

**NOTULAE TAXINOMICAE, CHOROLOGICAE,
NOMENCLATURALES, BIBLIOGRAPHICAE AUT PHILOLOGICAE
IN OPUS "FLORA IBERICA" INTENDENTES**

**NOMENCLATURE AND TYPIFICATION OF WESTERN EUROPEAN
JASIONE (CAMPANULACEAE)**

In the course of preparing the account of *Jasione* L. (Campanulaceae) for a forthcoming volume of *Flora iberica* (vol. 14), we found it was essential, because of the paucity of such information, to typify a large number of taxa of differing rank. Some were widespread European taxa, others were of limited distribution. In such a complex genus as *Jasione* where names have often been misapplied and where numerous taxa not meriting formal recognition have been described, exact typification, even more than usual, is of fundamental importance. Although the many taxa described by Boissier and Reuter in the 1830-50s have been comprehensively dealt with by Burdet, Charpin & Jacquemoud –in *Candollea* 38: 412-419 (1983)–, and the variants and some of the relatives of *J. montana* by Parnell –in *Watsonia* 16: 249-267 (1987)–, a majority of the taxa in the genus has never been properly typified. In order to make the information that we have assembled as comprehensive and useful as possible, we have included both previously published typifications and the results of our own extensive investigations. An early (not always reliable) source of nomenclature and synonymy (not typification) in *Jasione* is Schmeja's revision of the genus –in *Beih. Bot. Centralbl.* 48(2): 1-51 (1931).

For easy reference the accepted taxa (according to our *Flora iberica* account) are listed in alphabetical order. In addition to validly published names, it includes *nomina nuda* and other invalid names that have been applied in the Iberian peninsula.

Our *Flora* account of *Jasione* is substantially different from that of Tutin –in *Tutin & al., Flora Europaea* 4: 100-102 (1976)– and the *Med-Checklist* –Greuter & al., *Med-Checklist* 2: 146-149

(1984)– though in general accord with Parnell –loc. cit.– for *J. montana* and Köster for *J. crispa* –cf. "*Jasione crispa* in westlichen Mediterrangebiet" (1994)–. We recognise only 10 species in the *Flora iberica* area together with 4 subspecies (in *J. crispa*) and 5 varieties (4 in *J. montana*, 2 in the resuscitated *J. maritima*).

Many taxa have variously been switched between species and accorded differing rank. This emphasizes the difficulties, some man-made, of taxonomy and nomenclature in *Jasione*.

J. cavanillesii C. Vicioso in *Anales Jard. Bot. Madrid* 6(2): 80, 92 lám. 4 (1946)

≡ *J. amethystina* subsp. *cavanillesii* (C. Vicioso) C. Vicioso & M. Laínz in *Bol. Inst. Estud. Asturianos, Supl. Ci.* 5: 30 (1962); *J. humilis* (Pers.) Lois. subsp. *cavanillesii* (C. Vicioso) Rivas Mart. in *Anales Inst. Bot. Cavanilles* 21: 270 (1964); *J. crispa* subsp. *cavanillesii* (C. Vicioso) Tutin in *Bot. J. Linn. Soc.* 67: 278 (1973)

Type loc.: [Spain, Santander, Picos de Europa] "Hab. Peña Vieja (Cantabria)".

Type: "in saxosis calcareis, Picos de Europa, «Peña Vieja» (Santander), 4-IX-1944, Leg. M. Martín & C. Vicioso. Det. C. Vicioso" (holo., MA 186970!) –cf. E. Bayón in *Ruizia* 4: 127-128, 172 (1987).

–*J. cantabrica* C. Vicioso, nom. nud. in sched.

J. corymbosa Poir. ex Schult. in *Roem. & Schult., Syst. Veg.* 5: 474 (1819)

≡ *J. corymbosa* Poir. in *Lam., Encycl. Suppl.* 3: 130 (1813), nom. provis.; *J. montana* var. *corymbosa* (Poir. ex Schult.) Schmeja in *Beih. Bot.*

- Centralbl. 48(2): 31 (1931); *J. montana* subsp. *corymbosa* (Poir. ex Schult.) Greuter & Burdet in Willdenowia 11: 40 (1981)
- Type loc.: "La plus remarquable est une plante recueillie par Broussonnet [sic] à Maroc ou en Espagne..." [sec. Poir in Lam., loc. cit.].
- Type: [Morocco] "Tangier 1794-1799, Broussonnet s.n." (lecto., M; iso., MA 154731!, MA 154743!) -cf. J. Parnell in Watsonia 16: 265 (1987).
- = *J. glabra* Durieu ex Boiss. & Reut., Pugill. Pl. Afr. Bor. Hispan.: 72 (1852); *J. corymbosa* subsp. *glabra* (Durieu ex Boiss. & Reut.) Batt. in Batt. & Trab., Fl. Algérie (Dicot.): 570 (1889); *J. montana* subsp. *glabra* (Durieu ex Boiss. & Reut.) Greuter & Burdet in Willdenowia 11: 40 (1981); *J. corymbosa* var. *glabra* (Durieu ex Boiss. & Reut.) J. Parn. in Watsonia 16: 265 (1987)
- Type loc.: [Algeria] "Hab. in arenosis maritimis ad pedem rupium La Grande Falaise dictarum ad orientem urbis Oran (Boiss. et Reut. F. Aprilii)".
- Type: "Oran, 1840-1842, Durieu" (lecto., G!) -cf. J. Parnell in Watsonia 16: 265 (1987).
- *J. arenaria* Salzm., nom. nud. in sched.
- J. crispa** (Pourr.) Samp. in Ann. Acad. Polytechn. Porto 14: 161 (1921)
- subsp. *crispa*
- = *Phyteuma crispum* Pourr. in Hist. & Mém. Acad. Roy. Sci. Toulouse 3: 324 (1788); *J. montana* var. *humilis* Pers., Syn. Pl. 2: 215 (1806); *J. humilis* (Pers.) Loisel. in J. Bot. Agric. 2: 266 (1813), nom. illeg.; *J. perennis* subsp. *humilis* (Pers.) Bonnier & Layens, Tabl. Syn. Pl. Vasc. France: 196 (1894); *J. amethystina* subsp. *humilis* (Pers.) Rivas Mart. in Publ. Inst. Biol. Aplicada 42: 121 (1967), comb. inval.
- Type loc.: [France] "Dans les Pyrénées, à Eynes, Madres, Llaurenti, Caroll. & c."
- Type: The herbarium sheet [Pouret?] 988 at MAF has twelve specimens and three labels: "Phyteuma crispa Pourr. - Act. tolos. tom III", "Phyteuma crispa P. var.?, 29 en id" and "Phyteuma crispa P. var.: donación Barbier". M. Laínz in Bol. Inst. Estud. Asturianos, Supl. Ci. 15: 38 (1970) selected no. 988 as "holotype". Later, Rivas Martinez in Candollea 31: 112 (1976) chose as lectotype the "largest and better developed of those with large capitula" without indicating to which label it refer to. None of these specimens refers to the localities cited in the protologue. Pouret specimens are mainly housed at MAF and P and no indication is given by Laínz or Rivas Martinez whether there is *Phyteuma crispum* material elsewhere. There are, however, further specimens at G! (a Pouret specimen without locality "Phyteuma crispa, Pour. act. tolos. tom III", bearing a red "Typus" label) and P ("Jasione humilis DC. - Phyteuma crispa Pourr. - Collection de l'Abbé Pouret, extraite de l'herbier legué par le M. le Dr Barbier 1847"). There is also at P a separate Pouret herbarium, "Corona florum Narbonensis et Pyrenais", but no *Jasione* specimens are in it.
- = *J. fallax* Willk. in Flora 35: 198 (1852)
- Type loc.: [Spain, Zaragoza] "Hab. in glareosis montis Moncayo in consortio speciei antecedentis [*Jasione humilis* Lois.] sed multo rarior. Legi d. 15 Julii cum floribus".
- Type: "Aragon, Moncayo, 15 vii 1850, Willkomm s.n." (holo., COI!).
- The type is a small specimen with clumps of sturdy stems and a thick woody (? grazed) rootstock. Stems pressed flat, the longest stem 8 cm long. Leaves narrow-lanceolate, with long hairs at base, margins thickened. Apical and sometimes lateral trichoids (small multicellular structures, up to 0.3 × 0.1 mm, adpressed to the adaxial leaf surface) present. Peduncle c. 2 cm, glabrous except for long hairs at apex. Bracts ovate, acute, crenulate at middle portion. Pedicels 2 mm. Calyx teeth subulate, with long hairs.
- = *J. humilis* var. *pygmaea* Willk. in Willk. & Lange, Prodr. Fl. Hispan. 2: 283 (1868); *J. sessiliflora* f. *pygmaea* (Willk.) Pau in Actas Soc. Esp. Hist. Nat. 29: 288 (1900); *J. humilis* subsp. *centralis* Rivas Mart. in Anales Inst. Bot. Cavanilles 21: 270 (1964); *J. amethystina* subsp. *centralis* (Rivas Mart.) Rivas Mart. in Publ. Inst. Biol. Aplicada 42: 121 (1967); *J. crispa* subsp. *centralis* (Rivas Mart.) Tutin in Bot. J. Linn. Soc. 67: 278 (1973); *J. crispa* subsp. *centralis* (Rivas Mart.) Rivas Mart. in Anales Real Acad. Farm. 40: 72 (1974), comb. superfl.
- Type loc.: [Spain] "(*J. amethystina* Boiss., Reut. pl. exs. 1858! non Lag. Rodr. J. humilis Cut. Flora Madrid. p. 456!) (...) in glareosis regionis alpinae Pyrenaeor. orient. (Csta.), montis Moncayo Aragoniae (Wk.) et montium Carpetanor. (in Sierra de Guadarrama jugis et cacuminibus, Bss. Reut.!, Cut.!). - Majo, Julio".
- Type: [Spain, Madrid] "Jasione humilis Loiss. Pico de la Maliciosa. Junio" [mss. Isern]; "La Maliciosa -26 Junio" [mss. Cutanda] (lecto., selected here, MA 122432!) -cf. Cutanda, Fl. Comp. Madrid: 456 (1861).
- J. humilis* subsp. *centralis* Rivas Mart. was described as a *nom. nov.* Although there is no clear indication of a basionym it can be assumed that the first of the 4 names cited, "*J. humilis* Lois. var.

pygmaea Wk. in Wk. & Lge. 2: 283, 1870", was intended as the basionym of it.

= *J. nuriensis* var. *eliasii* Sennen, Pl. Espagne 1927, n.° 6127 (1927-28), in sched., nom. inval.?

Type loc.: [France] "1927 (...) N.° 6127. Jasione Nuriensis Sennen var. *eliasii* ? ej. stirps humilis. Cerdagne: Serra dels Clots, pâturages alpins, 2400 m. 12-VIII [1927]. Sennen et Elias. Note.—Plante moins développée, glabrescente, plus gazonnante" (iso., BM!, COI!, G!, MA 122392!).

= *J. nuriensis* Sennen in Bol. Soc. Ibér. Ci. Nat. 28: 175 (1930); Sennen, Pl. Espagne 1919, n.° 3731 (1919-20), in sched., nom. nud.; Sennen in Bull. Soc. Bot France 73: 657 (1926-27), nom. nud.; Sennen in Bull. Soc. Bot France 74: 387 (1927), nom. nud.

Type loc.: [Spain, Gerona] "N.° 3.731 (...) Pyrénées Catalanes à Nuria, rochers granitiques, vers 1850 m".

Type: "N.° 3731 (...) Pyrénées de Catalogne: Nuria, rochers granitiques, 1850 m. 1919-13-VIII" (iso., MA 122394!).

= *J. brevisepala* Rothm. in Cavanillesia 7: 121 (1935); *J. crispa* subsp. *brevisepala* (Rothm.) Rivas Mart. in Candollea 31: 112 (1976)

Type loc.: [Spain] "Léon in cacumine montis Teleno pr. Astorga, in pascuis caespitem densam formante, ad 2180 m, solo siliceo, 31 vii 1933, Rothmaler 556".

Type: "Léon, Cabrera alta, sonnige Triffen auf dem Gipfel des Teleno, Kalk, 2180 m, 31 vii 1933, Rothmaler 556" (holo., JE!).

The type which also bears the nomen "*J. microcalyx* n. sp." is a very inadequate specimen with only 3 flower heads and several tufts of leaves.

Recent (July 1998) searching by the authors at the type locality failed to find plants corresponding with Rothmaler's description.

— *J. bigerrensis* Pau, nom. nud. in sched. (MA 12467!)

— *J. microcalyx* Rothm., nom. nud. in sched. (see above).

J. crispa subsp. **mariana** (Willk.) Rivas Mart. in Anales Inst. Bot. Cavanilles 28: 45 (1972)

= *J. mariana* Willk. in Willk. & Lange, Prodr. Fl. Hispan. 2: 284 (1868); *J. humilis* subsp. *mariana* (Willk.) Rivas Mart. in Anales Inst. Bot. Cavanilles 21: 121 (1964); *J. amethystina* subsp. *mariana* (Willk.) Rivas Mart. in Publ. Inst. Biol. Aplicada 42: 121 (1967), comb. inval.

Type loc.: [Spain, Ciudad Real or Jaén] "in fissuris rupium schistosorum montium Marianorum (Puerta de Despeñaperos et alibi)".

Type: "Sierra Morena, in fissuras rupium faucium Despeñaperros, 29 VII 1845, Willkomm 1026" (lecto., selected here, COI!).

J. crispa subsp. **tomentosa** (A. DC.) Rivas Mart. in Anales Inst. Bot. Cavanilles 28: 45 (1972)

= *J. humilis* var. *tomentosa* A. DC., Monogr. Campan.: 105 (1830); *J. sessiliflora* var. *eriantha* Boiss., Diagn. Pl. Nov. Hisp.: 21 (V-1842) [in Biblioth. Universelle Genève ser. 2, 38: 213 (VI-1842)], nom. illeg.; *J. humilis* subsp. *tomentosa* (A. DC.) Rivas Mart. in Anales Inst. Bot. Cavanilles 21: 270 (1964), comb. inval.; *J. amethystina* subsp. *tomentosa* (A. DC.) Rivas Mart. in Publ. Inst. Biol. Aplicada 42: 121 (1967); *J. tomentosa* (A. DC.) Rivas Mart. in Lagasalia 15 (Extra): 117 (1988)

Type loc.: [Spain, Ciudad Real] "Var. β in Novâ Castiliâ (...) Varietatem β à celeb, Lagasca accipi (...) Crescit propè Herenciam in Novâ Castiliâ".

Type: "Herencia d. del Valle, 1803, herb. Pavon" (lecto., G!; iso., MA 154729!) —cf. H. Burdet & al. in Candollea 38: 417 (1983).

= *J. diapensifolia* Gand. in Bull. Soc. Bot. France 59: 61 (1912)

Type loc.: [Spain, Badajoz, 1908] "Hab. Cordoba, supra Almorchon ad rupes meridionales sparse". Almorchón today is in the province of Badajoz.

= *J. crispa* subsp. *segurensis* Mota, C. Díaz, Gómez Merc. & F. Valle in Lagasalia 15(Extra): 479 (1988)

Type loc.: [Spain] "Jaén, Sierra de Segura. Cerca de Orcera, 1100 m, 30-VII-1985, Valle, Gómez-Mercado & Mota" (GDAC 24702, holotypus; MAF 126753, isotypus).

Type: "Jaén, Sierra de Segura prope Orcera, 1100 m, 30SWH2142, 30 VII 1985. Valle, Gómez-Mercado & Mota" (iso., MAF 126753!).

J. crispa subsp. **tristis** (Bory) G. López in Anales Jard. Bot. Madrid 56: 166 (1998)

= *J. tristis* Bory in Ann. Gén. Sci. Phys. 3: 10 (1820) ["Florule de la Sierra-Nevada"]; *J. amethystina* var. *tristis* (Bory) A. DC. in DC., Prodr. 7: 416 (1838)

Type loc.: [Spain, Granada, Sierra Nevada] "Entre les pierres à la montée du Collado de Vellela [sic]".

Type: No Bory types have been traced.

It is unfortunate that the long established name for this relatively distinct taxon, *J. amethystina*, has to be replaced by a new name in accordance with the technicalities involving the application of autonym

names as laid down in the International Code of Nomenclature. When Sennen described *J. tristis* subsp. *ateridae* Sennen it automatically established, by today's nomenclatural rules, a *J. tristis* subsp. *tristis* and thus the earliest name for the Sierra Nevada endemic subspecies is that above. Sennen's predilection for describing new varieties, subspecies or species, usually based on trivial reasons, has continued to give trouble to botanists long after his lifetime.

= *J. amethystina* Lag. & Rodr. in *Anales Ci. Nat.* 5(15): 271 (1802); *J. crispa* raça *amethystina* (Lag.) Samp. in *Ann. Sci. Acad. Polytech. Porto* 14(3): 161 (1921); *J. humilis* subsp. *amethystina* (Lag. & Rodr.) Rivas Mart. in *Anales Inst. Bot. Cavanilles* 21: 270 (1964); *J. crispa* subsp. *amethystina* (Lag. & Rodr.) Tutin in *Bot. J. Linn. Soc.* 67: 278 (1973)

Type loc.: [Spain, Granada, Sierra Nevada, leg. G. Thalacker, VIII-1801].

Type: "Thalacker Sierra Nevada de Granada 1801" [mss. Cavanilles]; "Jasione obtusa sp. nov." [mss. J.D. Rodríguez] (lecto., selected here, MA 154734!; iso., G!).

J. foliosa Cav., *Icon.* 2: 38, tab. 148 fig. 1 (1793)

Type loc.: [Spain, Alicante] "Habitat copiose prope cacumen montis Orospeadae vulgo Mariola in tractu Alt de Moncabrer contra septentrionem in saxorum fissuris".

Type: "habitat ad saxorum rimulas in frigidis Mariolae, 1 Augusti" (lecto., MA 154754!) –cf. F. Bellot & M.E. Ron in *Bol. Soc. Brot. ser. 2*, 47, Supl.: 347 (1972).

There is another Cavanilles specimen of *J. foliosa* in the "Herbier de Ventenat", Geneva (G), "Jasione foliosa Cav., tab. 148, ex monte Valentino, Mariola rara Cavan. misit."

= *Phyteuma minutum* Agardh ex Schult. in *Roemer & Schult., Syst. Veg.* 5: 86 (1820); *J. minuta* (Agardh ex Schult.) Pau in *Actas Soc. Esp. Hist. Nat.* 27: 90 (1898); *J. foliosa* var. *minuta* (Agardh ex Schult.) Cuatrec. in *Trab. Mus. Ci. Nat. Barcelona* 12: 443 (1929); *J. foliosa* subsp. *minuta* (Agardh ex Schult.) Font Quer in *Cavanillesia* 7: 79 (1935)

Type loc.: [Spain, Málaga or Granada] "Amicissimus Agardh e summis Sierrae Texedae misit inscritam: «Campanula minuta mihi ad interim, sed potius novum genus»".

Type: BM!, Z?

= *J. nummulariifolia* Pau in *Actas Soc. Esp. Hist. Nat.* 27: 90 (1898) ["nummulariaefolia"]

Type loc.: [Spain, Málaga] "Sierra de la Nieve, Reverchon 1890: 554".

Type: "Plantes de l'Andalousie. 1890. E. Reverchon. No. 554 (...) Sierra de la Nieve [sic] sur les rochers calcaires. 20 août." [mss. Reverchon] (holo., MA 122447!; iso., E!).

J. laevis Lam., *Fl. Franç.* 2: 3 (1779)

= *J. perennis* Lam., *Encycl.* 3: 216 (1789), nom. illeg.

Type loc.: [France] "elle croit au [Massif Central] Mont-d'Or en Auvergne, où été observée par M. le Monnier".

Type: "Jasione perennis, lam. dict. Jasionae laevis, fl. fr. 398" (lecto., selected here, P-LA, microfiche!).

The specimen in the Lamarck herbarium has no indication of locality and, therefore, there is no obvious connection with the protologue. It is, however, the only specimen in the Lamarck herbarium and apparently the only candidate for the type of the species.

= *J. carpetana* Boiss. & Reut. in *Boiss., Voy. Bot. Espagne* 2: 745 (1845); *J. perennis* var. *carpetana* (Boiss. & Reut.) Willk. & Lange in *Prodr. Fl. Hisp.* 2: 284 (1868); *J. perennis* subsp. *carpetana* (Boiss. & Reut.) Nyman, *Consp. Fl. Eur.* 2: 487 (1879); *J. perennis* subsp. *carpetana* (Boiss. & Reut.) Rivas Mart. in *Anales Inst. Bot. Cavanilles* 21: 270 (1964), comb. superfl.; *J. laevis* subsp. *carpetana* (Boiss. & Reut.) Rivas Mart. in *Publ. Inst. Biol. Aplicada* 42: 122 (1967)

Type loc.: [Spain] "J. amethystina Reuter. pl. exs. non Lag. (...) In pascuis editioribus Carpetanorum supra Miraflores, Cartuja del Pular, al Puerto de la Marcuera [sic] et in monte Sa. de Gredos ad lagunam ejusdem nominis. Fl. Maio-Junio".

Type: [Spain, Madrid] "Sierra de Guadarrama supra Miraflores, au dessus de la fi hauteur, 15 v 1841" [mss. Reuter] (lecto., G!) –cf. H. Burdet & al. in *Candollea* 38: 413 (1983)–. The name "amethystina" also occurs on the lectotype specimen.

= *J. perennis* var. *pygmaea* Gren. in *Gren. & Godr., Fl. France* 2: 399 (1850); *J. pygmaea* (Gren.) Timb.-Lagr. in *Bull. Soc. Sci. Phys. Nat. Toulouse* 6: 149 (1883-84); *J. perennis* race *pygmaea* (Gren.) Sennen in *Bull. Soc. Bot. France* 74: 387 (1927); *J. laevis* var. *pygmaea* (Gren.) O. Bolòs & Vigo in *Collect. Bot. (Barcelona)* 14: 102 (1983)

Type loc.: [France] "Hautes-Pyrénées, Esquierry, Tourmalet, Eaux-Bonnes, Monts-Dores. Juin-août".

= *J. perennis* proles *pyrenaica* Sennen in *Bol. Soc. Aragonesa Ci. Nat.* 15: 251 (1916); Sennen, *Pl. Espagne* 1915, n.º 2345 (1915-16), in sched., nom. nud.; *J. pyrenaica* (Sennen) Sennen, *Pl. Espagne* 1916, n.º 2741 (1916-17)

Type loc.: "N.° 2345 (...) France: Cerdagne et Capcir: Montlouis et tout le massif jusqu'en Capcir, aux Angles, Formiguères, Esponsouilles, etc., le Cambredase, etc."

Type: "N.° 2345 (...) France: Cerdagne et Capcir, à S. Pierre, Montlouis, les Angles, bois et pacages, entre 1600 et 1800 m. 1915-VII, VIII et IX" (iso., MA 122359!).

= *J. pyrenaica* var. *macrocephala* Sennen, Pl. Espagne 1920, n.° 3983 (1920-21), in sched., nom. nud.; *J. pyrenaica* f. *macrocephala* Sennen, Pl. Espagne 1920, n.° 3983 (1920-21), in sched., nom. altern., nom. nud.; *J. pyrenaica* var. *macrocephala* Sennen, Diagn. Nouv.: 61 (1936), nom. nud. ["*Jasione pyrenaica* olim *pyrenaica* Sennen in Pl. d'Esp."]

Type loc.: [France] "N.° 3983 (...) Cerdagne: Massif du Carlite, hauteurs granitiques du val d'Angoustrine, vers 1900 m. 1920-4-VIII".

= *J. pyrenaica* Sennen, Pl. Espagne 1926, n.° 5792 (1926), in sched.; Sennen in Bull. Soc. Bot. France 73: 656 (1926-27), nom. nud.; *J. perennis* race *pyrenaica* (Sennen) Sennen in Bull. Soc. Bot. France 74: 387 (1927); *J. perennis* subsp. *pyrenaica* (Sennen) Sennen in Butll. Inst. Catalana Hist. Nat. 32: 115 (1932)

Type loc.: as below.

Type: [France] "N.° 5792 (...) Cerdagne, Font-Romeu, pâturages, 1830 m., 30-VII [1926]" (iso., BM!, G!).

= *J. pyrenaica* var. *hirsuta* Sennen, Pl. Espagne 1926, n.° 5793 (1926), in sched., nom. nud.; Sennen, Pl. Espagne 1929, n.° 7042 (1929-30), in sched., nom. nud.; Sennen, Diagn. Nouv.: 61 (1936), nom. nud. ["*Jasione pyrenaica* olim *pyrenaica* Sennen in Pl. d'Esp."]

= *J. pyrenaica* var. *parcepilosa* Sennen, Pl. Espagne 1926, n.° 5793 (1926), in sched., nom. nud.

= *J. pyrenaica* var. *semiglabra* Sennen, Pl. Espagne 1926, n.° 5793 (1926), in sched., nom. nud.; Sennen, Pl. Espagne 1929, n.° 7043 (1929-30), in sched., nom. nud.; Sennen, Diagn. Nouv.: 61 (1936), nom. nud. ["*Jasione pyrenaica* olim *pyrenaica* Sennen in Pl. d'Esp."]

= *J. tajae* Sennen in Bol. Soc. Ibér. Ci. Nat. 28: 173 (1929); Sennen, Pl. Espagne 1916, n.° 2740 (1916-17), in sched., nom. nud.; Sennen in Bull. Soc. Bot. France 73: 656 (1926-27), nom. nud.; *J. perennis* race *tajae* Sennen in Bull. Soc. Bot. France 74: 387 (1927), nom. nud.

Type loc.: [France] "N.° 2.740 (...) Pyrénées Orientales: Le Capcir au val de Galba, éboulis granitiques herbeux, vers 1900 m".

Type: "N.° 2740 (...) "Pyr. Orientales: Capcir, vallée de Galba, éboulis granitiques - 1930 m. 1916-10-VII" (iso., BM!, MA 122460!).

= *J. × bialii* Sennen, Pl. Espagne 1929, n. 7042 (1929-30), in sched. ["*Biali*"; "*J. cartilaginea* × *J. pyrenaica*"; *J. × bialis* Sennen in Bull. Soc. Bot. France 76: 1064 (1930), nom. nud. ["*J. pyrenaica* × *cartilaginea*"]

Type loc.: as below.

Type: [France] "1929 (...) N.° 7042. *J. Biali* Sennen *J. cartilaginea* × *J. pyrenaica* Cerdagne: Font-Romeu, bois clairières, sur le granite, 1800 m. 1929-2-IX".

= *J. pyrenaica* var. *gracilis* Sennen, Pl. Espagne 1929, n.° 6965 (1929-30), in sched.; *J. perennis* var. *gracilis* (Sennen) Sennen in Butll. Inst. Catalana Hist. Nat. 32: 115 (1932)

Type loc.: as below.

Type: [Spain] "1929 (...) N.° 6965. *Jasione Pyrenaica* Sennen olim *Pyrenaica* var. *gracilis* ej. Logroño: Piqueras, clairières de la broussaille, 1500 à 1600 m. 1929-VI. Leg. Dr. M. Losa" (iso., K!, MA 122361!).

= *J. pyrenaica* var. *glabra* Sennen, Diagn. Nouv.: 61 (1936), nom. nud. ["*Jasione pyrenaica* olim *pyrenaica* Sennen in Pl. d'Esp."]

= *J. laevis* subsp. *gredensis* Rivas-Mart. & Sancho in Lazaroa 6: 181 (1984)

Type loc.: as the type.

Type: [Spain] "Ávila: Circo de Gredos, loco dicto Cuchillar de Ballesteros, in glareosis nivosis, 2450 m, 30 VII 1983, Rivas-Martínez & Sancho" (holo., MAF 117700!; iso., MA, SEV, VALF).

- *J. amethystina* sensu Reuter, Pl. Carpetana Exsicc., non Lag. & Rodr.

J. mansanetiana R. Roselló & Peris in Bol. Soc. Castellon. Cult. 68: 210 (1992)

Type loc.: [Spain, Castellón] "hab. in fissuris (...) inter Argelita et Espadilla, 400-700 m, 30-VII-1991, R. Roselló & J.B. Peris".

Type: "Castellón, Argelita, 30TYK26, 400 m.s.m., en roquedos calizo-dolomíticos. 30-VII-1991, R. Roselló & J.B. Peris" (holo., VF 17061!; iso., BC!, H!, MA 516799!, MPU!).

J. maritima (Duby) L.M. Dufour ex Merino, Fl. Galicia 2: 291 (1906)

var. ***maritima***

= *J. montana* var. *maritima* Duby, Bot. Gall.: 311 (1828); *J. humilis* var. *maritima* (Duby) Willk. in Willk. & Lange, Prodr. Fl. Hispan. 2: 283 (1868); *J. montana* subsp. *maritima* (Duby) C. Vicioso in Anales Jard. Bot. Madrid 6(2): 80 (1946); *J. crispata* subsp. *maritima* (Duby) Tutin in Bot. J. Linn. Soc. 67: 278 (1973)

Type loc.: [France] "in maritimis Galliae occidentalis".

Type: [France, Gironde] "in arenosis maritimis, Teste de Buch, 1824, Dufour 58" (lecto., selected here, G-DC microfiche!).

In A. DC., Monogr. Campan.: 103 (1830), is: "In sabulosis maritimis Galliae meridionalis occidentalis, loco dicto Teste de Buch".

= *J. montana* var. *imbricans* J. Parn. in Watsonia 16: 264 (1987)

Type loc.: [Spain, La Coruña] "Finisterre, 1928, Lacaita 33283".

Type: "Finisterre, [in litore arenoso, 12 vii], 1928, Lacaita 33283" (holo., BM!).

J. maritima var. **sabularia** (Cout.) Sales & Hedge, comb. nov.

= *J. montana* L. var. *sabularia* Cout., Fl. Portugal: 603 (1913)

Type loc.: [Portugal] "Areias marítimas: do Minho ao Alentejo [Alentejo]".

Type: [Portugal, Douro Litoral] "Praia de Matosinhos, Porto, vii 1886, A. R. Cunha s.n. (lecto., selected here, LISU!).

North-western shores of Portugal only. The Alentejo in the original description could have been based on *J. montana* var. *montana* that can also grow near the sea.

– *J. lusitanica* auct.

– *J. montana* var. *lusitanica* auct.

J. montana L., Sp. Pl.: 928 (1753)
var. **montana**

Type loc.: "Habitat in Europae collibus siccissimis".

Type: "Rapunclus scabiosae capitulo caeruleo C.B. p." (lecto., BM-Herb. Cliff. 426 *Jasione*!) –cf. Parnell in Regnum Veg. 127: 58 (1993).

In the type specimen no roots are present. The plant is profusely branched, with upper branches up to 18 cm long, leafless and glabrous at apex. Leaves up to 15 × 1.5 mm, entire, flat, pubescent. Bracts lanceolate, quite narrow at base, flat, with remote shallow teeth, margins not thickened, pubescent, somewhat loose. Pedicels 4.5 × length of ovary. Calyx teeth c. 1.5 × ovary, linear, virtually reduced to midrib, glabrous. Heads 10–15 mm wide, many-flowered.

The specimen has the features often associated with what has been called *J. montana* var. *echinata*.

The distribution given in *Hortus Cliffortianus*: 426 (1737) is "crescit in petris, montibus sterilissimis, collibus graminosis aridissimis Sveciae, Germaniae, Galliae, Belgii".

= *J. lusitanica* A. DC., Monogr. Campan.: 105 (1830); *J. montana* raça *lusitanica* (DC. fil.) Samp., Lista Esp. Herb. Portug.: 127 (1913); *J. montana* var. *lusitanica* (A. DC.) Schmeja in Beih. Bot. Centralbl. 48, 2: 34 (1931); *J. maritima* var. *lusitanica* (A. DC.) Schmeja ex H. Buch. in Comment Biol. 10(17): 69 (1951)

Type loc.: [Portugal, Estremadura] "Habitat propè Olosippum. [sic] (v. in herb. Banks) (...) In herbario banksiano *Phyteuma*? at *Jasione perennis*? vocatur...".

Type: [Portugal, Estremadura] "Lisbon *J.B.*" (holo., BM!). Collected by Joseph Banks in Nov. 1766 during his 6-week stay in Lisbon, Portugal on his way back, circuitously, from Labrador to England –cf. H.B. Carter, Sir Joseph Banks 1743–1820: 38 (1988).

The type specimen is a biennial (?), ± 8 cm high. Stems 5, branched, loosely ascendent, densely leafy. Leaves broad-lanceolate, thin, with 1–many marginal trichoids, pubescent, green. Heads 6 (2 of which are virtually destroyed). Bracts ± lanceolate to ovate, entire. Calyx teeth linear, glabrous.

The above type specimen is almost identical with the type of *J. rosularis*.

The name *J. lusitanica* has been misapplied in previous literature apparently because the type has not been studied before.

= *J. echinata* Boiss. & Reut., Pugill. Pl. Afr. Bor. Hispan.: 73 (1852); *J. montana* var. *echinata* (Boiss. & Reut.) Willk. in Willk. & Lange, Prodr. Fl. Hispan. 2: 282 (1868); *J. montana* subsp. *echinata* (Boiss. & Reut.) Nyman, Consp. Fl. Eur.: 486 (1879); *J. montana* f. *echinata* (Boiss. & Reut.) C. Vicioso in Bol. Soc. Aragonesa Ci. Nat. 10: 102 (1911); *J. montana* subsp. *echinata* (Boiss. & Reut.) Rivas Mart. in Publ. Inst. Biol. Aplicada 42: 122 (1967), comb. superfl.

Type loc.: [Spain] "Hab. in sylvaticis et collibus Baeticae variis locis, circà Gaucin, Estepona, San Roque, Cadix, (herb. Fauché), Ronda (Bourgeau pl. exs. 1849), in Castellà veteri circà Matritum al Pardo, Sierra de Guadarrama (Reuter.)".

Type: [Spain, Málaga] "Hisp. austr., colles Gaucin mai 1837" (lecto., G!) –cf. H. Burdet & al. in Candollea 38: 414 (1983).

The type specimen has a thick indumentum on leaves and stem. At G! there are various syntypes from San Roque, Cadix, Ronda and Sierra de Guadarrama.

= *J. rosularis* Boiss. & Reut., Pugill. Pl. Afr. Bor. Hispan.: 74 (1852); *J. laevis* subsp. *rosularis* (Boiss. & Reut.) Tutin in Bot. J. Linn. Soc. 67: 277 (1973)

Type loc.: [Spain, Cádiz] "Hab. circà San Roque prope Gibraltar in monte Silla de la Reyna dicto Reuter, fl. Junio".

Type: "San Roque Silla de la Reyna, Boiss & Reut." (lecto., G!) —cf. H. Burdet & al. in *Candollea* 38: 416 (1983).

A previously misunderstood taxon which in *Med-Checklist* (cf. W. Greuter & al. 2: 148. 1984) was regarded as a subspecies of *J. laevis* and, in *Flora Europaea* (cf. T.G. Tutin in Tutin & al., *Fl. Eur.* 4: 102. 1976) as a rare plant restricted to one locality in the south of Spain. Study of the type gatherings (of which there are other specimens from the same locality only 1 of which, the lectotype, fully matches the type description) showed that it is a biennial or short-lived plant not different from *J. montana*; often it has sterile leaf-rosettes.

= *J. espadanae* Pau, *Not. Bot. Fl. Españ.* 1: 19 (1887)

Type loc.: [Spain, Castellón] "Hab. en la 'sierra de Espadán'. Ag. 1883".

Type: "Valentia: Sierra de Espadán. Aug. 1883" [mss. Pau] (lecto., selected here, MA 122296!). =? *J. ambigua* Merino, *Fl. Galicia* 3: 593 (1909)

Type loc.: [Spain] "(Herbar. número 2.373) (...) Abunda en los montes que circundan la parroquia de Requias, Ayuntamiento de Muñíos, Orense".

The Merino type of *J. ambigua* was not traced in any Spanish herbarium (cf. Laínz in *An. Inst. Forest Invest. Exper.* 10: 317. 1966). Plants recently collected by us (in August 1998) at the type locality do not agree with the description, being slender, small (c. 25 cm) annuals. The protologue refers to a perennial, 30-60 cm high with robust stems and flower heads 4-5 cm diameter (much wider than in any specimens observed in the genus). Nevertheless, the description of *J. ambigua* agrees better with *J. montana* s.l. than with any other species; Laínz, in contrast, considered (l.c.) that it was a synonym of *J. crispa*.

= *J. macrocalyx* Gand. in *Bull. Soc. Bot. France* 59: 59 (1912)

Type loc.: [Spain, Málaga, 1908] "Hab. Chorro prope Malaga ad rupes circa stationem".

No specimens were traced at Lyon (LY) where most Gandoger specimens are housed.

= *J. cartilaginea* Sennen, *Pl. Espagne* 1926, n.º 5791 (1926), in sched.; Sennen in *Bol. Soc. Ibér. Ci. Nat.* 28: 176 (1930) ["st. montana"]; *J. montana* var. *cartilaginea* Sennen, *Pl. Espagne* 1918, n.º 3461 (1918-19), in sched., nom. nud.; *J. montana* race *cartilaginea* (Sennen) Sennen in *Bull. Soc. Bot. France* 74(5/6): 387 (1927); *J. montana* var. *cartilaginea* ap. J. Parnell in *Watsonia* 16: 264 (1987)]

Type loc.: as below.

Type: [France, Spain] "1926 (...) N.º 5791 *Jasione cartilaginea* Sennen gr. montana. Cerdagne: Llivia, Angoustrine, Villeneuve, coteaux, 1250-1400 m. VI et VII [1926]" (iso., BM!, G!, MA 122298!, MA 466801!, MAF!).

= *J. × macrocephala* Sennen, *Pl. Espagne* 1926, n.º 5794 (1926), in sched.; Sennen in *Bol. Soc. Ibér. Ci. Nat.* 28: 175 (1930) ["*J. cartilaginea × pygmaea* hb."]; Sennen, *Pl. Espagne* 1917, n.º 3111 (1917-18), in sched., nom. nud.

Type loc.: [France] "1926 (...) N.º 5794. *Jasione macrocephala* Sennen var. *glabra* ej. = *J. cartilaginea × pyrenaica* ej. Cerdagne: Err, coteaux schisteux, 1450 m. 26-VII [1926] Inter parentes. Note.—Tige herissée dans le bas, plus ou moins sur les feuilles, glabre ou parcepilée dans les haut (var. *subglabra*) et pédoncules variables quant à la longueur et à l'épaisseur (var. *longepedunculata* et *macropoda*). Le *pyrenaica*, dressé, plus réduit de taille, pérsente las var. *hirsuta* et *parcepilosa*. En résumé, groupe assez intriqué".

Type: [France] "N.º 3111. *Jasione macrocephala* Sennen. Cerdagne: Angoustrine et Dorras, pâturages entre 1450 et 1600 m. 1917 - VIII et IX" (iso., BM!, MA 122475!).

In the BM herbarium there are 5 plants, one of which is probably *J. laevis*. The BM specimen lacks roots, with a dense indumentum on stems & leaves and with 9 flowering shoots. There are 2 further specimens: "*J. macrocephala* var. *glabra* ej. = *J. cartilaginea × pyrenaica* ej., Cerdagne, Err, coteaux schisteux, 1450 m, inter parentes, 26 vii 1926, Sennen 5794" (G!) and "*J. macrocephala* var. *hirsuta* (...) Sennen 5795" (iso., G!, MA!, MAF!).

= *J. × macrocephala* var. *glabra* Sennen, *Pl. Espagne* 1926, n.º 5794 (1926), in sched.

Type loc.: as below.

Type: [France] "1926 (...) N.º 5794. *Jasione macrocephala* Sennen var. *glabra* ej. = *J. cartilaginea × pyrenaica* ej. Cerdagne: Err, coteaux schisteux, 1450 m. 26-VII [1926] Inter parentes" (iso., G!, MA 122476!, MAF!).

= *J. × macrocephala* var. *hirsuta* Sennen, *Pl. Espagne* 1926, n.º 5795 (1926), in sched.

Type loc.: as below.

Type: [France] "1926 (...) N.º 5795. *Jasione macrocephala* Sennen var. *hirsuta* ej. = *J. cartilaginea × pyrenaica*, ej. Cerdagne: Err, coteaux schisteux, 1450 m. 26-VII [1926] Inter parentes" (iso., MA 122477!).

= *J. × macrocephala* var. *longepedunculata* Sennen, *Pl. Espagne* 1926, n.º 5795 (1926), in sched., nom. nud.

- Type loc.: [France] "Cerdagne: Err, coteaux schisteux, 1450 m. 26-VII [1926]".
 = *J. × macrocephala* var. *macropoda* Sennen, Pl. Espagne 1926, n.° 5795 (1926), in sched., nom. nud.
 Type loc.: [France] "Cerdagne: Err, coteaux schisteux, 1450 m. 26-VII [1926]".
 = *J. × macrocephala* var. *subglabra* Sennen, Pl. Espagne 1926, n.° 5795 (1926), in sched., nom. nud.
 Type loc.: [France] "Cerdagne: Err, coteaux schisteux, 1450 m. 26-VII [1926]".
 = *J. montana* var. *megaphylla* C. Vicioso in Anales Jard. Bot. Madrid 6(2): 79 (1946)
 Type loc.: [Spain] "Hab. "Sierra Parda" Tolox (Málaga), Leg. L. Ceballos, Junii".
 Type: "802 (...) Sierra Parda; Tolox (Málaga). Leg. L. Ceballos - 13-VI-1932. Det. C. Vicioso" (holo., MA 122294!) -cf. E. Bayón in Ruizia 4: 128-129, 173 (1987).
 -*J. asterolepis* Pau, nom. nud. in sched. [MA 122445!; "Galicia. Legit P. Merino"]
- J. montana** L. var. *bracteosa* Willk. in Bot. Zeitung (Berlin) 5: 863 (1847)
 Type loc.: [Spain] "(*J. baetica* Rodrig. ined. in herb. Bout.) (...) Hab. raro, ut videtur, prope urbem Sevilla Rodriguez! (forma glabra) et in collibus juxta monasterium los Angelos [sic], prope urbem Malaga (forma lanuginosa), ubi unicum specimen mense Aprilis 1845 legi".
 Type: [Spain, Málaga] "in collibus juxta monasterium los Angelos prope urbem Málaga, 23 iv 1845, Willkomm s.n." (lecto., selected here, COI!).
 =? *J. montana* var. *littoralis* Boiss., Voy. Bot. Espagne 2: 396 (1841), non illeg., non Fr., Novit. Fl. Suec. Alt.: 269 (1828); *J. corymbosa* var. *littoralis* Boiss. ex Pau in Mem. Real Soc. Esp. Hist. Nat. 12(5): 208 (1924)
 Type loc.: [Spain] "in arenosis et maritimis regionibus calidae, colles suprà Monda, Gilbraltar in declivitate orientali, Fl. Maio".
 Type: cf. Burdet & al. in Candollea 38: 415 (1983), but almost certainly but not positively described on the same material as was later used by Boissier to describe *J. blepharodon*.
 = *J. blepharodon* Boiss. & Reut., Pugill. Pl. Afr. Bor. Hispan. 72 (1852); *J. corymbosa* subsp. *blepharodon* (Boiss. & Reut.) Batt. in Batt. & Trab., Fl. Algérie (Dicot.): 571 (1889); *J. corymbosa* var. *blepharodon* (Boiss. & Reut.) Batt. & Trab. ex Cout., Notas Fl. Portugal 2: 15 (1915); *J. montana* var. *hirsuta* Sennen, Pl. Espagne 1907, n.° 306 (1907-08), in sched., nom. altern.; *J. montana* subsp. *blepharodon* (Boiss. & Reut.) Rivas Mart. in Candollea 31: 113 (1976); *J. montana* var. *blepharodon* (Boiss. & Reut.) Malag., Sin. Fl. Ibér. 71: 1126 (1977), comb. inval.
- Type loc.: [Spain] "*Jasione montana* var. *littoralis* Boiss. Voy. Bot. Hisp. non L. Hab. in arenosis et sylvaticis totius Baeticae circà Gibraltar, Sevilla, Granada, Antequera, Arcos (Boiss. et Reut.) Ronda et Puerto Santa Maria (Bourgeau pl. exs. N.° 321 et 321α.)".
 Type: "Gibraltar, in arenosis, juin 1849" (lecto., G!) -cf. Burdet & al. in Candollea 38: 412 (1983) and comment under *J. montana* var. *littoralis*.
 The bracts in the lectotype specimen are up to 14 mm. There are numerous isotypes at G.
 - *J. arenaria* Boiss., nom. nud.
 - *J. baetica* Rodr. nom. nud. in sched. -cf. Willk. in Bot. Zeitung (Berlin) 5: 863 (1847) ["ined. in herb. Bout. (...) prope urbem Sevilla Rodriguez"]
- J. montana** var. *gracilis* Lange in Vidensk. Meddel. Dansk Naturhist. Foren. Kjøbenhavn 1861: 105 (1862) [Pugill. Pl. Hisp.: 155 (1860-65)]
 Type loc.: [Spain] "Santiago et Pico Sagro Galleciae; Villafranca del Vierzo! [sic]".
 Type: [Spain, La Coruña] "Santiago de Compostela, 19 VIII 1852" Herb. Joh. Lange (lecto., selected here, G!). No specimen has been traced at Copenhagen (C) where the first set of Lange's specimens is housed.
 = *J. euphrasiifolia* Porta in Atti Imp. Regia Accad. Rovereto ser. 3, 2: 214 (1896) ["euphrasiaefolia"]
 Type loc.: as type.
 Type: [Spain, Jaén] "Reg. Murc. [reino de Murcia] in glareosis dolomicis montium sierra Segura supra pag. Orsera [Orcera], alt. 800-1000 m, Jul.". The Porta herbarium is in the Seminario Arcivescovile, Trento near Rovereto, Italy. The original label (pers. comm.), written by Huter, colleague of Porta, bears the name "*Jasione montana* var. *gracilis*"; this was subsequently changed by Porta to "*J. euphrasiaefolia*".
- J. montana** var. *latifolia* Pugsley in J. Bot. 59: 215 (1921)
 Type loc.: "syntypes from Britain: Somerset, Orkney, Ireland".
 Type: "Eire, Wicklow, Bray Head, ann. 1881, Britten & Nicholson" (lecto., BM!) -cf. J. Parnell in Watsonia 16: 264 (1987).
 Possibly, the earliest name for this variety is *J. montana* var. *prolifera* DC., but as it is apparently impossible to typify the name, see comments under *J. montana* var. *prolifera* (below) it is better to adopt the name used here.

= *J. montana* var. *prolifera* DC. in Lam. & DC., Fl. Franç. ed. 3, 3: 717 (1805)

The varietal name appears for the first time in Latourr., Chlor. Lugd.: 25 (1785)!, without description; it is cited as "Lugd. Delph." [Lyon y Le Dauphiné]. Bellardi, App. Fl. Pedem.: 41 (1792) [in Mém. Acad. Roy. Sci. (Turin) 5: 247 (1793)], does not give a name to the variety but refers to "in ericetis circa lacum Malioni". De Candolle did not mention a locality in the protologue.

= *J. montana* var. *latifolia* C. Vicioso in Anales Jard. Bot. Madrid 6(2): 80 (1946), nom. illeg., non Pugsley (1921)

Type loc.: [Spain] "Flore Julii. Hab. in arenosis maritimis; Suances (Santander), leg. *Coscollano*".

Type: "Suances (Santander), VII-1912, Leg. Coscollano, Det. C. Vicioso" (holo., MA 122284!) –cf. E. Bayón in Ruizia 4: 128, 173 (1987).

– *J. nemorosa* Lacaita, nom. nud.

J. penicillata Boiss., Elench. Pl. Nov. 63 (1838); Boiss., Voy. Bot. Espagne 2: 396, tab. 119 fig. A (1841)

= *J. blepharodon* subsp. *penicillata* (Boiss.) Rivas Goday in Bol. Soc. Brot. 47, Supl.: 168 (1974); *J. montana* subsp. *penicillata* (Boiss.) Rivas Mart. in Candollea 31: 113 (1976)

Type loc.: [Spain, Málaga] "hab. in arenâ inter rupes in Sierra Tejada parte inferiori. Alt. 2000-3000".

Type: "Sa Tejada in arenosis suprâ Canillas Junio 1837" (lecto., G) –cf. Burdet & al. in Candollea 38: 416 (1983).

J. sessiliflora Boiss. & Reut., Diagn. Pl. Nov. Hispan.: 21 (V.1842); in Biblioth. Universelle Genève ser. 2, 38: 213 (VI.1842)

= *J. sessiliflora* var. *montana* Boiss. & Reut., Diagn. Pl. Nov. Hispan.: 21 (V.1842) [in Biblioth. Universelle Genève ser. 2, 38: 213 (VI.1842)], nom. illeg.; *J. humilis* var. *montana* Boiss. & Reut. ex Willk. in Willk. & Lange, Prodr. Fl. Hispan. 2: 282 (1868); *J. humilis* subsp. *sessiliflora* (Boiss. & Reut.) Nyman, Consp. Fl. Eur. 2: 487 (1879); *J. maritima* var. *sessiliflora* (Boiss. & Reut.) Pau & Merino in Merino, Fl. Galicia 292 (1906); *J. humilis* subsp. *sessiliflora* (Boiss. & Reut.) Rivas Mart. in Anales Inst. Bot. Cavanilles 21: 270 (1964), comb. inval.; *J. amethystina* subsp. *sessiliflora* (Boiss. & Reut.) Rivas Mart. in Publ. Inst. Biol. Aplicada 42: 121 (1967); *J. crispa* subsp. *sessiliflora* (Boiss. & Reut.) Rivas Mart. in Anales Inst. Bot. Cavanilles 27: 154

(1970); *J. crispa* subsp. *sessiliflora* (Boiss. & Reut.) Tutin in Bot. J. Linn. Soc. 67: 278 (1973), comb. superfl.

Type loc.: [Spain] "Hab. in pinetis Sierra de Guadarrama propè San Rafael, Puerto de Navacerrada, Montes de Avila (Reuter) Fl. Aug."

Type: [Spain, Segovia] "Pinar de Sn Rafael 1841, Reuter s.n., août" (lecto., G!) –cf. H. Burdet & al. in Candollea 38: 417 (1983).

In *J. sessiliflora*, Boissier & Reuter described three varieties: *montana*, *canescens* and *eriantha*. The first variety cited, *montana*, should be regarded as the type variety, var. *sessiliflora*.

= *J. sessiliflora* var. *canescens* Boiss. & Reut., Diagn. Pl. Nov. Hispan.: 21 (V.1842); in Biblioth. Universelle Genève ser. 2, 38: 213 (VI.1842); *J. humilis* var. *campestris* Willk. in Willk. & Lange, Prodr. Fl. Hispan. 2: 283-284 (1868), nom. illeg.

Type loc.: [Spain, Madrid] "hab. in arenosis collium propè Matritum Chamartin, Pardo, Casa del Campo (Reuter), Fl. Jun."

Type: "Matriti, in arenosis propè Chamartin. Jun. 1841. Reuter s.n." (lecto., G!; iso., BM!, K!) –cf. H. Burdet & al. in Candollea 38: 417 (1983).

= *J. appressifolia* Pau, Not. Bot. Fl. Españ. 1: 19 (1887)

Type loc.: [Spain, Castellón] "Hab. en la 'Sierra de Espadán'. Ag. 1883".

Type: [Spain, Castellón] "Valentia: Sierra de Espadán. Aug. 1883. Jas. sessiliflora B.R. f. angustifolia subacuta. 1883" [mss. Pau] (lecto., selected here, MA 122382!).

= *J. castellana* Sennen, Pl. Espagne 1929, n.º 7172 (1929-30), in sched.; Sennen in Butll. Inst. Catalana Hist. Nat. 32: 101 (1932); *J. tristis* subsp. *castellana* (Sennen) Sennen in Butll. Inst. Catalana Hist. Nat. 32: 101 (1932), nom. altern.

Type loc.: as below.

Type: [Spain] "1929 (...) N.º 7172. (...) Madrid, Dehesa de la Villa, 680 m., 1929-20-VII. Leg. Sennen et Jeronimo" (iso., BM!, G!, MA 122393!).

The type has similar leaves to those of *J. crispa* subsp. *serpentinica*.

= *J. tristis* subsp. *ateridae* Sennen in Butll. Inst. Catalana Hist. Nat. 32: 101 (1932); *J. ateridae* Sennen, Pl. Espagne 1929, n.º 7171 (1929-30), in sched., nom. nud.; *J. ateridae* (Sennen) Sennen, Diagn. Nouv.: 88 (1936)

Type loc.: [Spain] "No. 7171. (...) Hab.–Madrid: Sierra de Guadarrama à Navacerrada, sol granitique, 1800 m. Leg. Sennen, Jerónimo et Mauricio".

Type: "1929 (...) N.º 7171 (...) *Jasione tristis* Bory vel *J. Ateridae* Sennen Madrid: Sierra Guadarrama à Navacerrada, 1830 m. 1929-31-VII. Leg. Sennen, Jerónimo, Mauricio" (iso., BCF!, BM!, G!, K!, MA 122407!).

= *J. crispa* subsp. *serpentinica* P. Silva in Agron. Lusit. 30: 225 (1970)

Type loc.: "NE Portugal, Bragança" –several specimens.

Type: [Portugal] "Trás-os-Montes e Alto Douro, Bragança, prope Campo de Aviação, Posto Hípico, in saxosis, solo serpentinoso-chromitico, 700 m, 28 vii 1964, P. Silva, B. Rainha & J. Martins 7359" (holo., LISE!). Several syntypes from the same area are cited in the protologue, but the holotype is the only one that clearly agrees with the original description.

= *J. crispa* var. *praelittoralis* Masclans in Collect. Bot. (Barcelona) 8: 124 (1972)

Type loc.: [Spain, Tarragona, Montes de Prades] "Typus: BC 601633. Valle de Castellfolit, Si, 1000 m, pinar de *Pinus sylvestris* (Leg. Masc., 28-VI-1954)".

–*J. sessiliflora* var. *gredensis* Lacaita, nom. nud.

NOMINA NUDA OR OTHER NAMES NOT IDENTIFIED

J. amethystina var. *intermedia* Willk. in Willk. & Lange, Prodr. Fl. Hispan. 2: 283-284 (1868)

Typ. loc.: [Spain] "(*J. humilis* Costa Fl. catal. ex p. et Lge. pl. pyren. exsicc. ex p.!, *J. amethystina* Coss. in Bourg. pl. hisp. exs. 1863 no. 2443!) (...) in montib. Carpetan. (Sierra de Gredos, Bourg.!), Extremadura superior. (Puerto de Miravete, Bourg.!) et Pyrenaeis (Pto. de Benasque, Lge.!, Sierra de Bassibé, Port de Calder, Costa!). – Majo, Aug. (v.v.)".

J. andorrana Coustur. & Gand. in Bull. Soc. Bot. France 60: 556 (1913), nom. provis.

J. fallax f. *subalpina* C. Vicioso in Bol. Soc. Aragonesa Ci. Nat. 10: 102 (1911), nom. nud.

Type loc.: [Spain, Zaragoza, "en el Moncayo"]

J. genisticola Gand. in Bull. Soc. Bot. France 45: 594 (1898)

Type loc.: [Spain, León, Arbas] "Le 4 juillet 1898 (...) je montais donc à l'Arvas [sic], par la vallée du ruisseau qui débouche vers le pont de la collégiale d'Arvas (...) et qui prend sa source vers les névés du pic principal (...) *genisticola* Gandoger sp. nova! = *J. carpetana* form. *latifolia*...". No specimen has been traced at LY [Lyon].

J. humilis var. *elongata* Sennen in Trab. Inst. Catalana Hist. Nat. 3: 164 (1917-18), nom. nud.

Type loc.: "à les Agudes du Montseny et abundant à Nuria".

J. montana var. *glaberrima* Merino in Brotéria, Ser. Bot. 12: 114 (1914)

Type loc.: [Spain] "En los arenales y pinares próximos al Miño cerca de Camposancos, Pontevedra". Is probably *J. montana*.

J. montana var. *umbellata* Lapeyr., Hist. Pl. Pyrénées: 102 (1813)

Type loc.: [France, Hautes-Pyrénées] "Au Port de Pyeresourde sur le versant dans la Vallée du Louron".

J. perennis var. *alpestris* Willk. in Flora 35: 199 (1852)

Typ. loc.: [Spain, Huesca] "In Pyrenaeorum Aragoniae pascuis editis, praecipue locis irriguis frequens: Puerto de Canfranc, in valle Izas, circa Panticosa etc. ad alt. 4500-5500'. Junio c. flor".

J. perennis var. *intermedia* Coss., Notes Pl. Crit. 3: 121 (1851)

Type loc.: [Spain, Jaén] "In aridis montis regni Murcici, ad basim montis Sierra de Segura (E. Bourgeau, 6^a die Julii 1850.–pl. Esp. n. 776)".

J. perennis f. *megacarpaea* Coustur. & Gand. in Bull. Soc. Bot. France 60: 551, 556 (1913)

Type loc.: "Hab. Andorra, in monte Rialb, alt. 2500 m. (P. Cousturier)".

NOT JASIONE

J. obtusifolia Pau in Bol. Soc. Arag. 28 (1902); Feddes Repert. 3: 321 (1907). Sphalm in Index Kewensis, for *Jasonia* (Compositae).

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UNA NUEVA COMBINACIÓN EN *CAMPANULA* L. (CAMPANULACEAE)

Campanula specularioides Coss., descrita de la serranía de Ronda, ha sido aceptada por diversos autores, como: Fedorov in Tutin & al. (eds.), Fl. Eur. 4: 88 (1976), Gallego in Valdés, Talavera & Galiano (eds.), Fl. Andalucía Occid. 2: 565 (1987), etc. Según López González in Bol. Soc. Brot. ser. 2, 53: 299-308 (1980), las especies más cercanas son *C. lusitanica* L. y *C. decumbens* DC. En este grupo, el hábito, la forma de los dientes del cáliz y de las cápsulas, etc., son muy variables; hay todo el gradiente de caracteres intermedios entre las formas típicas de *C. lusitanica* (tallos erectos, con dientes calicinos lineares o linear-lanceolados y cápsulas obcónicas) y las típicas de *C. specularioides* (tallos decumbentes, con dientes calicinos elíptico-lanceolados y cápsula subesférica). Las formas intermedias son frecuentes en el S de la Península y en el NW de África, especialmente en el Rif y en el Alto Atlas. Los datos citológicos —Gallego in Lagasalia 14(2): 286-

288 (1985); García Martín & Silvestre in Lagasalia 13(2): 313-318 (1985)— también apoyarían un supuesto parentesco entre *C. lusitanica* ($n = 9$, 10) y *C. specularioides* ($n = 10$). No obstante, pensamos que las plantas rupícolas de las serranías de Ronda y Grazalema pueden reconocerse taxonómicamente.

Campanula lusitanica* subsp. *specularioides
(Coss.) Aldasoro & L. Sáez, **comb. & stat. nov.**
= *Campanula specularioides* Coss., Notes Pl. Crit.:
41 (1849) [basión.]

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¿QUÉ ES *LOBELIA MINIMA* SIMS?

En el volumen 46 del conocido Curtis's Botanical Magazine se publica, con el número 2077, la lámina coloreada y la descripción de una planta "Native of the Cape of Good-Hope. Communicated by Mr. Colville, from his renowned [sic] nursery in the King's Road". La lámina representa a una lobeliácea de hojas cortamente pecioladas y flores tribracteoladas, de un rosa pálido. En la descripción su autor la compara con *Lobelia minuta* L. [*Solenopsis minuta* (L.) C. Presl] y *Lobelia laurentia* L. [*Solenopsis laurentia* (L.) C. Presl].

Meikle, en su estudio del género *Laurentia* Adans. —cf. Kew Bull. 34(2): 373-375 (1979)— supuso que se trataba de una planta nativa de Mallorca, puesto que incluye el nombre entre los sinónimos del endemismo mallorquín *Solenopsis minuta* subsp. *balearica* (F.E. Wimmer) Meikle.

Posteriormente M.B. Crespo, L. Serra & N. Turland —cf. Taxon 45: 117-120 (1996)— designan como lectótipo la mencionada lámina 2077. Estos autores (loc. cit.) suponen que Sims se equivocó al indicar la procedencia del material, ya que, según ellos, en la región del Cabo no se ha encontrado una planta similar a *Solenopsis minuta* (L.) C. Presl o *S. laurentia* (L.) C. Presl.

El propio Linneo (Mant. Alt.: 292. 1771) cometió un error similar cuando hace también sudafricana la planta que describe como *Lobelia minuta* L. [*Solenopsis minuta* (L.) C. Presl], otro endemismo mediterráneo.

En contra de lo que se viene suponiendo, la sudodicha lámina 2077 del Curtis Bot. Mag., lectótipo de *Lobelia minima* Sims, no parece apuntar a la planta mallorquina, más bien al contrario: el tamaño y el color de sus flores, la presencia de un verticilo de tres bractéolas en todos los pedicelos florales, el corto peciolo foliar y la forma de la lámina son caracteres que nos hacen pensar que no se trata de una *Solenopsis*.

Si, como pretendemos, las plantas de Mallorca requieren el rango específico, asunto en el que coincidimos con otros autores —M.B. Crespo, L. Serra & A. Juan in Pl. Syst. & Evol. 210: 211-229 (1998)—, hemos de utilizar el restrictivo de F.E. Wimmer y proponer la combinación *Solenopsis balearica* (E. Wimm.) Aldasoro, Castrov., Sales & Hedge, **comb. & stat. nov.**; *Laurentia minuta* forma *balearica* E. Wimm. in Ann. Naturhist. Mus. Wien 56: 334 (1948), **basión.**; **typus:** Majorca, Barranco de Sóller, 4 Julii 1869, Bourgeau 2770 [holotypus W, isotypus K].

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