanchier ovalis* Medik.

*Aria balearica* Gand., Fl. Eur. 8: 306 (1886), nom. inval.

**Poterium spachianum** subsp. **balearicum** Bourg. ex Nyman, Consp. Fl. Eur. 1: 240 (1878);  $\equiv$  *P. balearicum* (Bourg. ex Nyman) Bourg. ex Porta in Nuovo Giorn. Bot. Ital. 19: 304 (1887);  $\equiv$  *Sanguisorba minor* subsp. *balearica* (Bourg. ex Nyman) Muñoz Garm. & C. Navarro in Anales Jard. Bot. Madrid 56: 176 (1998)

Ind. loc.: "Bourg. exs. Balear a. 1869 (nom. *P. Sanguis. muricata*)"

Type material: Not traced.

Remarks: Name in current use (MUÑOZ GARMENDIA & NAVARRO, 1998; NAVARRO & MUÑOZ GARMENDIA, 1998). Described from the Balearic Islands, but widely distributed in Europe. This taxon was previously long known as *Sanguisorba minor* Scop. subsp. *muricata* (Spach ex Bonnier & Layens) Briq. to which priority should be given.

*Poterium balearica* Gand., Fl. Eur. 8: 183 (1886), nom. inval.

*Poterium hirtum* Gand., Fl. Eur. 8: 174 (1886), nom. inval.

*Poterium insulare* Gand., Fl. Eur. 8: 164 (1886), nom. inval.

*Poterium minoricense* Gand., Fl. Eur. 8: 163 (1886), nom. inval.

*Prunus balearica* Gand., Fl. Eur. 8: 183 (1886), nom. inval.;  $\equiv$  *P. spinosa* subsp. *balearica* (Gand.) Gand., Nov. Consp. Fl. Eur.: 133 (1910), nom. inval.

*Prunus rodriguezii* Gand., Fl. Eur. 8: 182 (1886), nom. inval.

**Prunus spinosa** var. **balearica** Willk. in Linnaea 40: 92 (1875)

Ind. loc.: "Mallorca: in sepibus dumetisque regionis inferioris et montanae in tractus Sierra parte orientali et centrali satis frequens (c. Pollenza, Lluch, Escorca, Plá de

Cuba ad rivum et alt. c. 700 met., ubi inde a Gorg bloan im consortio Ruborum, Rosae rubiginosae et Calyotomes spinosae abundat, Barranco de Sóller, c. Sóller, in valle versus Coll de Sóller in regione Quercuum). Legi d. 2 Maji cum drupis immaturis."

Type material: Mallorca: ad rivum vallis Plá de Cuba inter Escorca et Soller abundantes. Legi d. 2-V-1873, Willkomm, Herb. balear. n. 389. (**COI-Willkomm**).

**Lectotype here designated** (right specimen).

Remarks: Not recognized as taxonomically distinct from *Prunus spinosa* L. (BLANCA & DÍAZ DE LA GUARDIA, 1998).

*Prunus spinosa* var. *inermis* P. Palau in Anales Inst. Bot. Cavanilles 11: 506 (1954), nom. inval.

*Ripartia rodriguezii* Gand., Tab. Rhodolog.: 36 (1881), nom. inval.

*Ripartia minoricensis* Gand., Tab. Rhodolog.: 36 (1881) nom. inval.

**Rosa balearica** Desf., Tabl. École Bot.: 175 (1804); ≡ *Ripartia balearica* (Desf.) Gand., Tab. Rhodolog.: 38 (1881), nom. inval.

Ind. loc.: "de Mahon"

Type material: To be searched for at FI.

Remarks: A later synonym of *Rosa sempervirens* L. (KLÁSTERSK, 1968).

*Rosa balearica* Pers., Syn. Pl. 2: 49 (1806), nom. illeg.

*Trichothalamus balearicus* Gand., Fl. Eur. 8: 147 (1886), nom. inval.

*Trichothalamus paucidens* Gand., Fl. Eur. 8: 1 (1886), nom. inval.

## Rubiaceae

*Aparine minoricensis* Gand., Fl. Eur. 11: 133 (1886), nom. inval.

*Aspera balearica* Gand., Fl. Eur. 11: 138 (1886), nom. inval.

**Asperula cynanchica** [subsp. *brachysiphon*] var. **ebositana** O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 100 (1983)

Ind. loc.: "Eivissa, Puig Sirer, 300 m alt. leg. P. Font i Quer, 18-V-1919, BC 27586"

Type material: **BC** (holotype).

Remarks: The taxonomic affinities of the Pytiusic plants belonging to *Asperula cynanchica* require further study. The lack of a detailed and karyological study prevents the making of a conclusive statement about this variety. However, preliminary observations do not suggest that *A. cynanchica* var. *ebositana* merits taxonomic recognition.

**Asperula paui** Font Quer in Butll. Inst. Catalana Hist. Nat. 20: 188 (1920); ≡ A. cynanchica f. paui (Font Quer) Knoche, Fl. Balear. 2: 417 (1922); ≡ A. cynanchica subsp. paui (Font Quer) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 100 (1983); ≡ A. cynanchica var. paui (Font Quer) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 100 (1983)

Ind. loc.: "in rupestribus calcareis insulae Ebusae, l.d. Cala de Lladalt, Cala de les Torretes, Cala de les Balandres, Puig Nonó, in parva insula Vedrà dicta, etiam in Frumentaria insula l.d. la Mola."

Type material: Cala de les Torretes (Eivissa), 8-VII-1920, Gros (**BC** 109680).

**Lectotype here designated.**

Remarks: Name in current use (EHRENDORFER & KRENDL, 1976). The species has also been recorded from Eastern continental Spain. It is said that mainland populations differ from those growing in the Balearic Islands and they have been named *Asperula paui* var. *dianensis* Font Quer (FONT QUER, 1926).

*Crucianella angustifolia* subsp. *caprariensis* P. Palau in Anales Inst. Bot. Cavanilles 11: 516 (1954), nom. inval.

**Galium balearicum** Briq. in Annuaire Conserv. Jard. Bot. Genève 11-12: 191 (1908); ≡ G. rubrum var. *balearicum* (Briq.) Knoche, Fl. Balear. 2: 421 (1922); ≡ G. rubrum subsp. *balearicum* (Briq.) Malag., Subsp. Var. Geogr.: 14 (1973); ≡ G. rubrum subsp. *balearicum* (Briq.) Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), comb. inval.

Ind. loc.: "Insulae balearicae: Majorca, in rupium fissuris et locis glareosis de Puig major de Torrella, solo calcareo, 1000-1300 m., 12-24 jul. fl. p. (Porta et Rigo, ann. 1885, sine n.)"

Type material: **G** (holotype).

Remarks: Name in current use (EHRENDORFER & al., 1976); endemic to the Balearic Islands (Mallorca).

**Galium cespianum** J.J. Rodr. in Anales Soc. Esp. Hist. Nat. 8: 55 (1879)

Ind. loc.: "Coma den [sic] Arbona sobre Bonnave, en las grietas de peñas calcáreas, á [sic] unos 600 metros. En flor."

Type material: Coma de'n Arbona, 16-VI-1877, J.J. Rodríguez (**PH-RODR**).

**Lectotype here designated.**

Remarks: Name in current use (EHRENDORFER & al., 1976; CARDONA & SIERRA-RAFOLS, 1979; BOLÒS & VIGO, 1996). As far as currently circumscribed (TORRES & al., 2000) *Galium cespianum* is restricted to the island of Mallorca.

**Galium firmum** f. *balearicum* Knoche, Fl. Balear. 2: 420 (1922); ≡ G. firmum subsp. *balearicum* (Knoche) Malag., Subsp. Var. Geogr.: 13 (1973); ≡ G. friedrichi N. Torres, L. Sáez, Mus & Rosselló in Bot. J. Linn. Soc.: in press.

Ind. loc.: "IVICE: 1<sup>j</sup> D<sup>7</sup>. Isla de Vedra (Font!)"

Type material: Cala Aubarca, exp. N, 75 m, 21-V-1908, Knoche 2493 (**MPU-Knoche**). **Lectotype here designated** (left specimen).

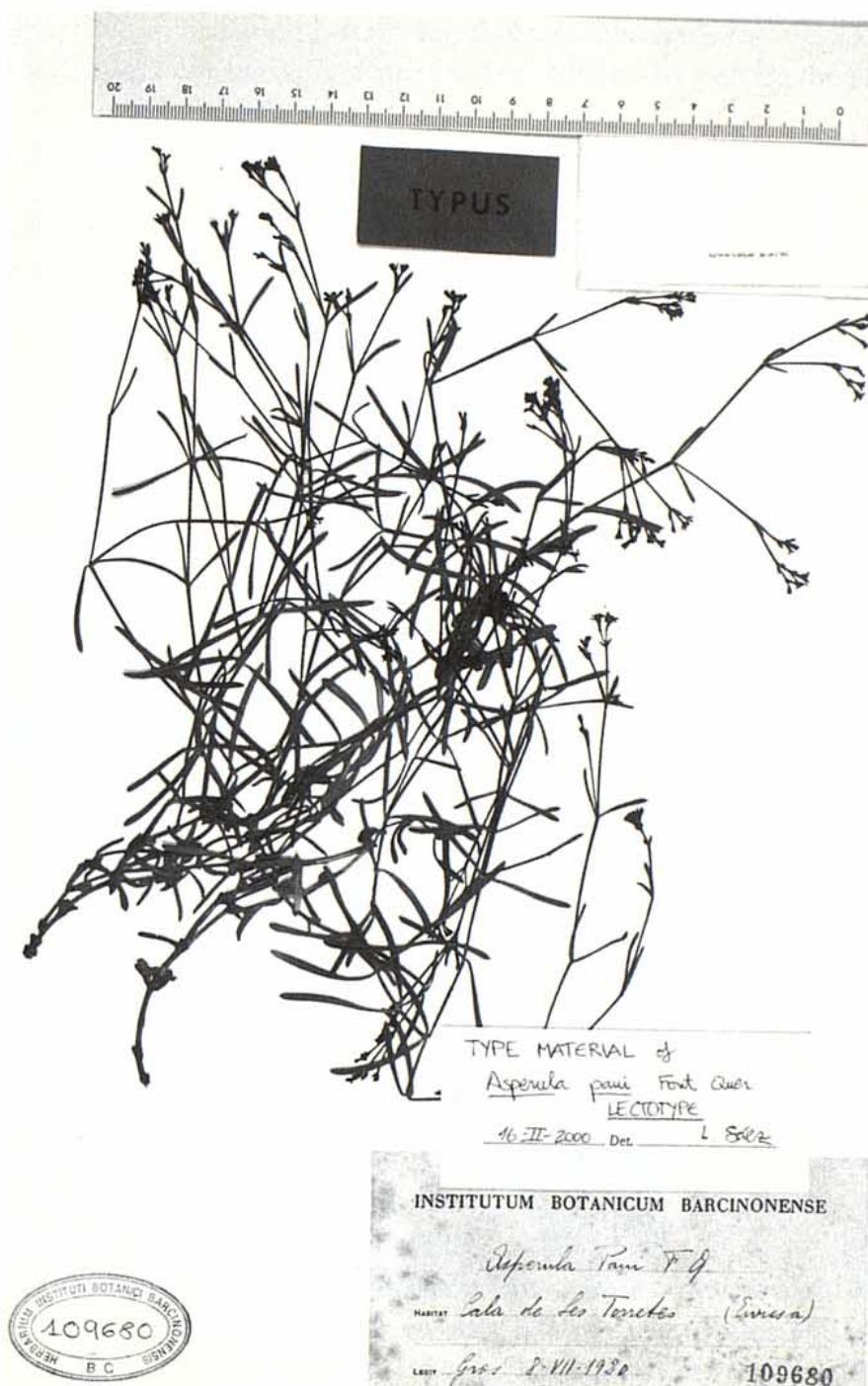


Fig. 15. Lectotype of *Asperula paui* Font Quer (BC).

Remarks: For an account of the differences between *Galium cespianum* and *G. friedrichi* see TORRES & al. (2000).

**Galium friedrichi** N. Torres, L. S ez, Mus & Rossell , see **Galium firmum** f. **balearicum** Knoche

**Galium murale** var. **balearicum** Sennen in Bol. Soc. Ib r. Ci. Nat. 27: 182 (1928)

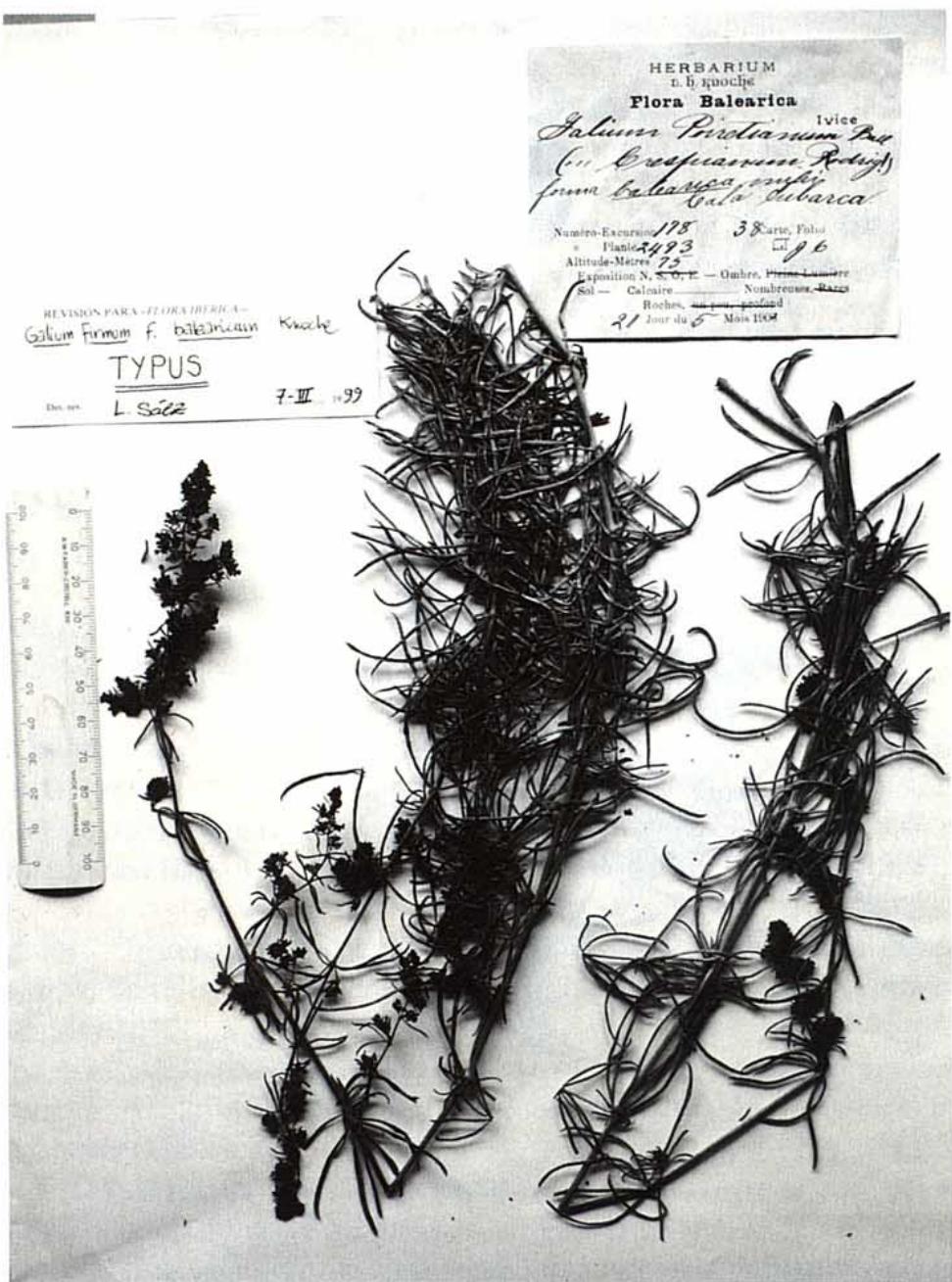


Fig. 16. Lectotype of *Galium firmum* f. *balearicum* Knoche (MPU-Knoche).

Ind. loc.: Bal ares: Pont d Inca, murs. leg. F. Bianor

Type material: Bal ares: Pont d Inca, murs, 16-V-1918, Bianor, Pl. Espagne-F.Sennen n.... 3396 (BC-Sennen 836709). **Lectotype here designated** (single specimen).

Remarks: We have not traced any single feature which can be used to discriminate this variety from typical *Galium murale* All.

#### ***Galium murale* f. *villosa* Gand. in Bull. Soc. Bot. France 47: 138 (1900)**

Ind. loc.: Dans la sierra Escandills

Type material: To be searched for at LY.

Remarks: No information concerning this taxon is available. We have not seen any feature of specimens of *Galium murale* from Eivissa supporting their singularity.

**Rubia angustifolia** L., Mant. Pl.: 39 (1767)

Ind. loc.: "Habitat in Minorca. Richard"

Type material: No authentic material of this taxon has been traced (LÓPEZ GONZÁLEZ, 1995). A neotype was selected by CARDONA & SIERRA-RAFOLS (1981), but according to LÓPEZ GONZÁLEZ (1995) this can be rejected on the basis of Art. 8.1 of the ICBN.

Remarks: Traditionally *Rubia angustifolia* has been used to name both the Balearic plant [now *Rubia balearica* (Willk.) Porta] and forms of *R. peregrina* L. (*R. longifolia* Poir.). However, LÓPEZ GONZÁLEZ (1995) convincingly argued that the Linnean taxon should most probably not be referred to the Balearic endemic but to the narrow leaved form of *R. peregrina*.

**Rubia angustifolia** var. **caespitosa** Font Quer & Marcos in Cavanillesia 8: 46 (1936); ≡ *R. angustifolia* subsp. *caespitosa* (Font Quer & Marcos) Rosselló, Mus. N. Torres & Gradaille in Candollea 48: 599 (1993); ≡ *R. angustifolia* subsp. *caespitosa* (Font Quer & Marcos) Romo, Fl. Silvestres Baleares: 284 (1994), comb. superfl.; ≡ *R. balearica* subsp. *caespitosa* (Font Quer & Marcos) Rosselló, L. Sáez & Mus in Anales Jard. Bot. Madrid 55: 479 (1997)

Ind. loc.: "In saxosis rupestribusque calcareis loco L'Anciola, in Insula Capraria, d. 10 junii, A. MARCOS legit"

Type material: Cabrera: Anciola i Avaradero d'es Cap Roig, 10-VI-1939 [1936], A. Marcos (BC 631874). **Lectotype here designated** (bottom specimen).

Remarks: Name in current use (ROSELLÓ & SÁEZ, 1997b); endemic to the island of Cabrera.

**Rubia peregrina** var. **balearica** Willk. in Oesterr. Bot. Z. 25: 110 (1875); in Linnaea 40: 54 (1876); ≡ *R. balearica* (Willk.) Porta in Nuovo Giorn. Bot. Ital. 19: 307 (1887); ≡ *R. balearica* (Willk.) G. López in Anales Jard. Bot. Madrid 53: 135 (1995), comb. superfl.

Ind. loc.: "in fissuris rupium calcareum, ad muros atque in dumetis promontorii Cabo Vermey prope Artá atque inter Sóller, Deyá et Miramar, Aprilii et Majo c. flor."

Type material: Mallorca: ad muros inter Soller et Deyá, 9-V-1873, Willkomm Herb. balear. n. 329. (**COI-Willkomm**). **Lectotype here designated** (right specimen).

Remarks: Name in current use (LÓPEZ GONZÁLEZ, 1995); endemic to the Balearic Islands.

## Ruscaceae

*Ruscus balearicus* Gand., Fl. Eur. 22: 23 (1890), nom. inval.

*Ruscus glaucinus* Gand., Fl. Eur. 22: 25 (1890), nom. inval.

*Ruscus ovalifolius* Gand., Fl. Eur. 22: 24 (1890), nom. inval.

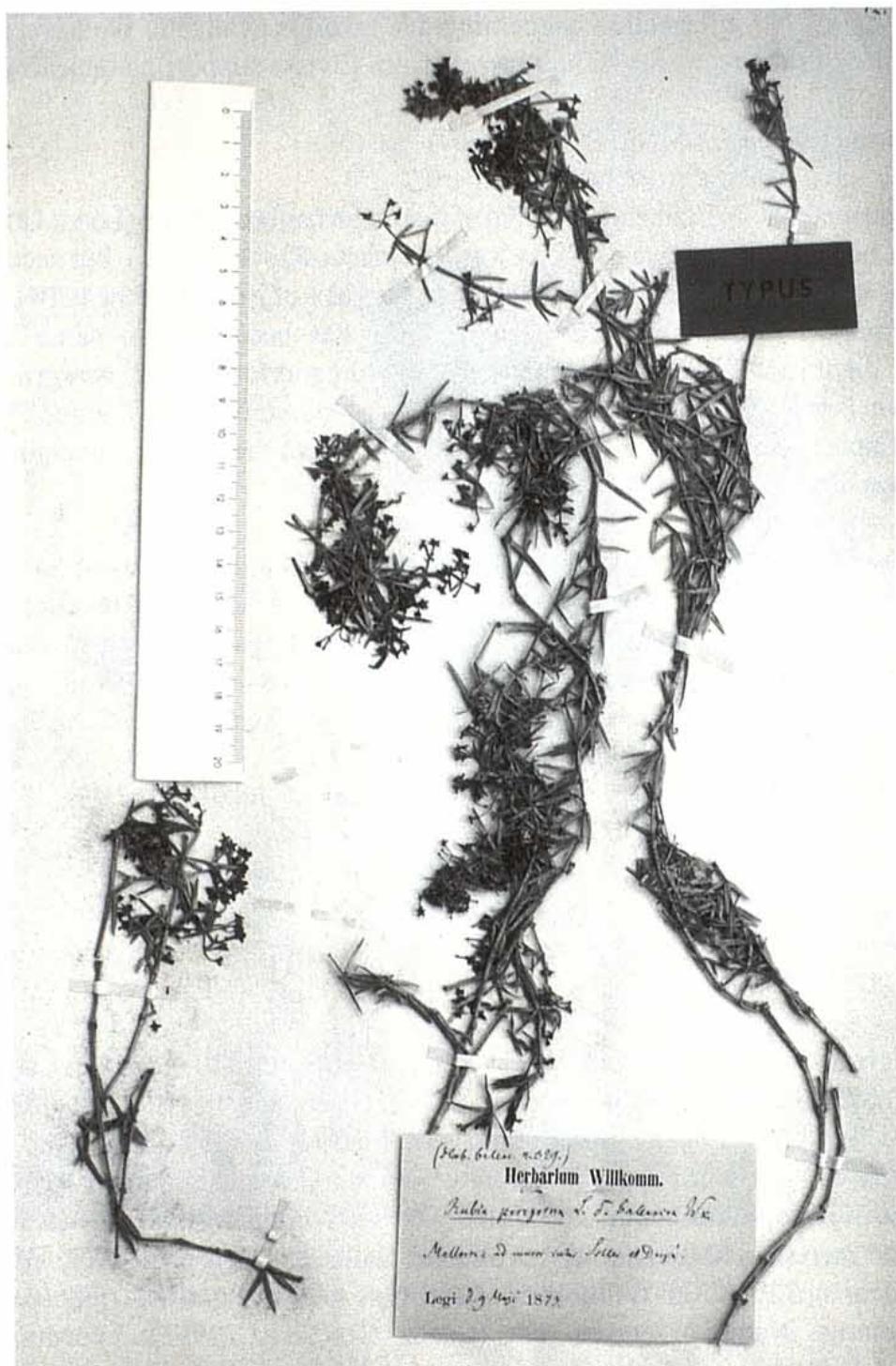


Fig. 17. Lectotype of *Rubia peregrina* var. *balearica* Willk. (COI-Willkomm).

### Rutaceae

*Ruta balearica* Gand., Fl. Eur. 5: 210 (1885) nom. inval.

### Salicaceae

*Populus alba* [subsp. *comasiana*] var. *balearica* Sennen, Campagn. Bot.: 117 (1936), nom. nud.

*Populus alba* [subsp. *epirotica*] var. *benildi* Sennen, Campagn. Bot.: 117 (1936) nom. nud.

### Saxifragaceae

**Saxifraga corsica** subsp. **ebusitana** Romo, Fl. Silvestres Baleares: 123 (1994)

Ind. loc.: "HOLOTYPE: In Formentera insula, loco dicto la Mola, ad rupes calcareas, 24 aprilis 1920, leg. Font Quer, BC 23947"

Type material: **BC** (holotype).

Remarks: The Balearic populations belonging to *Saxifraga corsica* (Ser.) Gren. & Godron were reported as having intermediate features between *S. corsica* subsp. *corsica* and *S. corsica* subsp. *cossoniana* (Boiss. & Reut.) D.A. Webb (WEBB, 1964). VARGAS (1997), however, included them under the latter and did not recognize the Pytiusic plants as a distinct taxon.

**Saxifraga corsica** [subsp. *cossoniana*] var. **fontqueri** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 66 (1974) ≡ *S. corsica* subsp. *fontqueri* (O. Bolòs & Vigo) Malag., Sin. Fl. Ibér. ed. 2, fasc. 45: 703 (1976)

Ind. loc.: "Typus: in Frumentaria insula, loco sa Mola dicto, in rupestribus calcareis, leg. E. Gros 11-V-1918, det. P. Font i Quer, BC 23947"

Type material: **BC** (holotype).

Remarks: *Saxifraga corsica* subsp. *ebusitana* Romo and *Saxifraga corsica* var. *fontqueri* O. Bolòs & Vigo refer to the same entity.

**Saxifraga ludovici-salvatoris** Marches. in Bol. Soc. Adriat. Sci. Nat. 26: 45 (1912)

Ind. loc.: "Inveni Saxifragam hanc in insula balearica Mallorca inter Valldemossam et Miramar ad murum secus viam ad «eremitanos» ducentem (alt. 480 m.) nec non copiosissima in umbrosis ad rupes calcareas humidas loco dicto Barranc haud procul a Miramar (alt. circ. 200 m) mensibus Aprilis et Mai florentem"

Type material: To be searched for at TRB.

Remarks: The diagnosis and the plate given in the original publication clearly shows that *Saxifraga ludovici-salvatoris* does not belong to any Saxifragaceae, but in fact it should be referred to *Sibthorpia africana* L.

**Saxifraga tenerima** Willk. in Oesterr. Bot. Z. 25: 111 (1875); in Linnaea 40: 86 (1876); ≡ *S. tridactylites* subsp. *tenerima* (Willk.) Gand., Nov. Consp. Fl. Eur.: 200 (1910); ≡ *S. tridactylites* f. *flacidissima* Engl. & Irmsch in Engl., Das Planzenreich IV. 117. I: 209 (1916); ≡ *S. tridactylites* var. *tenerima* (Willk.) F. Herm. in Verh. Bot. Vereins Prov. Brandenburg 54: 250 (1914); ≡ *S. tridactylites* subsp. *tenerima* (Willk.) Colom, Biogeografía Baleares ed. 2, 1: 203 (1978), comb. inval.

Ind. loc.: "Mallorca: ad rupes madidas in faucibus Gorg bloar, d.2. Maji c. flor."

Type material: Mallorca: ad rupes faucibus Gorg bloau juxta pontem, 2-V-1873, Willkomm, Herb. balear. n. 393. (COI-Willkomm). **Lectotype here designated** (upper right specimen).

Remarks: Plants from the type locality show all transitional forms to typical *Saxifraga tridactylites* L., to which it should be subsumed.

***Saxifraga tridactylites* f. *flaccidissima*** Engl. & Irmsch in Engl., see ***Saxifraga tenurima*** Willk.

### Scrophulariaceae

***Celsia balearica*** Gand., Fl. Eur. 16: 112 (1889), nom. inval.;  $\equiv$  *C. cretica* subsp. *balearica* (Gand.) Gand., Nov. Consp. Fl. Eur.: 345 (1910), nom. inval.

***Celsia floccosa*** Porta in Nuovo Giorn. Bot. Ital. 19: 313 (1887), nom. illeg.;  $\equiv$  ***Verbascum portae*** Willk., Ill. Fl. Hispan. 2: 54 (1888);  $\equiv$  *C. barnadesii* subsp. *floccosa* (Porta) Gand., Nov. Consp. Fl. Eur.: 345 (1910);  $\equiv$  *V. boerhavii* var. *portae* (Willk.) Knoche, Fl. Balear. 2: 367 (1922);  $\equiv$  *V. boerhavii* subsp. *portae* (Willk.) Malag. in Acta Phytotax. Barcinon. 1: 81 (1968), comb. inval.;  $\equiv$  *V. boerhavii* subsp. *portae* (Willk.) Malag., Sin. Fl. Ibér. ed. 2, fasc. 92: 1465 (1978);  $\equiv$  *V. boerhavii* subsp. *portae* (Willk.) Knoche ex Colom, Biogeografía Baleares ed. 2, 1: 198 (1978), comb. inval.

Ind. loc.: "M[ajorca]. Locus mihi excidit; sed probabiliter in pascuis apricis supra pagum Boola, vel prope Lluch; individuum unicum. Mai. Jun."

Type material: To be searched for at LY.

Remarks: BENEDI & al. (1989) identified this plant with *Verbascum boerhavii* L. var. *boerhavii*.

***Chaenorhinum crassifolium* var. *pityusicum*** Font Quer in Asoc. Esp. Progreso Ci. Oporto 6: 13 (1921);  $\equiv$  *Ch. organifolium* f. *pythiusicum* (Font Quer) Knoche, Fl. Balear. 2: 380 (1922);  $\equiv$  *Ch. organifolium* [subsp. *crassifolium*] f. *pythiusicum* (Font Quer) R. Fernandes in Bot. J. Linn. Soc. 64: 220 (1971);  $\equiv$  *Linaria organifolia* f. *pityusica* (Font Quer) Colom, Biogeografía Baleares ed. 2, 1: 209 (1978), comb. inval.;  $\equiv$  *L. organifolia* var. *pityusica* (Font Quer) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 97 (1983);  $\equiv$  *Ch. crassifolium* subsp. *pityusicum* (Font Quer) Romo, Fl. Silvestres Baleares: 276 (1994)

Ind. loc.: "Formentera: La Mola, Gros, 11-V-18. Ibiza; Cala de les Torretes, Gros, 29-V-19; San Miguel, Punta de la Creu, F.Q., 19-V-19."

Type material: Cala de les Torretes, 29-V-1918, Gros (**BC 44680**). **Lectotype here designated** (single specimen).

Remarks: The taxonomic status of the Balearic plant is uncertain and merits further study. We have not been able to find any constant morphological feature suggesting that plants of the Pytiusic islands merits recognition as a separate taxon.

**Chaenorhinum formenterae** Gand. in Bull. Soc. Bot. France 47: 140 (1900); ≡ Ch. grandifolium var. formenterae (Gand.) Font Quer in Asoc. Esp. Progreso Ci. Oporto 6: 12 (1921); ≡ Ch. origanifolium var. formenterae (Gand.) Knoche, Fl. Balear. 2: 381 (1922); ≡ Ch. rubrifolium subsp. formenterae (Gand.) R. Fernandes in Bot. J. Linn. Soc. 64: 227 (1971); ≡ *Linaria origanifolia* subsp. *formenterae* (Gand.) Knoche ex Colom, Biogeografía Baleares ed. 2, 1: 186 (1978), comb. inval.; ≡ *L. origanifolia* f. *formenterae* (Gand.) Knoche ex Colom, Biogeografía Baleares ed. 2, 1: 209 (1978), comb. inval.; ≡ *L. rubrifolia* subsp. *formenterae* (Gand.) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 97 (1983)

Ind. loc.: “[Formentera] Hab. copiose in dunis maritimis ad «La Sabina» et ad salinas versus lagunam interiorem”

Type material: To be searched for at LY.

Remarks: Name in current use, endemic to the islands of Eivissa, Formentera and Mallorca (BENEDÍ, 1991).

**Chaenorhinum rubrifolium** var. **bianorii** Knoche, Fl. Balear. 2: 382 (1922); ≡ *Linaria rubrifolia* var. *bianorii* (Knoche) Maire in Bull. Soc. Hist. Nat. Afrique N. 31: 110 (1940); ≡ *L. rubrifolia* var. *bianorii* (Knoche) Maire in Emberger & Maire, Cat. Pl. Maroc 4: 1125 (1941), comb. superfl.; ≡ *L. rubrifolia* var. *bianorii* (Knoche) Garcias Font in Collect. Bot. (Barcelona) 7: 496 (1968), comb. superfl.; ≡ *Ch. rubrifolium* subsp. *bianorii* (Knoche) Malag., H. Bianor Educador Botánico Baleares: 137 (1971), comb. inval.; ≡ *Ch. rubrifolium* [subsp. *rubrifolium*] f. *bianorii* (Knoche) R. Fernandes in Bot. J. Linn. Soc. 64: 227 (1971); ≡ *Ch. rubrifolium* subsp. *bianorii* (Knoche) Malag., Subsp. Variac. Geogr.: 18 (1973); ≡ *Ch. rubrifolium* subsp. *bianorii* (Knoche) Malag., Sin. Fl. Ibér. ed. 2, fasc. 91: 1440 (1978), comb. superfl.; ≡ *Linaria rubrifolia* subsp. *bianorii* (Knoche) Colom, Biogeografía Baleares ed. 2, 1: 204 (1978), comb. inval.; ≡ *L. rubrifolia* f. *bianorii* (Knoche) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 97 (1983)

Ind. loc.: “Abondant aux environs des carrières du Col d'en Rebassa (Torre d'en Pau) (Frère Bianor)”

Type material: **MPU-Knoche** (lectotype; BENEDÍ, 1991: 74); **PH-BIANOR** (isotype).

Remarks: According to BENEDÍ (1991) this variety differs in several seed features and merits taxonomic recognition. It is also reported from Northern Africa (Morocco and Algeria).

*Cymbalaria minoricensis* Gand., Fl. Eur. 18: 130 (1889), nom. inval.

**Digitalis dubia** J.J. Rodr. in Anales Soc. Esp. Hist. Nat. 3: 45 (1874); ≡ *D. purpurea* subsp. *dubia* (J.J. Rodr.) Knoche, Fl. Balear. 2: 388 (1922); ≡ *D. purpurea* raza *dubia* (J.J. Rodr.) Font Quer in Bol. Far. Militar 3(28): 128 (1925); ≡ *D. purpurea* f. *dubia* (J.J. Rodr.) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 98 (1983)

Ind. loc.: “Grietas de los peñascos y al pie de las rocas siempre con exposición al Norte: Mezquita, San Antonio, Calafiguera, barranco del Favaret, Forma-nou y Capifort en Mahon; barranco de Se Mola, Santa Ponsa, Lluquelquelba y Son Blanc

en Alayor; monte Toro, Son Vidal en San Cristóbal; camino del barranco de Algendar en Ferrerías; Calaforcada en Ciudadela”

Type material: **MPU** (lectotype; PERICÁS & al., 1987), **COI-Willk.** (syntype).

Remarks: *Digitalis minor* L. is the earlier available name for the plants known as *Digitalis dubia* J.J. Rodr. (HINZ, 1987b). The morphological plasticity exhibited by *D. minor* is highly remarkable, and on this basis a large number of infraspecific variants have been described (under *D. dubia*). With the exception of *D. minor* var. *palaui* (Garcias Font & Marcos) Hinz & Rosselló, none of them merits taxonomic recognition (PERICÁS & al., 1987; HINZ, 1987c).

*Digitalis dubia* var. *albiflora* Bianor in Butll. Inst. Catalana Hist. Nat 17: 139 (1917), nom. nud.

**Digitalis dubia** var. **longipedunculata** Font Quer ex Pau in Butll. Inst. Catalana Hist. Nat. 14: 139 (1914); ≡ *D. purpurea* var. *longipedunculata* (Font Quer ex Pau) Font Quer in Bol. Farm. Militar 3(28): 128 (1925); ≡ *D. dubia* f. *longipedunculata* (Font Quer ex Pau) Werner in Bot. Jahrb. Syst. 79: 224 (1960)

Ind. loc.: “Barranco del Favaret (Mahón): 17 Mayo 1913”

Type material: Barranco del Favaret (Mahón), peñascos sombríos calcáreos, 17-V-1913, Font Quer (**BC 43935**). **Lectotype here designated** (single specimen).

Remarks: See comments under *Digitalis dubia* J.J. Rodr.

**Digitalis dubia** var. **marcosii** Garcias Font in Collect. Bot. (Barcelona) 5: 877 (1958)

Ind. loc.: “Majorica: in umbrosis Querceti ilicis l. dicto Escorca circa Lluc ubi legi 18-VII-1957. Typus in Herb. Garcias Font.”

Type material: Not traced, probably lost.

Remarks: See comments under *Digitalis dubia* J.J. Rodr.

**Digitalis dubia** var. **micrantha** L. Chodat in Bull. Soc. Bot. Genève 15: 257 (1924)

Ind. loc.: “c'est que nous trouvons dans l'herbier Barbey-Boissier, une digitale récoltée par PEYSSON...”

Type material: Not traced at G.

Remarks: See comments under *Digitalis dubia* J.J. Rodr.

**Digitalis dubia** f. **mollis** Martínez in Bol. Soc. Esp. Hist. Nat. 31: 699 (1931); ≡ *D. purpurea* [subsp. *dubia*] f. *mollis* (Martínez) O. Bolòs & Vigo, Fl. Països Catalans 3: 443 (1996)

Ind. loc.: “El ejemplar [...] fue herborizado en Cala Mezquita por F. Carreras Reura y determinado por D. Carlos Vicioso”

Type material: Isla de Menorca, Cala Mezquita (Baleares), leg. IV-1917, F. Carrera Reura, det. C. Vicioso (**MA 112855**). **Lectotype here designated** (single specimen).

Remarks: See comments under *Digitalis dubia* J.J. Rodr.

**Digitalis dubia** subsp. **palaui** Garcias Font & Marcos in Garcias Font in Collect. Bot. (Barcelona) 5: 874, 876 (1958); ≡ *D. purpurea* f. *palaui* (Garcias Font & Marcos) O.

Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 98 (1983);  $\equiv$  D. dubia var. palau (Garcias Font & Marcos) Pericás & Rosselló in Candollea 42: 395 (1987);  $\equiv$  D. minor var. palau (Garcías & Marcos) Hinz & Rosselló in Candollea 42: 714 (1987);  $\equiv$  D. minor subsp. palau (Garcias Font & Marcos) Romo, Fl. Silvestres Baleares: 278 (1994), comb. inval.

Ind. loc.: "Majorica: in glareosis calcareis, secus vias in l. Ses Síries (Galilea) dicto, 29-V-1949. Serra et Muntaner legerunt"

Type material: **BC** (holotype, isotype).

Remarks: Name in current use (PERICÁS & al., 1987; HINZ, 1987c), but it should be replaced at the varietal level by the prioritaire *Digitalis minor* var. *minima* Lind.

**Digitalis dubia** var. **rodriguezii** L. Chodat, Bull. Soc. Bot. Genève 15: 256 (1924)

Ind. loc.: "Cala Mesquita"

Type material: Not traced at G.

Remarks: See comments under *Digitalis dubia* J.J. Rodr.

**Digitalis minor** L., Mant. Pl.: 567 (1771)

Ind. loc.: "Habitat in Hispania"

Type material: **LINN** 775.2 (lectotype: HINZ, 1987a).

Remarks: Name in current use (HINZ, 1987b, 1987c); endemic to the Eastern Balearic Islands.

**Digitalis minor** var. **minima** Lind., Digitalium Monogr.: 12, tab. vi (1821)

Ind. loc.: "Varietas singularis β in horto Domini Lee ad Hammersmith provenit"

Type material: Not traced. The colour plate given in the protologue may be a suitable choice for lectotypification purposes.

Remarks: This taxon should be referred to the glabrous forms of *Digitalis minor*, and therefore has priority at the varietal level over *D. minor* var. *palau*.

*Digitalis purpurea* [subsp. *dubia*] f. *albiflora* Marcos in Cavanillesia 8: 44 (1936), nom. nud.

**Digitalis purpurea** [raza *dubia*] var. **gracilis** Font Quer in Bol. Farmacia Militar 3(28): 128 (1925);  $\equiv$  D. *dubia* f. *gracilis* (Font Quer) Werner in Bot. Jahrb. Syst. 79: 224 (1960)

Ind. loc.: "...Santa Ponsa de Alayor..."

Type material: Santa Ponsa de Alayor, peñascos sombríos, de 150 a 200 m, 30-V-1913, Font Quer (**BC** 43933). **Lectotype here designated** (right specimen).

Remarks: See comments under *Digitalis dubia* J.J. Rodr.

*Eufragia balearica* Gand., Fl. Eur. 18: 21 (1889), nom. inval.

*Eufragia leptocaula* Gand., Fl. Eur. 18: 23 (1889), nom. inval.

*Kickxia balearica* Gand., Fl. Eur. 18: 125 (1889), nom. inval.

*Linaria aequitriloba* var. *parviflora* L. Llorens in Bol. Soc. Hist. Nat. Baleares 24: 98 (1980), nom. inval.

**Linaria aeruginea** var. **pruinosa** Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 18 (1911);  $\equiv$  *L. supina* var. *pruinosa* (Sennen & Pau) Sennen & Pau in Sennen in Bull. Géogr. Bot. 24: 226 (1914);  $\equiv$  *L. supina* proles *pruinosa* (Sennen & Pau) Sennen & Pau in Sennen in Bull. Géogr. Bot. 24: 226 (1914);  $\equiv$  *L. aeruginea* f. *pruinosa* (Sennen & Pau) Knoche, Fl. Balear. 2: 379 (1922);  $\equiv$  *L. tristis* var. *pruinosa* (Sennen & Pau) Pau in Brotéria Ci. Nat. 3: 178 (1934);  $\equiv$  *L. supina* var. *pruinosa* (Sennen) O. Bolòs & Molinier in Collect. Bot. (Barcelona) 5: tab. 7 (1958), comb. inval.;  $\equiv$  *L. aeruginea* subsp. *pruinosa* (Sennen & Pau) Chater & Valdés in Bot. J. Linn. Soc. 65: 264 (1972)

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: BC 44400 (lectotype; VALDÉS, 1970: 160); BM (isolectotype), MA (isolectotype), MANCH (isolectotype).

Remarks: Name in current use, endemic to the island of Mallorca (VALDÉS, 1970). The lectotype chosen by VALDÉS (1970) was apparently collected after the description of the plant and can barely be considered as authentic material. This is a technical pitfall, but the taxon, however, does not offer any problem of interpretation.

**Linaria fragilis** J.J. Rodr. in Bull. Soc. Bot. France 25: 240 (1878);  $\equiv$  *L. aequitriloba* subsp. *fragilis* (J.J. Rodr.) Gand., Nov. Consp. Fl. Eur.: 381 (1910);  $\equiv$  *Cymbalaria fragilis* (J.J. Rodr.) Chevalier in Bull. Soc. Bot. France 83: 641 (1936);  $\equiv$  *C. aequitriloba* subsp. *fragilis* (J.J. Rodr.) D.A. Webb in Bot. J. Linn. Soc. 65: 265 (1972);  $\equiv$  *Linaria aequitriloba* subsp. *fragilis* (J.J. Rodr.) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 98 (1983), comb. superfl.

Ind. loc.: "Rochers humides et ombragés du barranco de Algendar- Fl. mai-juillet; fructifie dès mi-juillet"

Type material: FI (syntype).

Remarks: Name in current use (CHEVALIER, 1936); endemic to the Balearic Islands (Menorca).

*Linaria fragilis* var. *aequiloba* Porta in Nuovo Giorn. Bot. Ital. 19: 314 (1887), nom. nud.

**Linaria hepaticefolia** var. **majorica** Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 18 (1911);  $\equiv$  *Cymbalaria hepaticifolia* var. *majorica* (Sennen & Pau) Bonafé, Fl. Mallorca 4: 114 (1980), comb. inval.

Ind. loc.: "...recogidas en las cercanías de Sóller, ó en su jurisdicción, por el hermano Bianor"

Type material: BC (holotype).

Remarks: PERICÁS & ROSELLÓ (1983) included *Linaria hepaticifolia* var. *majorica* under *Cymbalaria aequitriloba* (Viv.) A. Cheval subsp. *aequitriloba*.

*Linaria pedicellata* Gand., Fl. Eur. 18: 81 (1889), nom. inval.

**Linaria rodriguezii** Porta in Nuovo Giorn. Bot. Ital. 19: 314 (1887); ≡ *L. origanifolia* subsp. *rodriguezii* (Porta) Gand., Nov. Consp. Fl. Eur.: 380 (1910); ≡ *L. origanifolia* var. *rodriguezii* (Porta) Sennen & Pau ex Pau in Butll. Inst. Catalana Hist. Nat. 11: 18 (1911); ≡ *Chaenorhinum origanifolium* f. *rodriguezii* (Porta) Knoche, Fl. Balear. 2: 381 (1922); ≡ *Ch. villosum* var. *rodriguezii* (Porta) Pau in Brotéria Ci. Nat. 3: 178 (1934); ≡ *Ch. origanifolium* f. *rodriguezii* (Porta) Bonafé, Fl. Mallorca 4: 106 (1980), comb. inval.; ≡ *Ch. origanifolium* subsp. *rodriguezii* (Porta) Bonafé, Fl. Mallorca 4: 366 (1980), comb. inval.; ≡ *Ch. rodriguezii* (Porta) L. Sáez & Vicens, Cat. Pl. Vasc. Puig Major: 54 (1997)

Ind. loc.: "M[ajorca]. In petrosis borealibus m. Puig major de Torrella, rarissima. 24 Jun. flor. 29 Jul. fruct."

Type material: To be searched for at FI.

Remarks: A conclusive statement concerning the taxonomic status of this poorly known plant is required. On morphological grounds it is closely related to *Chaenorhinum origanifolium* (L.) Fourr. and probably be included within this species at the subspecific level.

*Linaria rubrifolia* var. *bianorii* Knoche ex Bianor in Butll. Inst. Catalana Hist. Nat 17: 138 (1917), nom. nud.

**Linaria spuria** var. **hastifolia** J.J. Rodr. in Anales Soc. Esp. Hist. Nat. 3: 45 (1874)

Ind. loc.: "Rara en el camino del Campás en Alayor.-Junio"

Type material: **PH-RODR** (syntype).

Remarks: The features given by RODRÍGUEZ (1874) to characterize this taxon are unreliable. It should be included within *Kicksia spuria* (L.) Dumort.

**Linaria triphylla** var. **versicolor** Sennen in Bol. Soc. Ibér. Ci. Nat. 29: 81 (1930)

Ind. loc.: "Baléares: Pont d'Inca, champs. Leg. F. Bianor"

Type material: Baléares: Pont d'Inca, champs. 10-V-1918, Bianor, Pl. Espagne-F. Sennen n.º 3495 (**BC-Sennen** 852447). **Lectotype here designated.**

Remarks: Not worthy of recognition as a separate taxon from *Linaria triphylla* (L.) Mill.

*Linaria triphylla* f. *violacea* Sennen, Campagn. Bot.: 116 (1936), nom. nud.

*Omphalospora majorica* Gand., Fl. Eur. 18: 282 (1889), nom. inval.

**Scrophularia canina** [subsp. *ramossissima*] var. **minoricensis** P. Monts. in O. Bolòs, Molinier & P. Monts. in Acta Geobot. Phytotax. 5: 120 (1970); ≡ *S. ramossissima* subsp. *minoricensis* (P. Monts.) Romo, Fl. Silvestres Baleares: 274 (1994)

Ind. loc.: "Tirant, in Herb. P. Montserrat"

Type material: **BC** (holotype).

Remarks: Included by ORTEGA & DEVESA (1993) within the variation of *Scrophularia canina* L. subsp. *ramosissima* (Loisel.) P. Fourn.

**Sibthorpia africana** L., Sp. Pl.: 631 (1753); ≡ *Disandra africana* (L.) Reichard, Syst. Pl. 2: 137 (1779) [n.v.]; ≡ *D. africana* (L.) Cambess. in Mém. Mus. Hist. Nat. 14: 289 (1827), comb. superfl.; ≡ *Disandra prostrata* var. *africana* (L.) Willd., Sp. Pl. 2: 282 (1799); ≡ *Sibthorpia europaea* var. *africana* (L.) Hooker in J. Proc. Linn. Soc., Bot. 7: 208 (1864); ≡ *Disandra africana* (L.) Gand., Fl. Eur. 18: 21 (1889), nom. inval.

Ind. loc.: "Habitat in Africa"

Type material: K (holotype; HEDBERG, 1955).

Remarks: Name in current use (HEDBERG, 1955). KNOCHE (1922) suggests that the type of *Sibthorpia africana* should be applied to plants inhabiting Africa, and he therefore described the Balearic plants as *S. europaea* Knoche. However, HEDBERG (1955) did not confirm the interpretation of KNOCHE (1922) concerning the holotype of *S. africana*, and continued to apply this name to the Balearic endemic plant.

**Sibthorpia africana** var. **albiflora** J.J. Rodr., Fl. Menorca: 97 (1904)

Ind. loc.: "Se Roca de Mercadal"

Type material: **PH-RODR** (holotype).

Remarks: Specimens of *Sibthorpia africana* showing white flowers have only been reported from the type locality. Their taxonomic recognition was not credited by HEDBERG (1955), a view that is here followed.

**Sipthorpia africana** f. **minor** Gand. in Bull. Soc. Bot. France 47: 134 (1900)

Ind. loc.: "Gorch Blau"

Type material: To be searched for at LY.

Remarks: Judging from the diagnosis and from the herbarium specimens collected at the type locality no taxonomic value should be accredited to this form.

**Sibthorpia balearica** Knoche, Fl. Balear. 2: 390 (1922); ≡ *S. europaea* var. *balearica* (Knoche) L. Chodat, Bull. Soc. Bot. Genève 15: 247 (1924); ≡ *S. europaea* f. *balearica* (Knoche) L. Chodat in Bull. Soc. Bot. Genève 15: 181 (1924)

Ind. loc.: "MAJORQUE: commun, dans les fentes des rochers, murs humides, etc., dans la Sierra [...]. MINORQUE: (uniquement sur calcaire) "forme à fleur blanche à Se [sic] Roca de Mercadal" (Rod.). IVICE: (Barc.), Santa Ines [sic], Cala Torretes (Gros); Cala de Eubarca [sic], Lladalt (Font). 1<sup>M</sup> E<sup>1</sup>. Dragonera: (nobis)"

Type material: K (lectotype; HEDBERG, 1955); **MPU-Knoche** (syntypes).

Remarks: *Sibthorpia balearica* is conspecific with *S. africana* (HEDBERG, 1955).

*Thapsandra balearica* Gand., Fl. Eur. 16: 112 (1889), nom. inval.

*Tomiophyllum balearicum* Gand., Fl. Eur. 18: 194 (1889), nom. inval.

*Uranostachys balearica* Gand., Fl. Eur. 18: 217 (1889), nom. inval.

**Verbascum boerhavii** var. **knochei** Benedí, Orell & J.J. Orell in Butll. Inst. Catalana Hist. Nat. 57: 62 (1989)

Ind. loc.: "Hab. in insula Majorica, loco dicto «Coll de Sóller», ubi die 26 junii anni 1982 J. Orell legit. Holotypus in Herbario Facultatis Pharmaciae Barcinonensis asservatus est (BCF 33591); isotypi in Herbario J. Orell."

Type material: **BCF** (holotype); PH-ORELL (isotype).

Remarks: According to BENEDÍ & al. (1989) two sympatric variants of *Verbascum boerhavii* L. occur in the Balearic Islands, and one of them (var. *knochei*), differing in leaf shape and denticulation, is apparently endemic to Mallorca.

*Verbascum sinuatum* f. *lanata* Knoche, Fl. Balear. 2: 366 (1922), nom. nud.

**Verbascum portae** Willk., see *Celsia floccosa* Porta

*Veronica balearica* Sennen in Bol. Soc. Ibér. Ci. Nat. 29: 86 (1930), nom. inval.

**Veronica bianoris** Sennen in Bol. Soc. Ibér. Ci. Nat. 29: 85 (1930)

Ind. loc.: "Baléares: Torrent entre Palma et Pont d'Inca. Leg. F. Bianor"

Type material: Baléares: Torrent et fossés, entre Palma et Pont d'Inca, 28-VIII-1917, Bianor, Pl. Espagne-F. Sennen n.º 3126 (**BC 45242**). **Lectotype here designated** (single specimen).

Remarks: The lectotype of *Veronica bianoris* should be adscribed to *V. anagalloides* Guss. without further recognition.

*Veronica glandulifera* Freyn in Oesterr. Bot. Z. 26: 371 (1876), nom. illeg.; ≡ *V. cymbalaria* subsp. *glandulifera* (Freyn) Gand., Nov. Consp. Fl. Eur.: 384 (1910), nom. inval.; ≡ *V. cymbalaria* f. *glandulifera* (Freyn) Knoche, Fl. Balear. 2: 388 (1922), nom. inval.; ≡ *V. cymbalaria* var. *glandulifera* (Freyn) Bonafè, Fl. Mallorca 4: 127 (1980), nom. inval.

**Veronica maresii** Sennen in Bol. Soc. Ibér. Ci. Nat. 29: 86 (1930); ≡ *V. beccabunga* var. *maresii* (Sennen) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 98 (1983); ≡ *V. beccabunga* var. *maresii* (Sennen) O. Bolòs & Vigo, Fl. Països Catalans 3: 446 (1996), comb. superfl.

Ind. loc.: "Baléares: Torrent entre Palma et Pont d'Inca. Leg. F. Bianor"

Type material: Baléares: Torrent entre Palma et Pont d'Inca, 28-VIII-1917, Bianor, Pl. Espagne-F. Sennen n.º 3127 (**BC 45209**). **Lectotype here designated** (upper specimen).

Remarks: The lectotype cannot be distinguished from *Veronica beccabunga* L.

**Veronica praecox** var. **macrocalyx** Willk. in Linnaea 40: 74 (1875)

Ind. loc.: "Mallorca: in cultis regionis inferioris (Huerta de Sóller), d. 9 Maji c. flor. et fruct. mat."

Type material: Mallorca: Huerta de Sóller, in cultis, 9-V-1873, Willkomm, Herb. balear. n. 477. (**COI-Willkomm**). **Lectotype here designated** (upper specimen).

Remarks: Calyx and capsule features suggest that this taxon should be referred to *Veronica arvensis* L.

**Veronica trichadena** var. **freyniana** M. Fischer in Bol. Soc. Hist. Nat. Baleares 18: 11 (1973); ≡ *V. cymbalaria* [subsp. *trichaderna*] var. *freyniana* (M. Fischer) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 98 (1983)

Ind. loc.: "Holotypus: Champs de Vicia faba aux environs de Son Forteza près de Puigpunyent, 200-300 m s.m., leg. Manfred Fischer, 10. avril 1971"

Type material: WU (holotype).

Remarks: This variety refers to the illegitimate *Veronica glandulifera* Freyn. See FISHER (1975) for the relationships of this taxon within the *Veronica cymbalaria* aggregate.

### Selaginellaceae

*Selaginella balearica* Gand., Fl. Eur. 27: 214 (1891), nom. inval.; ≡ *S. denticulata* subsp. *balearica* (Gand.) Gand., Nov. Conspl. Fl. Eur.: 522 (1910), nom. inval.

*Selaginella platyclada* Gand., Fl. Eur. 27: 215 (1891), nom. inval.

### Smilacaceae

**Smilax aspera** var. **balearica** Willk. in Oesterr. Bot. Z. 25: 109 (1875); Willk. in Linnaea 40: 22 (1876); ≡ *S. balearica* (Willk.) Burnat & Barbey, Notes Voy. Bot.: 61 (1882); ≡ *S. balearica* (Willk.) Porta in Nuovo Giorn. Bot. Ital. 19: 320 (1887), comb. superfl.; ≡ *S. aspera* f. *balearica* (Willk.) Knoche, Fl. Balear. 1: 384 (1921); ≡ *S. aspera* subsp. *balearica* (Willk.) Malag., Subsp. Var. Geogr.: 26 (1973); ≡ *S. aspera* subsp. *balearica* (Willk.) Colom, Biogeografía Baleares ed. 2, 1: 183 (1978), comb. inval.; ≡ *S. aspera* subsp. *balearica* (Willk.) Malag., Sin. Fl. Ibér. ed. 2, fasc. 7: 59 (1980), comb. inval.; ≡ *S. aspera* subsp. *balerica* (Willk.) Romo, Fl. Silvestres Baleares: 338 (1994), comb. superfl.

Ind. loc.: "Mallorca: in fissuris rupium glareosisque calcar. praecipue regionis montanae, ubi ad alt. 1540 met. usque adscendit. Flores non vidi"

Type material: Mallorca: Puig de galatzó, in parte superiore (...), in glareosis rupium fissuris, 17-IV-1873, Willkomm, Herb. balear. n. 283. (**COI-Willkomm**).

**Lectotype here designated** (upper left specimen).

Remarks: The morphological variation exhibited by *Smilax aspera* L. on some Balearic Islands (notably Mallorca and Menorca) is highly remarkable. No less than five taxa related to *S. aspera* have been described on the basis of conspicuous features. However, basic tenets supporting the fact that this variation might have some genetical basis have not yet been reported. Intermediate specimens linking the two extreme morphotypes, *S. aspera* var. *balearica* and *S. aspera* var. *altissima* Moris & De Not., are numerous and no constant morphological features can be used to trace taxa boundaries. Further experimental work should be encouraged to solve the status of the Balearic plant.

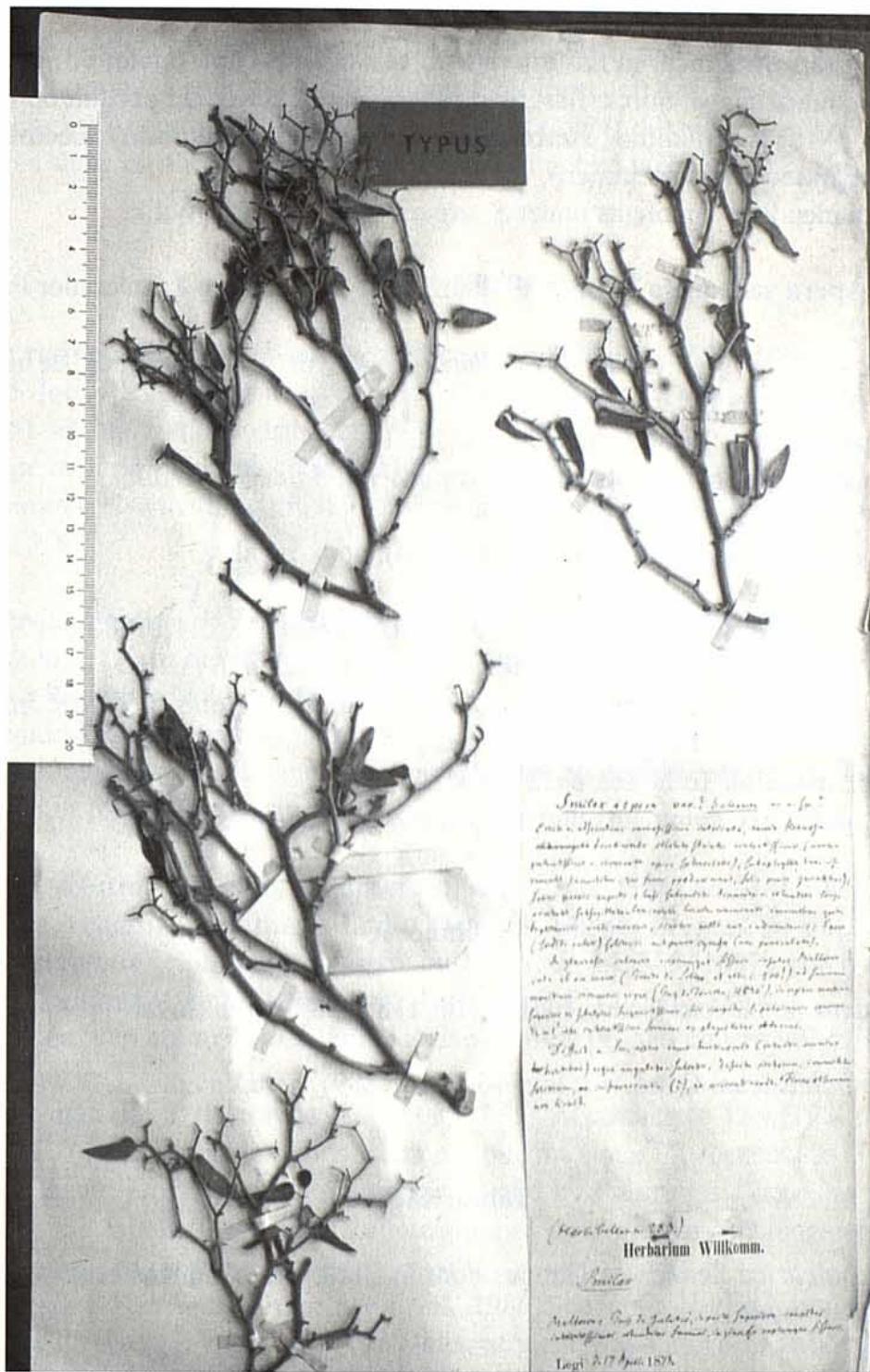


Fig. 18. Lectotype of *Smilax aspera* var. *balearica* Willk. (COI-Willkomm).

**Smilax aspera** f. *intermedia* Knoche, Fl. Balear. 1: 383 (1921)

Ind. loc.: Not stated.

Type material: To be searched for at MPU.

Remarks: See comments under *S. aspera* var. *balearica* Willk.

***Smilax aspera* var. *picta* Willk. in Linnaea 40: 22 (1875)**

Ind. loc.: "Mallorca: in fissuris rupium calcar. ad portum oppidi Sóller et alibi"

Type material: Mallorca: fissuris rupium collium calcar. ad portum/oppidi Sóller., 3-V-1873, Willkomm, Herb. balear. n. 38. (**COI-Willkomm**). **Lectotype here designated** (right specimen).

Remarks: See comments under *S. aspera* var. *balearica* Willk.

***Smilax aspera* var. *rubra* Texidor, Fl. Farmac.: 444 (1871); in Restaurador Farm. 28: 69 (1872)**

Ind. loc.: "[...] en tapias del término de Alayor y Mahon [sic], de menorca, encontró Casall.! la β"

Type material: To be searched for at MAF.

Remarks: See comments under *S. aspera* var. *balearica* Willk.

*Smilax balearica* Gand., Fl. Eur. 22: 26 (1890), nom. inval.***Smilax willkommii* Gand. in Bull. Soc. Bot. France 47: 124 (1900); ≡ *S. aspera* subsp. *willkommii* (Gand.) Gand., Nov. Consp. Fl. Eur.: 436 (1910)**

Ind. loc.: "Hab. frquens in apricis et aridis totius regionis calcareae insulae ad Galatso, Teix, Sóller, Puig de Torrella, etc."

Type material: To be searched for at LY.

Remarks: See comments under *S. aspera* var. *balearica* Willk.

**Solanaceae***Hyoscyamus balearicus* Gand., Fl. Eur. 16: 118 (1889), nom. inval.*Solanum balearicum* Gand., Fl. Eur. 16: 131 (1889), nom. inval.**Tamaricaceae***Tamarix balearica* Sennen ex Garcías Font in Butll. Inst. Catalana Hist. Nat. 23: 93 (1923), nom. nud.**Thelygonaceae*****Theligonum cynocrambe* var. *saxatilis* Willk. in Linnaea 40: 31 (1875)**

Ind. loc.: "Mallorca: in glareosis pinguibus rupiumque fissuris collium montiumque calcareorum per omnem insulam ad alt. 500-1200 met. praecipue in declivi- bus rupibusque septentrionem versus sitis abundat (v.c. Puig de Randa, P. de S. Salvador de Felanitx, Atalaya Vera, P. de Pollenza [sic], P. de Ternellas, Barr. de Sóller, P. de Teix etc.)"

Type material: Mallorca: Puig de Randa, in ruppium fissuris glareosisque summi cacuminis in latere borealis, 19-IV-1873, Willkomm, Herb. balear. n. 301. (**COI-Willkomm**). **Lectotype here designated** (upper left specimen).

Remarks: According to BENEDÍ & SILVESTRE (1997) this variety refers to foliose specimens showing short internodes which should not be taxonomically recognized.

### Thymelaeaceae

**Daphne rodriguezii** Texidor in Revista Progr. Ci. Exact. 18: 640 (1868)

Ind. loc.: "Es r.r.r. en una pequeña colina inmediata á Cala-Mezquita (Isla de Menorca). Fl. marzo (J. Rodriguez!)"

Type material: Not traced at MAF.

Remarks: Name in current use, endemic to the island of Menorca (NIETO FELINER, 1997).

**Daphne vellaeoides** J.J. Rodr. in Bull. Soc. Bot. France 16: 238 (1869)

Ind. loc.: "Hab. Environs de Cala-Mezquita, dans l'île de Minorque.- Fl. Mars"

Type material: Not traced

Remarks: *Daphne rodriguezii* and *D. vellaeoides* refer to the same taxon and were published nearly simultaneously, but there are no doubts concerning the priority of the former (NIETO FELINER, 1997).

**Passerina velutina** Pourr. ex Cambess. in Mém. Mus. Hist. Nat. 14: 304 (1827); ≡ *Thymelaea velutina* (Cambess.) Endl., Gen. Pl. Suppl. IV pars ii: 66 (1848); ≡ *Thymelaea velutina* (Cambess.) Meissn. in DC, Prodr. 14: 555 (1857), comb. superfl.; ≡ *Stellera velutina* (Cambess.) Kuntze, Revis. Gen. Pl. 2: 585 (1891)

Ind. loc.: "In arenosis maritimis insulae Majoris prope Palmam vulgatissima, in montibus rario"

Type material: P (lectotype; TAN, 1980: 221). According to TAN (1980) the typification of *Thymelaea velutina* poses some problems since CAMBESSEDESS (1827) did not listed in the protologue the specimens named by Pourret as *Passerina velutina*. Moreover, the labelled material of *P. velutina* at other herbaria belongs to another taxon (*Daphne myrtifolia* Poir.)

Remarks: Name in current use (TAN, 1980); endemic to the Eastern Balearic Islands (Mallorca and Menorca). The Balearic plant was known for a long time as *Thymelaea myrtifolia* (Poir.) D. A. Webb (WEBB, 1967) until it was shown by AYMONIN (1969) that this name referred to another taxon of the *T. tartonraira* (L.) All. complex [*T. tartonraira* subsp. *valentina* (Pau) O. Bolòs & Vigo according to PEDROL (1997)].

*Passerina velutina* f. *parvifolia* Knoche, Fl. Balear. 2: 214 (1922), nom. nud.

*Passerina velutina* f. *folia-acuminata* Knoche, Fl. Balear. 2: 214 (1922), nom. nud.

*Thymelaea acutifolia* Gand., Fl. Eur. 20: 20 (1890), nom. inval.

*Thymelaea balearica* Gand., Fl. Eur. 20: 20 (1890), nom. inval.

*Thymelaea imbricata* Gand., Fl. Eur. 20: 20 (1890), nom. inval.

**Thymelaea myrtifolia** subsp. **montana** Malag., Subsp. Var. Geogr.: 5 (1973); ≡ *T. velutina* subsp. *montana* (Malag.) Malag., Sin. Fl. Ibér. ed. 2, fasc. 10: 149 (1975)

Ind. loc.: “Trátase de una planta de altitud relativa en Mallorca”

Type material: Baléares: Montagnes de Lofre près Soller, 0 à 1400 m. 5-VI-1911, Bianor, Pl. Espagne-F. Sennen n.º 1275 (**BC 56448**). **Lectotype here designated** (upper specimen).

Remarks: The mountain specimens of *Thymelaea velutina* from Mallorca (also described as *T. velutina* var. *angustifolia* Willk.) have not been recognized as taxonomically distinct by TAN (1980) and PEDROL (1997).

**Thymelaea velutina** var. **angustifolia** Willk. in Linnaea 40: 35 (1875); ≡ *T. myrtifolia* var. *angustifolia* (Willk.) Bonafè, Fl. Mallorca 3: 174 (1979), comb. inval.

Ind. loc.: “Mallorca, in jugo Plana de néu inter Puig mayor [sic] de Masanella [sic] et Péña d'en Galiléu sito ad alt. 1150 met. copiose”

Type material: Mallorca: in valle inter montes Peña d'en Galileu et Puig de Manzanella loco Plana de neu. Legi d. 29-IV-1873, Willkomm (Herb. balear. n. 180.) (**COI-Willkomm**). **Lectotype here designated** (bottom right specimen).

Remarks: See comments under *Thymelaea myrtifolia* subsp. *montana*.

## Urticaceae

*Parietaria officinalis* f. *humilis* Knoche, Fl. Balear. 1: 422 (1921), nom. nud.

**Urtica balearica** L., Syst. Nat. ed. 10: 1265 (1759); ≡ *U. pilulifera* var. *balearica* (L.) Lange in Willk. & Lange, Prodr. Fl. Hispan. 1: 252 (1862); ≡ *U. pilulifera* subsp. *balearica* (L.) Gand., Nov. Consp. Fl. Eur.: 417 (1910); ≡ *U. pilulifera* f. *balearica* (L.) Asch. & Graebn., Syn. Mitteleur. Fl. 4: 606 (1911); ≡ *U. pilulifera* f. *balearica* (L.) Knoche, Fl. Balear. 1: 420 (1921), comb. superfl.; ≡ *U. pilulifera* subsp. *balearica* (L.) Malag., H. Bianor Educador Botánico Baleares: 137 (1971), comb. inval.

Ind. loc.: Not stated in the protologue. Later referred to “Habitat in India” (Sp. Pl. ed. 2: 1395, 1762)

Type material: LINN 1111.9

Remarks: This taxon is conspecific with *Urtica pilulifera* L. (PAIVA, 1993).

**Urtica atrovirens** var. **bianorii** Knoche, Fl. Balear. 1: 421 (1921); ≡ *U. atrovirens* subsp. *bianorii* (Knoche) Font Quer & Garcias Font, Flora Hispan. Herb. Normal, Cent. VI, n.º 514 (1951) in sched.; ≡ *U. atrovirens* subsp. *bianorii* (Knoche) Font Quer & Garcias Font ex Cañig. in Collect. Bot. (Barcelona) 3: 104 (1953), comb. inval.; ≡ *U. atrovirens* subsp. *bianorii* (Knoche) Font Quer & Garcias Font in Collect.

Bot. (Barcelona) 3: 360 (1953), comb. inval.;  $\equiv$  *U. bianorii* (Knoche) Paiva in Anales Jard. Bot. Madrid 50: 130 (1992)

Ind. loc.: Le Frere Bianor a trouv cette plante au Sud de Soller, Majorque, dans des stations ombrages, 'au pied des rochers qui forment la crte suprieure de la chane, droite du col qui est en face de la fontaine'. (1000 mtrs, 3P E8 ?). 8 mai 1912

Type material: Majorque, Serra Soller, V-1912, 100 m, Bianor (**MPU-Knoche**). **Lectotype here designated** (single specimen).

Remarks: Name in current use (PAIVA, 1993); endemic to the Balearic Islands (Mallorca). Recent work based on micromorphological and anatomical features (CORSI, 2000) supports its distinction from *U. atrovirens* Req. at the subspecific rank.

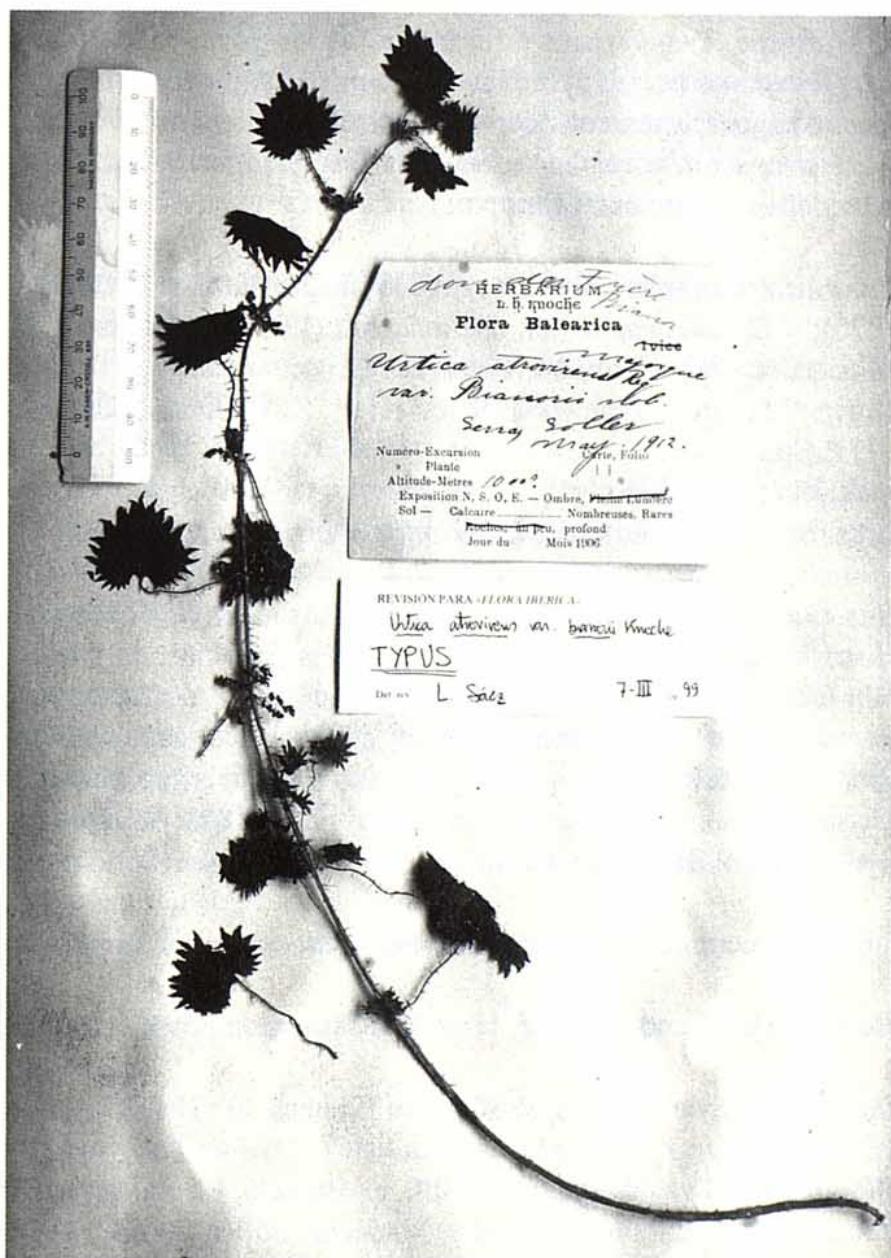


Fig. 19. Lectotype of *Urtica atrovirens* var. *bianorii* Knoche (**MPU-Knoche**).

*Urtica flexuosa* Gand., Fl. Eur. 20: 171 (1890), nom. inval.

### Valerianaceae

**Centranthus calcitrata** var. **donati** Sennen, Pl. Espagne-F. Sennen 1933 n.<sup>o</sup> 8620 (1933) in sched.; Diagn. Nouv.: 175 (1936)

Ind. loc.: "Hab.- Baléares: Manacor, à Porto Cristo"

Type material: Baléares: Manacor, à Porto Cristo, 10-IV-1933, s.r., Pl. Espagne-F. Sennen 1933 n.<sup>o</sup> 8620 (**BC** 82425). **Lectotype here designated** (right specimen); **MA** (isolectotype).

Remarks: This taxon is not worthy of distinct treatment from *Centranthus calcitrata* (L.) Dufresne. Two variants differing in the hairiness of the fruit have been recognized by RICHARDSON (1975) but the taxonomic rank given to them (subspecies) does not seem adequate when considering the small differences involved. The hairy variant (*C. calcitrata* subsp. *trichocarpus*) was described from Mallorca but its distribution extended to continental Europe.

**Centranthus calcitrata** subsp. **trichocarpus** I.B.K. Richardson in Bot. J. Linn. Soc. 71: 232 (1975);  $\equiv$  *C. calcitrapae* var. *trichocarpus* (I.B.K. Richardson) O. Bolòs & Vigo in Collect. Bot. (Barcelona) 14: 101 (1983), comb. inval.

Ind. loc.: "Mallorca: Pinewood S. of river, S. of C'an Picafort, E. coast. 24.v.1969, D.P. Spicer 5/518"

Type material: LTR (holotype).

Remarks: See comments under *Centranthus calcitrata* var. *donati*.

**Centranthus calcitrata** var. **alpestris** Willk. in Linnaea 40: 36 (1875)

Ind. loc.: "In glareosis regionis montanae et subalpinae, in tractu Sierra de Mallorca ad cacumina montium (v.c. Puig de Galatcó [sic], P. de Teix) et usque ad alt. c. 1300 met. adscendens, ubi in fissuris rupium glareosisque saepe abundat"

Type material: Mallorca: Puig de Galatzó, in parte superiore inter saxa atque in rupium fissuris ad summum cacuminem usque, 17-IX-1873, Willkomm, Herb. balear. n. 107. (**COI-Willkomm**). **Lectotype here designated** (bottom right specimen).

Remarks: See comments under *Centranthus calcitrata* var. *donati* Sennen.

*Valerianella balearica* Gand., Fl. Eur. 11: 200 (1886), nom. inval.

*Valerianella morisonii* var. *dasyarpa* Willk. in Linnaea 40: 37 (1875), nom. nud.

**Valerianella morisonii** var. **dasyarpa** Willk. ex Barceló, Fl. Baleares: 228 (1880)

Ind. loc.: "Mallorca: Palma, Andraitx, Manacor! Sóller, (Willk.) (V.V.)"

Type material: Not traced at COI-Willk.

Remarks: No information concerning this taxon is available. The name is not in current use, and this variety probably has no taxonomic significance.

## Verbenaceae

*Vitex agnus-castus* var. *albiflorus* P. Palau in Anales Inst. Bot. Cavanilles 11: 514 (1954), nom. nud.

## Violaceae

**Viola alba** nothosubsp. **bonaefidei** Orell & Romo in Butll. Inst. Catalana Hist. Nat. 59: 85 (1991)

Ind. loc.: "Holotype; Gorg Blau, 600 m, leg. J. Orell & A.M. Romo, 14-IV-1990, BC"

Type material: **BC** 836790 (holotype)

Remarks: According to ORELL & ROMO (1991) this name applies to the hybrids between *Viola alba* subsp. *dehnhardtii* and *V. suavis* subsp. *barceloi* but the presence of *Viola suavis* has not been verified in the Balearic Islands. No signs of hybridity have been observed in the type material which in our opinion belongs to *V. alba* Besser.

**Viola alba** nothosubsp. **neusii** Orell & Romo in Butll. Inst. Catalana Hist. Nat. 59: 83 (1991)

Ind. loc.: "Holotype; Sóller, Montagnes et rochers du Gorg Blau, 9-X-1912 leg. F. Bianor, BC-Herb, Sennen"

Type material: **BC-Sennen** (holotype).

Remarks: Described as the hybrid between *Viola alba* subsp. *dehnhardtii* and *V. jaubertiana*, but surprisingly included as a nothotaxon under *V. alba*. The type material effectively belongs to this hybrid, which at the nothospecific level should be named *V. × balearica* Rosselló & al.

*Viola ambigua* Barceló, Fl. Baleares: 53 (1879), nom. illeg.; ≡ **V. barceloi** Nyman, Consp. Fl. Eur., Suppl. 2: 45 (1889); ≡ *V. alba* subsp. *barceloi* (Nyman) Gand. Nov. Consp. Fl. Eur.: 55 (1910); ≡ *V. suavis* subsp. *barceloi* (Nyman) Orell & Romo in Butll. Inst. Catalana Hist. Nat 59: 82 (1991), nom. illeg.

Ind. loc.: "Mallorca: Andraitx, Puigpuñent, Valldemossa, Deyá, Sóller. Cultivada en los jardines."

Type material: **G** (lectotype; Mus & al., 2000)

*Viola arborescens* var. *pygmaea* P. Palau in Anales Inst. Bot. Cavanilles 11: 513 (1954), nom. inval.

*Viola arborescens* f. *pygmaea* P. Palau in Anales Inst. Bot. Cavanilles 11: 513 (1954), nom. inval.

**Viola × balearica** Rosselló, Mayol & Mus, see *V. barceloi* L. Chodat

**Viola barceloi** Nyman, see *V. ambigua* Barceló

*Viola barceloi* L. Chodat in Bull. Soc. Bot. Genève 15: 234 (1923), nom. illeg.; ≡ *V. × balearica* Rosselló, Mayol & Mus in Boll. Soc. Hist. Balears 32: 154 (1991)

Ind. loc.: “Crescit simul cum *Viola jaubertiana* in fissuris rupium ad exitum ancipitis dict. Gorch Blaou, inter Aumalluch et Escorca, fl. Martio.”

Type material: **G** (neotype; Mus & al. 2000)

Remarks: Name in current use (Mus & al., 2000). This is the hybrid between *V. alba* Besser and *V. jaubertiana*. For an account of the *Viola* names bearing the epithet *barceloi* see Mus & al. (2000). ORELL & ROMO (1991) stated that the name *V. × balearica* was invalidly published since no latin diagnosis was provided. However, *V. × balearica* was created as a new name to replace the illegitimate *V. barceloi* L. Chodat, and no formal requirement other than the basionyme citation is required by the Botanical Code.

**Viola jaubertiana** Marès & Vigin., Cat. Pl. Vasc. Balèares: 37 (1880); ≡ *V. odorata* var. *jaubertiana* (Marés & Vigin.) Knoche, Fl. Balear. 2: 209 (1922)

Ind. loc.: “MAJORQUE: Es gorch [sic] Blaou [sic] à l'Estretch [sic] entre Aumalluch, 10 juin 1852.- Cova de la Botella près es puig Gros de Ternellas aux environs de Pollenza, 4 mai 1855”

Type material: Gorch Blau, 10-VI-1852, Marès & Vigineix (**MPU-Knoche**).

**Lectotype here designated** (flowered specimen); **G** (isolectotype)

Remarks: Name in current use (MUÑOZ GARMENDIA & al., 1993); endemic to the Balearic Islands (Mallorca).

*Viola odorata* f. *depauperata* Knoche, Fl. Balear. 2: 209 (1922), nom. nud.

*Viola odorata* f. *eflagellata* Knoche, Fl. Balear. 2: 208 (1922), nom. nud.

**Viola odorata** f. **flagellata** Knoche, Fl. Balear. 2: 208 (1922)

Ind. loc.: “... près de l'Estellenchs”

Type material: Estallençs, 23-IV-1907, Knoche 1839 (**MPU-Knoche**).

**Lectotype here designated** (flowered specimen).

Remarks: The lectotype is not recognizable as taxonomic distinct from *Viola alba* Besser.

*Viola odorata* f. *glabra* Knoche, Fl. Balear. 2: 208 (1922), nom. nud.

*Viola odorata* f. *grandifolia* Knoche, Fl. Balear. 2: 208 (1922), nom. nud.

*Viola odorata* var. *inodora* Cambess. in Mém. Mus. Hist. Nat. 14: 218 (1827), nom. nud.

**Viola stolonifera** J.J. Rodr. in Bull. Soc. Bot. France 25: 238 (1878); ≡ *V. alba* subsp. *stolonifera* (J.J. Rodr.) Gand., Nov. Conspp. Fl. Eur.: 55 (1910); ≡ *V. odorata* subsp. *stolonifera* (J.J. Rodr.) Orell & Romo in Butll. Inst. Catalana Hist. Nat. 59: 83 (1991)

Ind. loc.: “Lieux frais et ombragés du barranco [sic] de Algendar.- Fl. Février-mars”

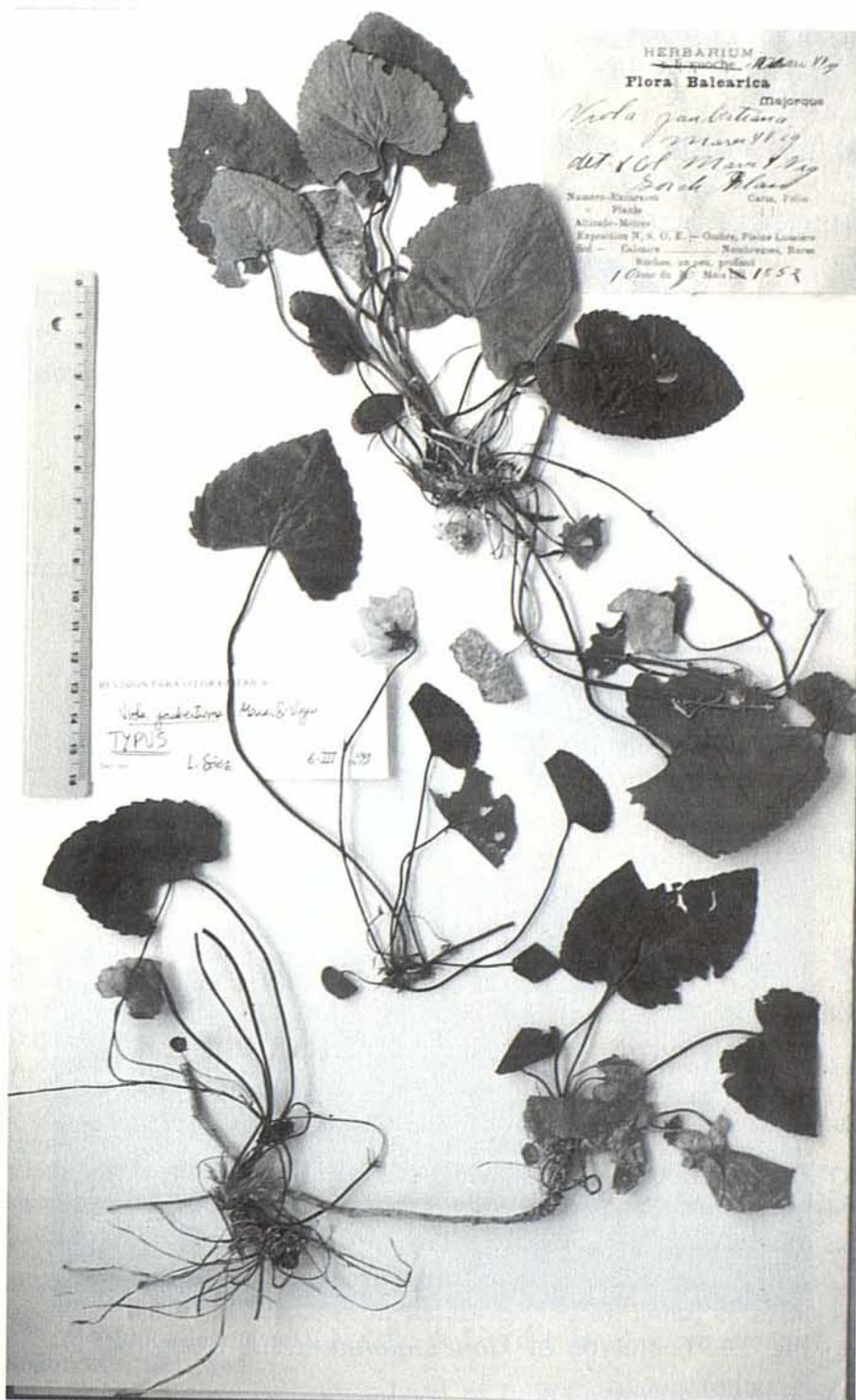


Fig. 20. Lectotype of *Viola jaubertiana* Mar s & Vigin. (MPU-Knoche).

Type material: Barranco de Algendar (Minorque), lieux humides, 22-IV-1873, J.J. Rodríguez (MPU-Knoche). **Lectotype here designated** (single specimen)

Remarks: A doubtful taxon requiring further study. *Viola stolonifera* is mostly related to *V. odorata* L., but it differs by small calyx features.

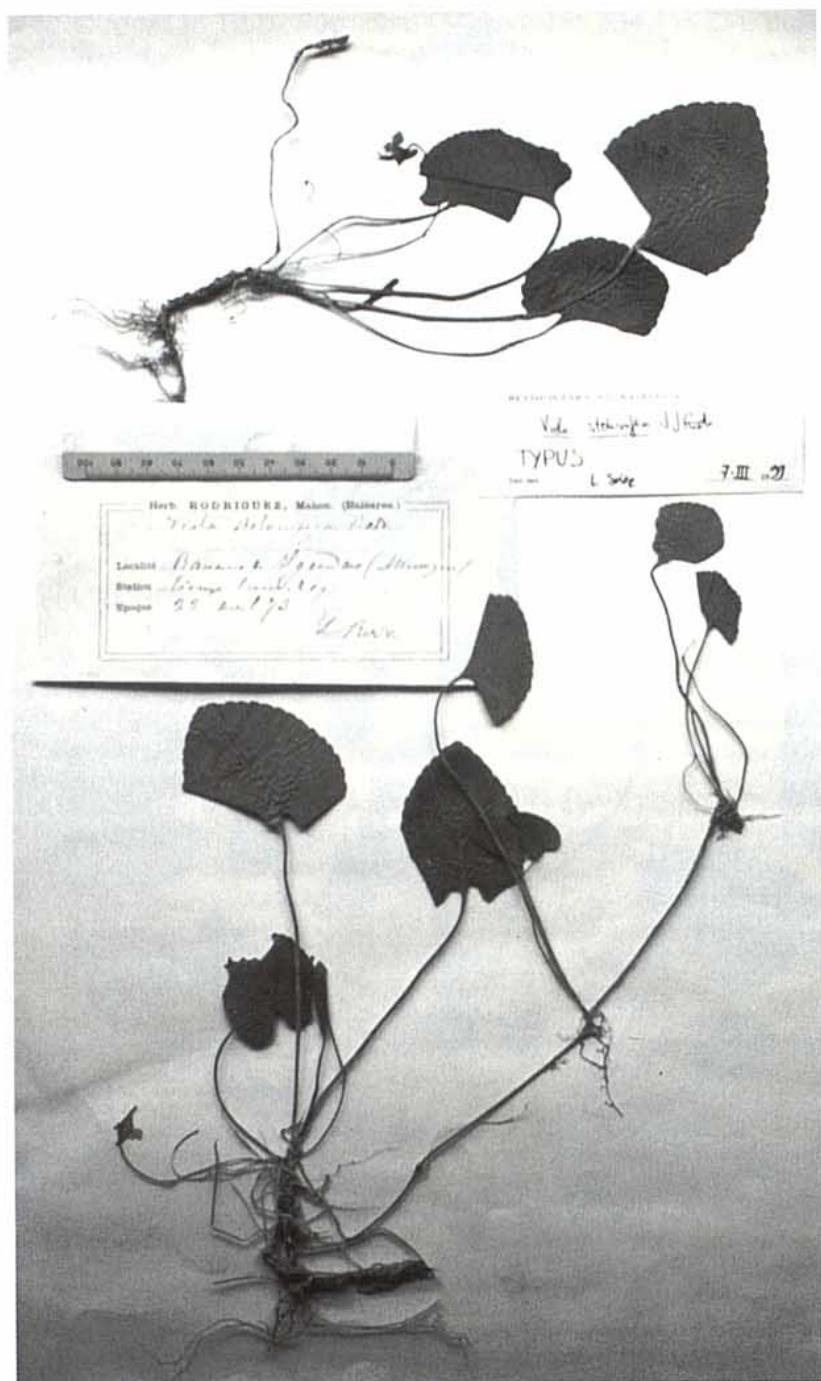


Fig. 21. Lectotype of *Viola stolonifera* J.J. Rodr. (MPU-Knoche).

**Viola suavis** nothosubsp. **cardonae** Orell & Romo in Butll. Inst. Catalana Hist. Nat. 59: 85 (1991)

Ind. loc.: El Gorg Blau, limestone, M.A. Cardona, 29-V-1979, BC

Type material: **BC** 644511 (holotype).

Remarks: ORELL & ROMO (1991) described this nothotaxon to include the hybrids between *Viola suavis* subsp. *barceloi*, nom. illeg and *V. jaubertiana*. The type

material, however, belongs to *V. jaubertiana*. Earlier records of *Viola suavis* from the Balearic Islands have proven to be misidentifications with *V. alba* Besser.

**Viola suavis** var. **barceloi** O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 80 (1974)

Ind. loc.: "Majorica, Sóller, lieux ombragés des collines. Leg. Fr. Bianor, III-1910, BC 74785 (Exs. Sennen Pl. d'Esp. 100)"

Type material: **BC** (holotype).

Remarks: *Viola suavis* var. *barceloi* has been included by Mus & al. (2000) within the synonymy of *V. alba*.

### Zosteraceae

*Zostera balearica* Gand., Fl. Eur. 27: 37 (1891), nom. inval.

### Zygophyllaceae

*Fagonia balearica* Gand., Fl. Eur. 5: 200 (1885), nom. inval.

## BIBLIOGRAPHIC REFERENCES

- ALEXANDER, J.M.C. (1979). The Mediterranean species of Senecio sections Senecio and Delphinifolius. *Notes Roy. Bot. Gard. Edinburgh* 37: 387-430.
- ALMEIDA DA SILVA, R.M., L. SÁEZ & J.A. ROSELLÓ (2000). Taxonomy of the genus Brimeura Salisb. (Hyacinthaceae). *Folia Geobot.*: in press.
- ALOMAR, G., M. MUS & J.A. ROSELLÓ (1997). *Flora Endèmica de les Balears*. Consell Insular de Mallorca. Palma de Mallorca.
- ALZIAR, G. & S. CAFFERTY (1998). Typification de plusieurs espèces de Phlomis de Linne (Lamiaceae). *Biocosme Mésogéen*. Nice 14: 119-127. [«1997»].
- AMARAL FRANCO, J. (1976). Crupina L. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 301. Cambridge University Press.
- AMARAL FRANCO, J. (1986). Pinus L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 1: 168-174.
- AMARAL FRANCO, J. (1990). Quercus L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 15-36. Real Jardín Botánico, CSIC. Madrid.
- AMICH, F. & J. PEDROL (1990) Polycarpon Loefl. ex L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 161-167. Real Jardín Botánico, CSIC. Madrid.
- ARRIGONI, P.V. (1979) Le piante endemiche della Sardegna: 40-53. *Boll. Soc. Sarda Sci. Nat.* 18: 223-295.
- ARRIGONI, P.V. & S. DIANA (1993): Contribution à la connaissance du genre Limonium en Corse. *Candollea* 48: 631-677.
- AURICH, CH. & D. PODLECH (1989). Zur Gliederung von Asteriscus spinosus (L.) Schultz Bip. sensu lato (Compositae). *Mitt. Bot. Staatssamml. München* 28: 239-296.
- AYMONIN, G.G. (1969). Etude sur le "Daphne myrtifolia" Poiret (Thyméléacées). *Bull. Soc. Bot. France* 116: 531-537.
- BABCOK, E.B. (1947). The genus Crepis. Part two. Systematic treatment. *Univ. Calif. Publ. Bot.* 22: i-x, 199-1030.

- BABCOK, E.B. & G.L. STEBBINS (1943). Systematic studies in the Cichorieae. *Univ. Calif. Publ. Bot.* 18: 227-240.
- BARCELÓ i COMBIS, F. (1880-1881). *Flora de las Islas Baleares, seguida de un diccionario de los nombres baleares, castellanos y botánicos, de las plantas espontáneas y de las cultivadas...* Imp. Pedro José Gelabert. Palma de Mallorca.
- BAYER, E. (1993). Erica L. In Castroviejo, S., C. Aedo, C. Gómez Campo, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner, E. Rico, S. Talavera & L. Villar (eds.). *Flora iberica* 4: 485-506. Real Jardín Botánico, CSIC. Madrid.
- BELLOT, F. (1946). Revisión crítica de las especies del género Hippocrepis de la Península e Islas Baleares. *Anales Jard. Bot. Madrid* 7: 197-334.
- BENEDÍ, C. (1991). Taxonomía de *Chaenohinum rubrifolium* agg. (Scrophulariaceae) en el área mediterránea occidental. *Collect. Bot. (Barcelona)* 20: 35-77.
- BENEDÍ, C. (1997). *Ilex* L. In Castroviejo, S., C. Aedo, C. Benedí, M. Laínz, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner & J. Paiva (eds.). *Flora iberica* 8: 182-185. Real Jardín Botánico, CSIC. Madrid.
- BENEDÍ, C. (1998). Consideraciones sobre el género *Anthyllis* L. (Loteae-Leguminosae) y su tratamiento en Flora iberica. *Anales Jard. Bot. Madrid* 56: 279-303.
- BENEDÍ, C., J. MOLERO, J. SIMON & J. VICENS (1997). *Euphorbia* L. In Castroviejo, S., C. Aedo, C. Benedí, M. Laínz, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner & J. Paiva (eds.). *Flora iberica* 8: 210-285. Real Jardín Botánico, CSIC. Madrid.
- BENEDÍ, C., J. ORELL & J.J. ORELL JAQUOTOT (1989). Notes taxonòmiques, nomenclaturals i corològiques de les espècies de *Verbascum* L. (Scrophulariaceae) a Mallorca. *Butll. Inst. Catalana. Hist. Nat.* 57: 61-64.
- BENEDÍ, C. & S. SILVESTRE (1997). *Theligonum* L. In Castroviejo, S., C. Aedo, C. Benedí, M. Laínz, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner & J. Paiva (eds.). *Flora iberica* 8: 11-13. Real Jardín Botánico-CSIC. Madrid.
- BENNERT, W. & G. FISCHER (1993). Byosystematics and evolution of the *Asplenium trichomanes* complex. *Webbia* 48: 743-760.
- BENNERT, W. & D.E. MEYER (1972). Der Gattungsbastard *xAsplenoceterach barrancense* hybr. nov. (*Asplenium majoricum* Lit. × *Ceterach officinarum* Lam. & DC.). *Willdenowia* 6: 461-470.
- BENNERT, W., H. RASBACH & K. RASBACH (1987). *Asplenium × reichstenii* (=*Asplenium fontanum* × *A. majoricum*; Aspleniaceae, Pteridophyta), a new endemic fern hybrid from Mallorca, Balearic Islands. *Fern Gaz.* 13: 133-141.
- BLANCA, G. & C. DÍAZ DE LA GUARDIA (1998). *Prunus* L. In Castroviejo, S., F. Muñoz Garmendia & C. Navarro (eds.). *Flora iberica* 6: 444-466. Real Jardín Botánico, CSIC. Madrid.
- BOLÒS, O. & J. VIGO (1984). *Flora dels Països Catalans*. Vol. 1. Ed. Barcino. Barcelona.
- BOLÒS, O. & J. VIGO (1987). Notes sobre taxonomia i nomenclatura de plantes, III. *Collect. Bot. (Barcelona)* 17: 89-93.
- BOLÒS, O. & J. VIGO (1990). *Flora dels Països Catalans*. Vol. 2. Ed. Barcino. Barcelona.
- BOLÒS, O. & J. VIGO (1996). *Flora dels Països Catalans*. Vol. 3. Ed. Barcino. Barcelona.
- BOLÒS, O., J. VIGO, R.M. MASALLES & J.M. NINOT (1990). *Flora Manual dels Països Catalans*. Ed. Pòrtic. Barcelona.
- BONAFÉ, F. (1977) *Flora de Mallorca*. Vol. 1. Ed. Moll. Palma de Mallorca.
- BOULOS, L. (1973). Révision systématique du Genre *Sonchus* L. s.l. IV. Sous-genre 1. *Sonchus*. *Bot. Not.* 126: 155-196.
- BOYCE, P. (1993). *The genus Arum*. A Kew magazine monograph. The Royal Botanic Gardens. Kew.
- BRAND, A. (1898). Monographie der Gattung *Lotus*. *Bot. Jahrb. Syst.* 25: 166-232.
- BROWICZ, K. (1976). *Lonicera* L. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 46-48. Cambridge University Press.
- BRULLO, S., P. PAVONE & C. SALMERI (1992). Cytotaxonomical notes on *Allium grosii* Font Quer from Ibiza (Balearic Islands). *Candollea* 47: 77-81.
- BRUMMITT, R.K. & C. E. POWELL (1992). *Authors of plant names*. Kew: Royal Botanic Gardens.
- BURDET, H.M., A. CHARPIN & F. JACQUEMOUD (1983). Types nomenclaturaux des taxa ibériques décrits par Boissier ou Reuter. IV. Citacées a Composées. *Candollea* 38: 751-802.
- CLAPHAM, A.R. (1976). *Helichrysum* Mill. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 128-131. Cambridge University Press.
- CAMARASA, J.M. (1988). El gabinet de curiositats de la Família Salvador. *Barcelona Metropolis* 9: 143-147.
- CAMBESSÉDES, J. (1827). *Enumeratio plantarum, quas in insulis Balearibus collegit J. Cambessèdes, earumque circa Mare Mediterraneum distributio geographica*. *Mém. Mus. Hist. Nat.* 14: 173-335.

- CANDAU, P. & S. TALAVERA (1979). Polen y semillas de las especies de *Silene* sect. *Erectorefractae* Chowdhuri. *Lagascalia* 8: 127-133.
- CANTÓ, P., S. RIVAS-MARTÍNEZ, R. GREINWALD & I. VAN RENSEN (1997). Revisión de *Genista* L. sect. *Spartioides* Spach en la Península Ibérica y Baleares. *Lazaroa* 18: 9-44.
- CARDONA, M.A. & J. CONTANDRIOPoulos (1983). IOPB Chromosome numbers. *Taxon* 32: 323-324.
- CARDONA, M.A., J. CONTANDRIOPoulos & E. SIERRA-RÀFOLS (1986). Etude biosystématique d'*Anthyllis hystrix* de Minorque et d'*A. hermanniae* de la Méditerranée orientale et centrale. *Orsis* 2: 5-25.
- CARDONA, M.A., L. LLORENS & E. SIERRA-RÀFOLS (1983). Etude biosystématique de *Dorycnium pentaphyllum* Scop. subsp. *fulgorans* (Porta) comb. nova, endémique des Baléares orientales. *Collect. Bot. (Barcelona)* 14: 133-150.
- CARDONA, M.A. & E. SIERRA-RÀFOLS (1979). Sobre *Galium crespiianum* de les Balears i G. foliosum de l'Africa del Nord. *Folia Bot. Misc.* 1: 31-36.
- CARDONA, M.A. & E. SIERRA-RÀFOLS (1981). Contribución al estudio del género *Rubia*. I. Táxones mediterráneo-occidentales y macaronésicos. *Anales Jard. Bot. Madrid* 37: 557-575.
- CASTROVIEJO, S. (1986). *Aristolochia* L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 1: 201-205. Real Jardín Botánico, CSIC. Madrid.
- CASTROVIEJO, S. & E. BAYÓN (1990). Notas sobre *Teucrium marum* L. y sus afines de las Islas Baleares. *Anales Jard. Bot. Madrid* 47: 507-509.
- CASTROVIEJO, S. & M. VELAYOS (1997). *Sedum* L. In Castroviejo, S., C. Aedo, M. Laínz, R. Morales, F. Muñoz Garmendia, G. Nieto & J. Paiva (eds.). *Flora iberica* 5: 121-153. Real Jardín Botánico, CSIC. Madrid.
- CAUWET, A.M. (1979). Le genre *Bupleurum* L. (Umbelliferae) dans le bassin occidental de la Méditerranée. Principales caractéristiques anatomiques de l'ensemble du sous-genre *Tenoria* (Sprengl.) Cauwet. *Vie & Milieu*, Sér. C 28-29: 151-168.
- CHATER, A.O. (1968). *Astragalus balearicus* Chater. In: H.V.Heywood (ed.), Flora Europaea. Notulae Systematicae ad Floram Europaeam spectantes. N° 7. *Feddes Repert. Spec. Nov. Regni Veg.* 79: 51.
- CHEVALIER, A. (1936). Les espèces élémentaires françaises du genre *Cymbalaria*. *Bull. Soc. Bot. France* 83: 638-653.
- CHIAPPINI, M. & A. SCRUGLI (1970). Ricerche citotassonomiche in *Leucojum aestivum* L. *Morisia* 2: 18-28.
- CHODAT, R. (1909). Un *Rhamnus* méconnu des Baléares. *Bull. Trav. Soc. Bot. Genève* 2 sér., 1: 242-243.
- CHODAT, L. (1924). Contribution à la geobotanique de Majorque. *Bull. Soc. Bot. Genève* 15: 153-264.
- CONSTANCE, L. & J.M.F. CANNON (1967). *Naufraga-* a new genus of Umbelliferae from Mallorca. In: V.H. Heywood (ed.), Flora Europaea. Notulae Systematicae ad Floram Europaeam speciales n° 6. *Feddes Repert. Spec. Nov. Regni Veg.* 74: 1-4.
- COOK, C.D.K., J. GRAU & G. LÓPEZ GONZÁLEZ (1986) *Ranunculus* L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 1: 279-371.
- CORSI, G. (2000). *Urtica bianorii* (Urticaceae)- a micromorphological and anatomical study. *Bot. Chron.* 13: 169-177.
- CRESPO, M.B. (2000). Comentarios sobre los táxones del grupo de *Hippocrepis balearica* Jacq. (Leguminosae). *Flora Montiberica* 14: 48-51.
- CRESPO, M.B., L. SERRA & A. JUAN (1998). *Solenopsis* (Lobeliaceae): a genus endemic in the Mediterranean Region. *Pl. Syst. Evol.* 210: 211-229.
- CRESPO, M.B., L. SERRA & N. TURLAND (1996). Lectotypification of four names in *Lobelia* (Lobeliaceae). *Taxon* 45: 117-120.
- CUBAS, P., E. PANGUA & J.A. ROSELLÓ (1987). Un nuevo híbrido balear del género *Asplenium*. *Anales Jard. Bot. Madrid* 44: 534-536.
- CUBAS, P., J.A. ROSELLÓ & E. PANGUA (1988). Comparative study of *Asplenium balearicum*, *A. onopteris* and their spontaneous hybrid *A. × tyrrhenicum*. *Anales Jard. Bot. Madrid* 45: 75-92.
- CUBAS, P., J.A. ROSELLÓ & E. PANGUA (1989). A new triploid hybrid in the *Asplenium trichomanes* complex: *Asplenium trichomanes* nothosubsp. *lucanum* (*A. trichomanes* subsp. *inxpectans* × *A. trichomanes* subsp. *quadrivalens*) nothosubsp. *nova*. *Candollea* 44: 181-190.
- DE FILIPPS, R.A. (1976). *Hypochaeris* L. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 308-310. Cambridge University Press.
- DELFORGE, P. (1990). Le groupe d'*Ophrys bertolonii* Moretti. *Mém. Soc. Roy. Bot. Belgique* 11: 7-29.

- DEVESA, J.A. (1984). Revisión del género *Scabiosa* en la Península Ibérica e islas Baleares. *Lagascalia* 12: 143-212.
- DEVESA, J.A. & G. LÓPEZ GONZÁLEZ (1997). Notas taxonómicas y nomenclaturales sobre el género *Ononis* L. (Leguminosae) en la Península Ibérica e Islas Baleares. *Anales Jard. Bot. Madrid* 55: 245-260.
- DEVESA, J.A. & S. TALAVERA (1981). *Revisión del género Carduus (Compositae) en la Península Ibérica e Islas Baleares*. Univ. Sevilla.
- DIANA-CORRIAS, S. (1981). Le piante endemiche della Sardegna: 94-95. *Boll. Soc. Sarda Sci. Nat.* 20: 287-300
- DITTRICH, M. & J. RITA (1989). *Filago petro-ianii*, a new species from Mallorca. In: K. Tan (ed.), *The Davis and Hedge Festschrift: plant taxonomy, phytogeography and related subjects*, 1-9. Edinburgh Univ.
- DOMÍNGUEZ, E. & E.F. GALIANO (1974). Revisión del género *Scorpiurus* L. II. Parte sistemática. *Lagascalia* 4: 259-280.
- DOWNIE, S.R., D.S. KATZ-DOWNIE & K. SPALIK (2000). A phylogeny of Apiaceae tribe Scandiceae: evidence from nuclear ribosomal DNA internal transcribed spacer sequences. *Amer. J. Bot.* 87: 76-95.
- DUISTERMAAT, H. (1996). Monograph of *Arctium* L. (Asteraceae). *Gorteria* 3.
- EHRENDORFER, F. & F. KRENDL (1976). *Asperula* L. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 4-14. Cambridge University Press.
- EHRENDORFER, F., F. KRENDL & CH. PUFF (1976). *Galium* L. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 14-36. Cambridge University Press.
- ERBEN, M. (1986). Bemerkungen zur Taxonomie der Gattung *Limonium* III. *Mitt. Bot. Staatssamml. München* 22: 203-220.
- ERBEN, M. (1988). Bemerkungen zur Taxonomie der Gattung *Limonium*. IV. *Mitt. Bot. Staatssamml. München* 27: 381-406.
- ERBEN, M. (1989). Bemerkungen zur Taxonomie der Gattung *Limonium* V. *Mitt. Bot. Staatssamml. München* 28: 313-417.
- ERBEN, M. (1993). *Limonium* Mill. In Castroviejo, S., C. Aedo, S. Cirujano, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, C. Navarro, J. Paiva & C. Soriano (eds.). *Flora iberica* 3: 2-143. Real Jardín Botánico, CSIC. Madrid.
- FENDERSON, G.K. (1986). *A synoptic guide to the genus Primula*. Allen Press, Lawrence, Kansas.
- FERNANDES, R. (1967). Notes taxonomiques sur le genre *Lavatera* L. In: V.H. Heywood (ed.), *Flora Europaea. Notulae systematicae ad Floram Europaeam spectantes* nº 6. *Feddes Repert.* 74: 18-20.
- FERNANDES, R. (1968). Contribuições para o conhecimento do género *Lavatera* L. I- Notas sobre algumas espécies. *Collect. Bot. (Barcelona)* 7: 393-447.
- FERNANDES, R. (1971). Note sur l'identification de *l'Origanum majoricum* Camb. In: V.H. Heywood (ed.), *Flora Europaea. Notulae Systematicae ad Floram Europaeam spectantes* nº 9. *Bot. J. Linn. Soc.* 64: 234-235.
- FERNANDES, R. (1993a). *Lobularia* Desv. In Castroviejo, S., C. Aedo, C. Gómez Campo, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner, E. Rico, S. Talavera & L. Villar (eds.). *Flora iberica* 4: 196-200. Real Jardín Botánico, CSIC. Madrid.
- FERNANDES, R. (1993b). *Lavatera* L. In Castroviejo, S., C. Aedo, S. Cirujano, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, C. Navarro, J. Paiva & C. Soriano (eds.). *Flora iberica* 3: 232-243. Real Jardín Botánico, CSIC. Madrid.
- FISHER, M. (1975). Untersuchungen über den Polyploidkomplex *Veronica cymbalaria* agg. (*Scrophulariaceae*). *Pl. Syst. Evol.* 123: 97-105.
- FONT QUER, P. (1919). Adiciones a la flora de Menorca. *Bol. Soc. Esp. Hist. Nat.* 19: 268-273.
- FONT QUER, P. (1926). De flora occidentale adnotaciones II. *Butll. Inst. Catalana Hist. Nat.* 26: 53-57.
- FRAGA, P. (1998). Notes florísticas de les Illes Balears (XI). *Boll. Soc. Hist. Nat. Balears* 41: 81-86.
- FRASER-JENKINS, C.R. (1977). Three species in the *Dryopteris villarii* aggregate (Pteridophyta-Aspidiaceae). *Candollea* 32: 305-319.
- FRASER-JENKINS, C.R. (1982). *Dryopteris* in Spain, Portugal and Macaronesia. *Bol. Soc. Brot.* 55: 175-336.
- FROEBE, H.A. (1979). Die infloreszenzen der Hydrocotyloideen (Apiaceae). *Trop. Subtrop. Pflanzenwelt* 29: 1-181.
- GALLEGO, M.J. (1993). *Xolantha* Raf. In Castroviejo, S., C. Aedo, S. Cirujano, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, C. Navarro, J. Paiva & C. Soriano (eds.). *Flora iberica* 3: 351-365. Real Jardín Botánico, CSIC. Madrid.

- GALLEGÓ, M.J. & S. TALAVERA (1983). Nota sobre las especies españolas del género *Calendula* L. *Lagascalia* 11: 100-104.
- GANDOGER, M. (1883-1891). *Flora Europaea*. Vols. 1-27. Paris (F. Savy), London (B. Quaritch) & Berlin (Friedländer und Sohn).
- GANDOGER, M. (1910). *Novus conspectus Flora Europae*. Parisiis (A. Hermann et Fil) & Lepsiae (Th.O. Weigel).
- GARCÍA MURILLO, P. (1999). Calicotome L. In Castroviejo, S., S. Talavera, C. Aedo, C. Romero Zarco, L. Sáez, F.J. Salgueiro & M. Velayos (eds.). *Flora iberica* 7(1): 182-188. Real Jardín Botánico, CSIC. Madrid.
- GARNATJE, T., A. SUSANNA & R. MESSEGUE (1998). Isozyme studies in the genus *Cheirolophus* Cass. (Asteraceae: Cardueae-Centaurineae) in the Iberian Peninsula. *Pl. Syst. Evol.* 213: 57-70.
- GIBBS, P.E. (1966). A revision of the genus *Genista* L. *Notes Roy. Bot. Gard. Edinburgh* 27: 11-99.
- GOLDBLATT, P. (1980). Systematics of *Gynandriris* (Iridaceae), a Mediterranean-southern african disjunct. *Bot. Not.* 133: 239-260.
- GÓMEZ, D. (1997). Coris L. In Castroviejo, S., C. Aedo, M. Laíz, R. Morales, F. Muñoz Garmendia, G. Nieto & J. Paiva (eds.). *Flora iberica* 5: 64-69. Real Jardín Botánico, CSIC. Madrid.
- GÓMEZ CAMPO, C. (1993a). Brassica L. In Castroviejo, S., C. Aedo, C. Gómez Campo, M. Laíz, P. Montserrat, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner, E. Rico, S. Talavera & L. Villar (eds.). *Flora iberica* 4: 362-384. Real Jardín Botánico, CSIC. Madrid.
- GÓMEZ CAMPO, C. (1993b). Eruca L. In Castroviejo, S., C. Aedo, C. Gómez Campo, M. Laíz, P. Montserrat, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner, E. Rico, S. Talavera & L. Villar (eds.). *Flora iberica* 4: 390-392. Real Jardín Botánico, CSIC. Madrid.
- GONÇALVES, M.L. (1990). *Mesembryanthemum* L. In Castroviejo, S., M. Laíz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 78-82. Real Jardín Botánico, CSIC. Madrid.
- GRAU, J. (1984). Nomenklatorische studien on *Ranunculus* L. sect. *Ranunculastrum* DC. von der Iberischen Halbinsel. *Mitt. Bot. Staatssamml. München* 20: 51-60.
- GRAU, J. & L. KLINGENBERG (1993). *Biscutella* L. In Castroviejo, S., C. Aedo, C. Gómez Campo, M. Laíz, P. Montserrat, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner, E. Rico, S. Talavera & L. Villar (eds.). *Flora iberica* 4: 293-311. Real Jardín Botánico, CSIC. Madrid.
- GREUTER, W. (1967). Contributions floristicae austro-aegaeae, 10-12. *Candollea* 22: 233-253.
- GREUTER, W. (1995). Proposal to conserve the name *Silene apetala* Willd. (Caryophyllaceae) with a conserved type. *Taxon* 44: 101-102.
- GREUTER, W., H.M. BURDET & G. LONG (1984). *Med-Checklist* 1. Edit. Conservatoire et Jardin botaniques de la Ville de Genève. Imp. Atar.
- GREUTER, W., H.M. BURDET & G. LONG (1989). *Med-Checklist* vol. 4. Edit. Conservatoire et Jardin botaniques de la Ville de Genève. Imp. Atar.
- GREUTER, W. & T. RAUS (eds.) (1986). *Med-Checklist Notulae*. 13. *Willdenowia* 16: 103-116.
- GREY-WILSON, C. (1988). *The Genus Cyclamen*. Kew Royal Botanic Gardens in association with C. Helm and Timber Press. London.
- GRUBE, A. (1986). Nach Menorca der Orchideen Wegen- ein Beitrag zur Orchideenkartierung der Balearen. *Ber. Arbeitskreisen Heimische Orchid.* 3: 39-52.
- GUINEA, E. & T.G. TUTIN (1976). *Santolina* L. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 144-145. Cambridge University Press.
- GUITTONNEAU, G. (1972). Contribution à l'étude biosystématique du genre *Erodium* L'Hérit. dans le bassin méditerranéen occidental. *Boissiera* 20: 1-154.
- GUTIÉRREZ-BUSTILLO, A.M. (1990). Beta L. In Castroviejo, S., M. Laíz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 478-482. Real Jardín Botánico, CSIC. Madrid.
- HEDBERG, O. (1955). A taxonomic revision of the genus *Sibthorpia* L. *Bot. Not.* 108: 161-183.
- HERNÁNDEZ BERMEJO, J.E. & M. CLEMENTE (1993). *Lepidium* (L.) R. Br. In Castroviejo, S., C. Aedo, C. Gómez Campo, M. Laíz, P. Montserrat, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner, E. Rico, S. Talavera & L. Villar (eds.). *Flora iberica* 4: 311-327. Real Jardín Botánico, CSIC. Madrid.
- HERNÁNDEZ CARDONA, A.M. (1976). Sobre la presencia en Mallorca de *Poa angustifolia* y *P. flaccidula*. *Boll. Soc. Hist. Nat. Balears* 21: 154-158.
- HERNÁNDEZ CARDONA, A.M. (1978). Estudio monográfico de los géneros *Poa* y *Bellardiochloa* en la Península Ibérica e Islas Baleares. *Dissert. Bot.* 46.
- HILLIARD, O.M. & B.L. BURTT (1973). Notes on some plants of Southern Africa chiefly from Natal : III. *Notes Roy. Bot. Gard. Edinburgh* 32: 303-387.
- HILLIARD, O.M. & B.L. BURTT (1981). Names in *Gnaphalium*, *Xeranthemum* and *Helichrysum* published between 1753 and 1800. *Bot. J. Linn. Soc.* 82: 233-265.

- HINZ, P.A. (1987a). Etude biosystématique de l'agrégat *Digitalis purpurea* L. (Scrophulariaceae) en Méditerranée occidentale III. Types nomenclaturaux. *Candollea* 42: 167-183.
- HINZ, P.A. (1987b). Etude biosystématique de l'agrégat *Digitalis purpurea* L. (Scrophulariaceae) en Méditerranée occidentale V. Note nomenclaturale: *Digitalis minor* L. - une confusion. *Candollea* 42: 191-204.
- HINZ, P.A. (1987c). Etude biosystématique de l'agrégat *Digitalis purpurea* L. (Scrophulariaceae) en Méditerranée occidentale VIII. *Digitalis minor* L. endémique des Baléares. *Candollea* 42: 693-716.
- HOLMGREN, P.K., N.H. HOLMGREN & L.C. BARNETT (1990). Index Herbariorum. Part I: the herbaria of the world. 8th ed. *Regnum Veg.* 120: 1-163.
- HRABETOVA-UHROVA, A. (1949-1950). Generis *Hippocratea* L. revisio. *Acta Acad. Sci. Nat. Morav.-Siles.* 21 (1949): 1-54, tab. I-V; 22 (1950): 99-158, tab. X-XII; 219-250.
- HUMPHRIES, C.J. (1980). *Hordeum* L. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 204-205. Cambridge University Press.
- IETSWAART, J.H. (1980). A taxonomic revision of the genus *Origanum* (Labiatae). Leiden Univ. Press. Leiden Botanical Series vol. 4.
- JACQUIN, N.J. (1781). *Icones Plantarum rariorium*. Vol. 1. Vindobonae.
- JALAS, J. (1971). Notes on *Thymus* L. (Labiatae) in Europe II. Comments on species and subspecies. In: V.H. Heywood (edit.), *Notulae systematicae ad Floram Europaeam spectantes*, n° 10. *Bot. J. Linn. Soc.* 64: 247-271.
- JALAS, J. (1972). *Thymus* L. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 3: 172-182. Cambridge University Press.
- JEANMONOD, D. (1984). Révision de la section *Siphonomorpha* Otth du genre *Silene* L. (Caryophyllaceae) en Méditerranée occidentale. II. Le groupe de *S. mollissima*. *Candollea* 39: 195-259.
- JONSELL, B. (1980). *Trisetum* L. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 220-224. Cambridge University Press.
- KADEREIT, J.W. (1986). A revision of *Papaver* L. sect. *Papaver* (Papaveraceae). *Bot. Jahrb. Syst.* 108: 1-16.
- KILIAN, N. (1997). Revision of *Launaea* Cass. (Compositae, Lactucaceae, Sonchinae). *Englera* 17.
- KLÁSTERSK, I. (1968) *Rosa* L. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 1: 25-32. Cambridge University Press.
- KNOCHE, H. (1921-23). *Flora Balearica. Etude phytogéographique sur les îles Baléares*. Vol. 1 (1921). Vol. 2 (1922). Vol. 3 (1923). Vol. 4 (1923). Imp. Roumégous et Déhen. Montpellier.
- KRESS, A. (1997). *Primula* L. In Castroviejo, S., C. Aedo, M. Laínz, R. Morales, F. Muñoz Garmendia, G. Nieto & J. Paiva (eds.). *Flora iberica* 5: 10-22. Real Jardín Botánico, CSIC. Madrid.
- KÜPFER, P. (1975). Recherches sur les liens de parenté entre la flore orophile des Alpes et celles des Pyrénées. *Boissiera* 23: 1-322.
- LAGUNA, E., M.B. CRESPO, G. MATEO, S. LÓPEZ, C. FABREGAT, L. SERRA, J.J. HERRERO-BORGOÑÓN, J.L. CARRETERO, A. AGUILELLA & R. FIGUEROLA (1998). *Flora endémica rara o amenazada de la Comunidad Valenciana*. Generalitat Valenciana, Conselleria de Medio Ambiente. Valencia.
- LAWRENCE, G.M.H., A.F. GÜNTHER, G.S. DANIELS & H. DOLEZAL (1968). *Botanico-Periodico Huntianum*. Hunt Botanical Library. Pittsburgh.
- LESINS, K.A. & I. LESINS (1979). Genus *Medicago* (Leguminosae). A Taxogenetic study. Dr. W. Junk Publishers. The Hague.
- LESLIE, A.C. (1980). The hybrid of *Erodium corsicum* Lém. with *E. reichardii* (Murr.) DC. *Plantsman* 2: 117-126.
- LEUTE, G.-H. (1970). Untersuchungen über den Verwandtschaftskreis der Gattung *Ligusticum* L. (Umbelliferae). II Teil. *Ann. Naturhist. Mus. Wien* 74: 457-519, pl. 8-17.
- LLORENS, L. (1982). Un nuevo endemismo de la isla de Menorca: *Apium bermejoi*. *Folia Bot. Misc.* 3: 27-33.
- LLORENS, L. (1984). Notas florísticas baleáricas. *Folia Bot. Misc.* 4: 55-58.
- LLORENS, L. (1986a). Revisión sistemático-taximétrica del género *Limonium* Miller en la isla de Mallorca (1). *Lazaroa* 8: 11-68.
- LLORENS, L. (1986b). El género *Limonium* Miller en la isla de Formentera (Baleares). *Lazaroa* 8: 69-83.
- LLORENS, L., L. GIL & H. BOIRA (1995) *Hippocratea balearica* aggregate. A statistical analysis. *Flora Mediterranea* 5: 163-175.

- LLORENS, L. & J.L. GRADAILLE (1991) *Dianthus rupicola* Biv. subsp. *bocchoriana* Llorens & Gradaille, nuevo endemismo de la isla de Mallorca. *Candollea* 46: 383-389.
- LÓPEZ GÓNZALEZ, G. (1990). *Arenaria* L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 172-224. Real Jardín Botánico, CSIC. Madrid.
- LÓPEZ GÓNZALEZ, G. (1993). *Helianthemum* Mill. In Castroviejo, S., C. Aedo, S. Cirujano, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, C. Navarro, J. Paiva & C. Soriano (eds.). *Flora iberica* 3: 365-421. Real Jardín Botánico, CSIC. Madrid.
- LÓPEZ GÓNZALEZ, G. (1995). *Rubia angustifolia* L. (Rubiaceae), ¿endemismo balear? *Anales Jard. Bot. Madrid* 53: 133-135.
- LÓPEZ GÓNZALEZ, G. & G. NIETO FELINER (1986). Apuntes para un tratamiento taxonómico del género *Arenaria* L. en la Península Ibérica y Baleares. *Anales Jard. Bot. Madrid* 42: 343-361.
- LOVIS, J.D., J.P. BROWNSEY, A. SLEEP & M.G. SHIVAS (1972). The origin of *Asplenium balearicum*. *Brit. Fern. Gaz.* 10: 263-268.
- LOVIS, J.D., H. RASBACH & T. REICHSTEIN (1989). *Asplenium trichomanes* L. nothosubsp. *melzeri* nothosubsp. nov. The triploid hybrid between *A. trichomanes* subsp. *inexpectans* and subsp. *quadrivalens*. *Candollea* 44: 543-553.
- LOVIS, J.D. & T. REICHSTEIN (1970). Der Farnbastard *Asplenium × orellii* hybr. nov.= *A. majoricum* Litard. × *A. trichomanes* L. subsp. *quadrivalens* D.E. Meyer und die Abstammung von *A. majoricum*. *Ber. Schweiz. Bot. Ges.* 79: 335-345.
- LUCEÑO, M. (1994) Monografía del género *Carex* en la península Ibérica e Islas Baleares. *Ruizia* 14.
- MARAIS, W. (1980). *Romulea Maratti*. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 99-100. Cambridge University Press.
- MARCOS, A. (1956). Acerca del *Origanum majoricum* Camb. *Bol. Soc. Hist. Nat. Baleares* 2: 69-70.
- MARCOS SAMANIEGO, N. (1993). *Succowia Medik.* In Castroviejo, S., C. Aedo, C. Gómez Campo, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner, E. Rico, S. Talavera & L. Villar (eds.). *Flora iberica* 4: 417-419. Real Jardín Botánico, CSIC. Madrid.
- MARKGRAF-DANNENBERG, I. (1980). *Festuca* L. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 125-153. Cambridge University Press.
- MARTÍNEZ, M. (1935). Sobre el *Origanum majoricum* Camb. y el *O. paui* Martz. *Bol. Soc. Esp. Hist. Nat.* 35: 125-128.
- MARTÍNEZ LABORDE, J.B. (1993). *Diplotaxis* L. In Castroviejo, S., C. Aedo, C. Gómez Campo, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner, E. Rico, S. Talavera & L. Villar (eds.). *Flora iberica* 4: 346-362. Real Jardín Botánico, CSIC. Madrid.
- MASCLANS, F. (1968). El género *Coris* en la región mediterránea occidental. *Collect. Bot. (Barcelona)* 7: 749-758.
- MATHEW, B.F. (1983). *The Crocus. A revision of the genus Crocus (Iridaceae)*. Timber Press. Portland.
- MATEO, G. & S. LÓPEZ UDIAS (1999). Notas acerca del género *Bunium* L. (Umbelliferae) en la Península Ibérica e Islas Baleares. *Anales Jard. Bot. Madrid* 57: 228-232.
- MEIKLE, R.D. (1979). Some notes on *Laurentia Adanson* (Campanulaceae). *Kew Bull.* 34: 373-375.
- MELDERIS, A. (1972). Taxonomic studies on the European species of the genus *Centaurium* Hill. In: V.H. Heywood (ed.), *Flora Europaea. Notulae Systematicae ad Floram Europaeam spectantes* nº 12. *Bot. J. Linn. Soc.* 65: 224-250.
- MEYER, F.K. (1969). Müssen wir Gandoger wirklich noch gerecht werden? *Taxon* 18: 415-420.
- MOLERO, J., M. MUS, J.A. ROSELLÓ & J. VALLÉS (1993). Délimitation et variation infraspécifique de l'*Euphorbia maresii* Knoche (Euphorbiaceae). *Acta Bot. Gallica* 140(1): 69-79.
- MONTSERRAT, G. & J.M. MONTSERRAT (1990) *Sagina* L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 293-299. Real Jardín Botánico, CSIC. Madrid.
- MONTSERRAT, J.M. (1990) *Moehringia* L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 225-230. Real Jardín Botánico, CSIC. Madrid.
- MORALES, R. (1991). El género *Micromeria* Bentham (Labiatae) en la Península Ibérica e Islas Baleares. *Anales Jard. Bot. Madrid* 48: 131-156.
- MORALES, R. & M.N. LUQUE (1997). El género *Calamintha* Mill. (Labiatae) en la Península Ibérica e Islas Baleares. *Anales Jard. Bot. Madrid* 55: 261-276.
- MÖSCHL, W. (1949). *Cerastium semidecandrum* Linne, sensu latiore. *Mem. Soc. Brot.* 5: 5-123.

- MUÑOZ GARMENDIA, F. & P. MONTSERRAT, M. LAÍNZ & J.J. ALDASORO (1993). *Viola* L. In Castroviejo, S., C. Aedo, S. Cirujano, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, C. Navarro, J. Paiva & C. Soriano (eds.). *Flora iberica* 3: 276-317. Real Jardín Botánico, CSIC. Madrid.
- MUÑOZ GARMENDIA, F. & C. NAVARRO (1993). *Paeonia* L. In Castroviejo, S., C. Aedo, S. Cirujano, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, C. Navarro, J. Paiva & C. Soriano (eds.). *Flora iberica* 3: 144-150. Real Jardín Botánico, CSIC. Madrid.
- MUÑOZ GARMENDIA, F. & C. NAVARRO (1998). Notas acerca del género *Sanguisorba* L. (Rosaceae) en la Península Ibérica y Baleares. *Anales Jard. Bot. Madrid* 56: 174-175.
- MUÑOZ GARMENDIA, F. & C. NAVARRO & C. AEDO (1998). *Amelanchier* L. In Castroviejo, S., F. Muñoz Garmendia & C. Navarro (eds.). *Flora iberica* 6: 430-433. Real Jardín Botánico, CSIC. Madrid.
- MUS, M. (1992). *Estudio de la diversificación en la flora endémica de Baleares. Aspectos taxonómicos y evolutivos*. Tesis doctoral (inédita). Universitat de les Illes Balears. Palma de Mallorca.
- MUS, M. & J.A. ROSELLÓ (1987). *Micromeria microphylla* (D' Urv.) Benth. en España. *Anales Jard. Bot. Madrid* 43: 459-460.
- MUS, M., J.A. ROSELLÓ & N. TORRES (1990). De flora balearica adnotationes (6-8). *Candollea* 45: 75-80.
- MUS, M., L. SÁEZ & J.A. ROSELLÓ (2000). *Viola barceloi* Nyman, *V. barceloi* L. Chodat and *V. suavis* var. *barceloi* O. Bolòs & Vigo: too many eponyms or too many taxa?. *Taxon* 49: 785-788.
- NARDI, E. (1983). Commentaria pteridologica. IV. De *Asplenio balearico* Shivas in Italia reperto. *Webbia* 36: 217-223.
- NARDI, E. (1984). The genus «*Aristolochia*» L. (Aristolochiaceae) in Italy. *Webbia* 38: 221-300.
- NAVARRO, C. & F. MUÑOZ GARMENDIA (1998). *Sanguisorba* L. In Castroviejo, S., F. Muñoz Garmendia & C. Navarro (eds.). *Flora iberica* 6: 375-388. Real Jardín Botánico, CSIC. Madrid.
- NAVARRO, T. (1995). Revisión del género *Teucrium* L. sección *Polium* (Mill.) Schreb., en la Península Ibérica y Baleares. *Acta. Bot. Malaciana* 20: 173-265.
- NAVARRO, T. & J.L. ROSUA (1990). Nomenclatural and taxonomic notes on the *Teucrium* Section *Polium* (Miller) Schreber (Lamiaceae) in the Iberian peninsula. *Candollea* 45: 581-589.
- NIETO FELINER, G. (1983). El *Helleborus lividus* y su publicación original. *Anales Jard. Bot. Madrid* 40: 277.
- NIETO FELINER, G. (1986). *Helleborus* L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 1: 215-218.
- NIETO FELINER, G. (1997). *Daphne* L. In Castroviejo, S., C. Aedo, C. Benedí, M. Laínz, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner & J. Paiva (eds.). *Flora iberica* 8: 33-42. Real Jardín Botánico-CSIC. Madrid.
- NOGUEIRA, I. & J. ORMONDE (1986). *Asplenium* L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 1: 90-104.
- NYMAN, C.F. (1878-1890). *Conspectus Florae Europaea*. Örebro, 1878-1890, 2 vols. [4 fasc. y suppl. I en tomo, 1878-1884; suppl. II(1) y suppl. II(2) en tomo, 1889-1890].
- ORELL, J. & A.M. ROMO (1991). The genus *Viola* in the Balearic Islands. *Butll. Inst. Catalana Hist. Nat.* 59: 81-88.
- ORTEGA, A. & J.A. DEVESA (1993). Revisión del género *Scrophularia* L. (Scrophulariaceae) en la Península Ibérica e Islas Baleares. *Ruizia* 11.
- PAIVA, J. (1993). *Urtica* L. In Castroviejo, S., C. Aedo, S. Cirujano, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, C. Navarro, J. Paiva & C. Soriano (eds.). *Flora iberica* 3: 263-268. Real Jardín Botánico, CSIC. Madrid.
- PAIVA, J. & I. NOGUEIRA (1993). *Althaea* L. In Castroviejo, S., C. Aedo, S. Cirujano, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, C. Navarro, J. Paiva & C. Soriano (eds.). *Flora iberica* 3: 228-232. Real Jardín Botánico, CSIC. Madrid.
- PALAU, P. (1976). Catàleg de la Flòrula de l'Illa de Cabrera i dels illots que l'envolten. *Treb. Inst. Catalana Hist. Nat.* 7: 5-103.
- PASTOR, J. & B. VALDÉS (1983). Revisión del género *Allium* (Liliaceae) en la Península Ibérica e Islas Baleares. *Anales Univ. Hisp., Ser. Ciencias. Publ. Univ. de Sevilla*. Sevilla.
- PAU, C. (1907). Synopsis formarum novarum hispanicarum cum synonymis nonnullis accidentibus. *Bull. Acad. Intern. Géogr. Bot.* 7: 73-77.
- PAU, C. (1895). Plantas de la Murta (Alcira). *Actas Soc. Esp. Hist. Nat.* 1894: 171-175.
- PAU, C. (1911). Sobre plantas mallorquinas. *Butll. Inst. Catalana Hist. Nat.* 11: 16-19.
- PANGUA, E., C. PRADA & S. PAJARÓN (1992). A new *Asplenium* hybrid from Valencia (Spain) related to *A. majoricum* Litard. *Bot. J. Linn. Soc.* 108: 1-13.

- PEDROL, J. (1997). *Thymelaea* L. In Castroviejo, S., C. Aedo, C. Benedí, M. Laínz, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner & J. Paiva (eds.). *Flora iberica* 8: 42-69. Real Jardín Botánico-CSIC. Madrid.
- PEREZ CARRO, F.J. & M.P. FERNÁNDEZ ARECES (1992). *Asplenium × protomajoricum* hybrid nov. (*A. fontanum* × *A. petrarchae* subsp. *bivalens*) y precisiones corológicas sobre *A. majoricum* en el levante Español. *Anales Jard. Bot. Madrid* 49: 187-194.
- PEREZ CARRO, F.J. & M.P. FERNÁNDEZ ARECES (1996). Híbridos del género *Asplenium* L. (Aspleniaceae) en la Península Ibérica. *Anales Jard. Bot. Madrid* 54: 106-125.
- PERICÁS, J.J. & J.A. ROSELLÓ (1983). Sobre la falsa presencia de *Cymbalaria hepaticifolia* (Poiret) Wettst. a Baleares. *Boll. Soc. Hist. Nat. Balears* 27: 195-199.
- PERICÁS, J., J.A. ROSELLÓ & M. MUS (1987). De flora balearica adnotationes (1-5). *Candollea*: 42: 393-398.
- PERIS, J.B. & G. STUBING (1984). *Genista lucida* Camb. en Cabo Moraira (Alicante). *Lazaroa* 6: 295.
- PERRING, F.E. (1976). *Arctium* L. In: Tutin, T.G, V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 215. Cambridge University Press.
- PETIT, D.P. (1997). Generic relationships of the Cardueae (Compositae): a cladistic analysis of morphological data. *Pl. Syst. Evol.* 207: 173-203.
- PICHI SERMOLLI, R.E.G. (1986). *Asplenium balearicum* Shivas in Sardegna. *Boll. Soc. Sarda Sci. Nat.* 24: 149-162.
- PIGNATTI, S. (1977). Note critiche sulla Flora d'Italia. V. Nuovi appunti miscellanei. *Giorn. Bot. Ital.* 111: 45-61.
- PIGNATTI, S. (1982). *Flora d'Italia*. Vol. 2. Bolonia.
- PUJADAS, A., J.A. ROSELLÓ & P. BARCELÓ (1991). De flora balearica adnotationes (10). *Candollea* 46: 65-74.
- RAMOS, A.F. (1993). *Hypericum* Mill. In Castroviejo, S., C. Aedo, S. Cirujano, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, C. Navarro, J. Paiva & C. Soriano (eds.). *Flora iberica* 3: 157-185. Real Jardín Botánico, CSIC. Madrid.
- RATTER, J.A. (1990). *Spergularia* (Pers.) J. Presl & C. Presl In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 172-224. Real Jardín Botánico, CSIC. Madrid.
- RECHINGER, H.K. (1974). *Aetheorrhiza bulbosa* (L.) Cass. und ihre geographischen Rassen. *Phyton (Horn)* 16: 211-220.
- REDURON, J.-P., A. CHARPIN & M. PIMENOV (1997). Contribution a la nomenclature génériques des Apiaceae (Ombelliferae). *J. Bot. Soc. Bot. France* 1: 91-104.
- RICHARDSON, I.B.K. (1975). A revision of the genus *Centranthus* DC. (Valerianaceae). *Bot. J. Linn. Soc.* 71: 211-234.
- RICO, E. (1990). *Cerastium* L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 260-283.
- ROBSON, N.B.K. (1985). Studies in the genus *Hypericum* L. (Guttiferae) 3. Sections 1. *Campylosporus* to 6a *Umbraculoides*. *Bull. Brit. Mus. (Nat. Hist.) Bot.* 12: 163-325.
- RODRÍGUEZ, J.J. (1874). Suplemento al Catálogo de plantas vasculares de Menorca. *Anales Soc. Esp. Hist. Nat.* 3: 5-68.
- RODRÍGUEZ, J.J. (1904). *Flórula de Menorca*. Imp. Fábregues. Mahón.
- ROMERO ZARCO, C. (1984). Revisión taxonómica del género *Avenula* (Dumort.) Dumort. (Gramineae) en la Península Ibérica e Islas Baleares. *Lagascalia* 12: 286-290.
- ROMERO ZARCO, C. (1999). Especies de *Vicia* subgen. *Cracca* (Dumort.) Peterm. (Leguminosae) mal interpretadas en las Floras Básicas de la Península Ibérica. *Anales Jard. Bot. Madrid* 57: 220-225.
- ROMO, A.M. (1994). *Flores Silvestres de Baleares*. Ed. Rueda. Madrid.
- ROSELLÓ, J.A., P. CUBAS, J.L. GRADAILLE & B. SASTRE (1990). *Asplenium × artanense* hybr. nov. (Pteridophyta: Aspleniaceae), a new diploid hybrid from Mallorca. *Fern Gaz.* 13: 349-355.
- ROSELLÓ, J.A. & M. MUS (1988). Estudio morfológico, anatómico y cromatográfico de *Rhamnus × jacobi-salvadorii* O.Bolòs & J. Vigo, supuesto híbrido de *Rhamnus alaternus* por R. ludovicii-salvatoris. *Candollea* 43: 199-207.
- ROSELLÓ, J.A., M. MUS, N. TORRES, M. MAYOL & M.V. IBÁÑEZ (1993). De flora balearica adnotationes (11-13). *Candollea* 48: 593-600.
- ROSELLÓ, J.A. & L. SÁEZ (1997a). Notes on some balearic araceae. *Acta Bot. Barcinon.* 44: 169-174.
- ROSELLÓ, J.A. & L. SÁEZ (1997b). A new combination in *Rubia* (Rubiaceae). *Anales Jard. Bot. Madrid* 55: 479-480.
- ROSELLÓ, J.A. & L. SÁEZ (1998). New combinations in balearic plants, II. *Anales Jard. Bot. Madrid* 56: 396.

- ROSELLÓ, J.A., L. SÁEZ & A. C. CARVALHO (1998). *Limonium carvalhoi* (Plumbaginaceae), a new endemic species from the Balearic Islands. *Anales Jard. Bot. Madrid* 56: 23-31.
- ROSELLÓ, J.A., L. SÁEZ & N. TORRES (1997). New combinations in Balearic plants. *Flora Montiberica* 7: 87-89.
- ROSELLÓ, J.A. & M. SERRA (1987) *Asplenium balearicum* Shivas en Menorca. *Acta Bot. Malacitana* 12: 95-102.
- ROSELLÓ, J.A., N. TORRES & L. SÁEZ (1999). A new *Biscutella* (Brassicaceae) species from the western Balearic Islands. *Bot. J. Linn. Soc.* 129: 155-164.
- SÁEZ, L. & J.A. ROSSELLÓ (1996). *Limonium inexpectans* (Plumbaginaceae) a new apomictic species from Mallorca (Balearic Islands). *Anales Jard. Bot. Madrid* 54: 285-289.
- SÁEZ, L. & J.A. ROSSELLÓ (2000). A new species of *Agrostis* (Gramineae) belonging to the *A. alpina* complex. *Bot. J. Linn. Soc.* 133: 359-370.
- SÁEZ L. & J. VICENS (1990). *Dryopteris submontana* (Fraser-Jenkins & Jermy) Fraser-Jenkins en los Ports de Beseit (Tarragona). *Acta Bot. Malacitana* 14: 260-261.
- SÁEZ, L., A.C. CARVALHO & J.A. ROSSELLÓ (1998). *Limonium marisolii* L. Llorens (Plumbaginaceae) revisited. *Anales Jard. Bot. Madrid* 56: 33-41.
- SÁEZ, L., J.M. MONTSERRAT & J.A. ROSSELLÓ (2000). A new subspecies of *Arenaria grandiflora* L. (Caryophyllaceae) from the Rif mountains (northern Morocco). *Bot. J. Linn. Soc.*: submitted.
- SÁEZ, L., J.A. ROSSELLÓ & G. ALOMAR (2000). *Helianthemum scopulicolum* (Cistaceae) a new species from Majorca (Balearic Islands, Spain). *Nordic J. Bot.* 19: 413-419.
- SAINT-YVES, A. (1934). Contribution à l'étude des *Brachypodium* (Europe et Région méditerranéenne). *Candollea* 5: 427-493.
- SANTOS GUERRA, A. (1993). *Frankenia* L. In Castroviejo, S., C. Aedo, S. Cirujano, M. Laínz, P. Montserrat, R. Morales, F. Muñoz Garmendia, C. Navarro, J. Paiva & C. Soriano (eds.). *Flora iberica* 3: 446-453. Real Jardín Botánico, CSIC. Madrid.
- SANZ, J., M. MUS & J.A. ROSSELLÓ (2000). Volatile components variation in the *Teucrium marum* (Lamiaceae) complex from the Balearic Islands. *Bot. J. Linn. Soc.* 132: 253-261.
- SAUVAGE, C. (1958). *Hypericum hircinum* et les espèces affines dans le bassin méditerranéen occidental. *Bull. Soc. Sci. Nat. Maroc* 38: 123-130.
- SCHOLZ, H. (2000). Old and new taxa of the genus *Catapedium* (Gramineae). *Bot. Chron.* 13: 95-104.
- SCHRENK-JÜRGEN, W. (1971). Ein neuen *Ophrys*-Bastard aus Mallorca. *Senckenberg. Biol.* 52: 171-175.
- SCHWARZ, O. (1938). Die Gattung *Globularia*. *Bot. Jahrb. Syst.* 69: 318-373.
- SCRUGLI, A. & M.P. GRASSO (1982). *Ophrys × heraultii* G. Keller ex Schrenk (= *Ophrys speculum* Link subsp. *speculum* × *O. tenthredinifera* Willd.) nuova per la flora italiana. *Atti Soc. Tosc. Sci. Nat.*, Mem. Ser. b, 89: 57-59.
- SELL, P.D. (1976a). *Cichorium* L. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 304-305. Cambridge University Press.
- SELL, P.D. (1976b). *Aethorhiza* Cass. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 326-327. Cambridge University Press.
- SELL, P.D. (1976c). *Crepis* L. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 344-357. Cambridge University Press.
- SLAGEREN M.W. VAN (1995). Wild wheats: a monograph of *Aegilops* L. and *Amblyopyrum* (Jaub. et Spach) Eig. (Poaceae). *Wageningen Agric. Univ. Pap.* 94(7): 512 pp.
- SLEEP, A. (1967). A contribution to the cytobotany of *Asplenium majoricum*. *Brit. Fern Gaz.* 9: 321-329.
- SLEEP, A. (1983). On the genus *Asplenium* in the Iberian Peninsula. *Acta Bot. Malacitana* 8: 11-46.
- SMITH, P.M. (1980). *Bromus* L. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 182-189. Cambridge University Press.
- SNOGERUP, S. (1980). *Juncus* L. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 102-111. Cambridge University Press.
- SNOGERUP, S. & D. PERSSON (1983) Hybridization between *Brassica insularis* Moris and *B. balearica* Pers. *Hereditas* 99: 187-190.
- STACE, A.C. (1980) Desmazeria Dumort. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 158. Cambridge University Press.

- STAFLEU, F.A. & R. S. COWAN (1976-1988). *Taxonomic literature* ed. 2. *Regnum Veg.* Vols. 94, 98, 105, 110, 112, 116. The Hague/Boston.
- STEARN, W.T. (1980). *Allium L.* In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 49-69. Cambridge University Press.
- STEARN, W.T. (1984). The genus *Allium* (Alliaceae) on the Pityusic Islands. In: H. Kuhbier, J.A. Alcover & C. Guerau d'Arellano (eds.). *Biogeography and Ecology of the Pityusic Islands*: 171-184. The Hague.
- STERN, F.C. (1946). A study of the genus *Paeonia*. London.
- SUSANNA, A. (1987). Femeniasia, novus genus Carduearum. *Collect. Bot. (Barcelona)* 17: 83-88.
- SUSANNA, A. (1989). Cheirolophus intybaceus (Lam.) Dóstal, Mapa n.º 114. In: J. Fernández Casas (ed.) Asientos corológicos 11. *Fontqueria* 22: 16-18.
- SUSANNA, A., N. GARCIA-JACAS, D.E. SOLTIS & P. SOLTIS (1995). Phylogenetic relationships in the tribe *Cardueae* (Asteraceae) based in ITS sequences. *Amer. J. Bot.* 82: 1056-1068.
- SUSANNA, A., T. GARNATJE & N. GARCIA-JACAS (1999). Molecular phylogeny of Cheirolophus (Asteraceae: Cardueae-Centaurineae) based in ITS sequences of nuclear ribosomal DNA. *Pl. Syst. Evol.* 214: 147-160.
- TALAVERA, S. (1990). *Silene L.* In Castroviejo, S., M. Lafíñz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 313-406. Real Jardín Botánico, CSIC. Madrid.
- TALAVERA, S. & E. DOMINGUEZ (2000). Notas sobre el género *Hippocratea* L. (Papilionoideae, Leguminosae) en la Península Ibérica y Baleares. *Anales Jard. Bot. Madrid* 57: 454-463.
- TALAVERA, S. & F. MUÑOZ GARMENDIA (1989). Sinopsis del género *Silene L.* (Caryophyllaceae) en la península Ibérica y Baleares. *Anales Jard. Bot. Madrid* 45: 407-460.
- TALAVERA, S. & F.J. SALGUEIRO (1999). Sobre el tratamiento de la tribu *Cytiseae* Bercht. & J. Presl (Papilioideae, Leguminosae) en Flora Iberica. *Anales Jard. Bot. Madrid* 57: 200-218.
- TALAVERA, S. (1999). *Genista L.* In Castroviejo, S., S. Talavera, C. Aedo, C. Romero Zarco, L. Sáez, F.J. Salgueiro & M. Velayos (eds.). *Flora iberica*. 7(1): 45-119. Real Jardín Botánico, CSIC. Madrid.
- TALAVERA, S. & P.E. GIBBS (1999). *Teline L.* In Castroviejo, S., S. Talavera, C. Aedo, C. Romero Zarco, L. Sáez, F.J. Salgueiro & M. Velayos (eds.). *Flora iberica*. 7(1): 141-147. Real Jardín Botánico, CSIC. Madrid.
- TALAVERA, S. & B. VALDÉS (1976). Revisión del género *Cirsium* (Compositae) en la Península Ibérica. *Lagascalia* 5: 127-223.
- TAN, K. (1980). Studies in the Thymelaeaceae II. A revision of the genus *Thymelaea*. *Notes Roy. Bot. Gard. Edinburgh* 38 : 189-246.
- TORRES, N., L. SÁEZ, M. MUS & J.A. ROSELLÓ (2000). The taxonomy of *Galium cespianum* J.J. Rodr. (Rubiaceae), a Balearic Islands endemic, revisited. *Bot. J. Linn. Soc.* in press.
- TORRES, N., L. SÁEZ, J.A. ROSELLÓ & C. BLANCHÉ (2000). A new *Delphinium* (Ranunculaceae) from the Balearic Islands. *Bot. J. Linn. Soc.* 133: 371-377.
- TURLAND, N.J. & C.E. JARVIS (1997). Typification of Linnean specific and varietal names in the Leguminosae (Fabaceae). *Taxon* 46: 457-485.
- TUTIN, T.G. (1964). *Clematis L.* In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 1: 221-222. Cambridge University Press.
- TUTIN, T.G. (1968a). *Kundmannia Scop.* In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 2: 342. Cambridge University Press.
- TUTIN, T.G. (1968b). *Naufraga Constance & Cannon*. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 2: 319. Cambridge University Press.
- TUTIN, T.G. (1968c). *Pastinaca L.* In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 2: 364. Cambridge University Press.
- TUTIN, T.G. (1968d). *Pimpinella L.* In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 2: 331-333. Cambridge University Press.
- TUTIN, T.G. (1968e). *Rhamnus L.* In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 2: 244-245. Cambridge University Press.
- UBERA, J.L. & B. VALDÉS (1983). Revisión del género *Nepeta* (Labiatae) en la Península Ibérica e Islas Baleares. *Lagascalia* 12(1): 3-80.
- VALDÉS, B. (1970). Revisión de las especies de *Linaria* con semillas aladas. Publ. de la Univ. de Sevilla. *Anales Univ. Hispalense, Ser. Ciencias* 7. Sevilla.

- VALDÉS, B. (1980). Merendera Ramond. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 25. Cambridge University Press.
- VALSECCHI, F. (1975). Contributo alla conoscenza sistematica del genere Genista in Sardegna. I. *Genista acanthoclada* DC. *Giorn. Bot. Ital.* 109: 239-249.
- VARGAS, P. (1997). *Saxifraga* L. In Castroviejo, S., C. Aedo, M. Laínz, R. Morales, F. Muñoz Garmendia, G. Nieto & J. Paiva (eds.). *Flora iberica* 5: 162-242. Real Jardín Botánico, CSIC. Madrid.
- VERLAQUE, R. (1986). Etude biosystématique et phylogénétique des Dipsacaceae. V. Tribu des Scabioseae (Phyllum n° 4) et conclusions. *Rev. Cytol. Biol. Vég. Botaniste* 9: 97-176.
- VILATERSANA, R., A. SUSANNA, N. GARCIA-JACAS & T. GARNATGE (2000). Generic delimitation and phylogeny of the Carduncellus-Carthamus complex (Asteraceae) based in ITS sequences. *Pl. Syst. Evol.* 221: 89-105.
- VILLAR, L. (1990). *Polygonum* L. In Castroviejo, S., M. Laínz, G. López González, P. Montserrat, F. Muñoz Garmendia, J. Paiva & L. Villar (eds.). *Flora iberica* 2: 571-586. Real Jardín Botánico, CSIC. Madrid.
- VILLAR, L. (1997). *Lysimachia* L. In Castroviejo, S., C. Aedo, M. Laínz, R. Morales, F. Muñoz Garmendia, G. Nieto & J. Paiva (eds.). *Flora iberica* 5: 46-51. Real Jardín Botánico, CSIC. Madrid.
- VILLAR, L. (1997). *Cytinus* L. In Castroviejo, S., C. Aedo, C. Benedí, M. Laínz, R. Morales, F. Muñoz Garmendia, G. Nieto Feliner & J. Paiva (eds.). *Flora iberica* 8: 170-174. Real Jardín Botánico, CSIC. Madrid.
- VOGT, R. (1991). Die Gattung *Leucathemum* Mill. (Compositae-Anthemideae) auf der Ibersischen Halbinsel. *Ruizia* 10.
- WAGENITZ, G & U. BEDARFF (1989). Taxonomic notes on some species of the genus *Cichorium* (Compositae-Lactuceae). In K. Tan (ed.), Plant Taxonomy, phytogeography and related subjects: 11-21. Edinburgh University Press.
- WEBB, D.A. (1964). *Saxifraga* L. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 1: 364-380. Cambridge University Press.
- WEBB, D.A. (1967). *Thymelaea myrtifolia* (Poiret) D.A. Webb comb. nov. In: V.H. Heywood (ed.), *Flora Europaea. Notulae Systematicae ad Floram Europaeam spectantes* n° 6. *Feddes Repert.* 74: 28-29.
- WEBB, D.A. (1976). *Bellis* L. In Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 4: 111-112. Cambridge University Press.
- WEBB, D.A. (1980). *Leucojum* L. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 76-77. Cambridge University Press.
- WEBB, D.A. & A.O. CHATER (1980). *Iris* L. In: Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, D.A. Webb (eds.). *Flora Europaea* 5: 87-92. Cambridge University Press.
- WILLDENOW, C.L. (1809). *Enumeratio plantarum horti regii botanici berolensis*. 2 Vols. Berlin. 5: 87-92. Cambridge University Press.
- WILLKOMM, M. (1876). Index plantarum vascularium quas in itineres vere 1873 suscepto in insulis Balearibus, legit et observavit Mauritius Willkomm. *Limnaea* 40: 1-134.
- XIFREDA, C.C. (1990). Los nombres científicos correctos de dos oréganos híbridos (Lamiaceae). *Taxon* 39: 523-525.
- YEO, P.F. (1986). The nomenclature of *Helleborus lividus* Aiton sens. lat. (Ranunculaceae). *Taxon* 35: 156-161.
- ZELTNER, L. (1970). Recherches de biosystématique sur les genres *Blackstonia* Huds. et *Centaurium* Hill. *Bull. Soc. Neuchateloise Sci. Nat.* 93: 5-164.
- ZELTNER, L. (1978). Recherches sur le *Centaurium bianoris* (Sennen) Sennen. *Rev. Biol. Ecol. Médit.* 5: 51-57.