

*Notes on the Genus Leucophaë Webb & Berth.
(Lamiaceae) in the Canary Islands*

by G. Kunkel *

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Notas sobre el género *Leucophaë* Webb & Berth. en las Islas Canarias. Discusión taxonómica y nomenclat6rica, tratando de reestablecer *Leucophaë* sobre *Sideritis*, en cuanto a plantas de estas islas. Descripción de una nueva especie: *Leucophaë sventenii* Kunkel; comb. novs. propuestas: *L. cabreræ* (Ceb. & Ort.) Kunkel, *L. cystosiphon* (Svent.) Kunkel, *L. dendro-chahorra* var. *albida* (Pit.) Kunkel, *L. gomeraea* (Bolle) Kunkel, *L. kuegleriana* (Bornm.) Kunkel, *L. lotsyi* var. *mascaënsis* (Svent.) Kunkel, y *L. nutans* (Svent.) Kunkel.

The genus *Leucophaë* was established and described by Webb & Berthelot (1845: 99). Six species were mentioned, all of which are Macaronesian taxa appearing to form a natural group within the *Sideritis-Stachys* complex. Later, new species were added (Bolle 1860, Christ 1888), but the genus sunk into *Sideritis*, a genus of (mainly) Mediterranean distribution. The opinion of later authors varied: Bornmüller (1904, but he changed his mind in 1924), Pitard & Proust (1908), Burchard (1929) and Lid (1968) retained *Leucophaë* as the valid genus name whereas Lindinger (1926) and Ceballos & Ortuño (1951) preferred *Sideritis*.

Confusion in nomenclature has always been a problem, and if we consider *Marrubiastrum* of Moench, there seems no end to the necessity for the renaming of already described taxa in Checklists, Lcms (1960) maintained *Leucophaë*, citing exact authorship except when recently described taxa were concerned, and no new combination was presented.

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Eriksson (1971) keeps to the modern interpretation, and enumerates species under consideration as *Sideritis*. His list surely was based on the nomenclatorial and geographic monograph presented by Sventenius (1968) who accepted definitely *Sideritis*, presenting sections and describing some new taxa.

Most authors (i. e. Sventenius 1968, Bramwell 1972) refer the Canarian species to the section *Leucophaë*, although Bentham (1832-36) and Briquet (1895:232) prefer *Marrubiastrum* (Moench) Benth. (the work done by Clos, 1862, is not known to me.) This has changed, again, in 1972 when Huynh created a separate section, *Empedocleopsis*, for our species of *Leucophaë* and the remaining group until then belonging to *Empedoclea*. Mendoza-Heuer (1973), however, when referring to palynological studies carried out by Huynh (1972), mentioned the fact that the pollen grains of species of section *Empedoclea* (Mediterranean species only) is "6-panto-colpado", whereas all plants of section *Marrubiastrum* (incl. *L. gomereae* and *L. nutans*) have "tetra-colpado" pollen. This fact, as well as the woody habit of all of our species, should be sufficient grounds for the retention of *Leucophaë* as a valid genus for all the Canarian species; the name should be proposed as *nomen conservandum*. I believe *Marrubiastrum* (although older than *Leucophaë*) should be refused because Moench included *M. elegans* (= *Sideritis lanata* L.), a species of Mediterranean origin, a situation which causes confusion. When accepting *Leucophaë* as valid, *Marrubiastrum* becomes *nomen confusum*.

Both A. Hansen, Copenhagen (in litt.), and F. Esteve Chueca, Granada (during my recent visit to Granada University), expressed their hopes that the Macaronesian "genus" *Leucophaë* could be re-established. After revising many herbarium specimens at Granada and Florence, I found myself in agreement with both scientists mentioned. And, by accepting *Leucophaë* (which I have already done in my "Checklist" of Gran Canaria, Kunkel 1972), it remains to be said that hardly any true *Sideritis* (s. str.) shows any marked similarities in habit to our group. On the contrary, some

Sideritis spp. (i.e. the North African *S. matus-foliae* Emb. & Maire) appears to be "lavandulous" whereas other Labiatae (*Stachys germanica*, *S. olympica* and *S. lanata*) become more "leucophaeous".

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Enumeration of Species

Leucophaë argosphacelus Webb & Berth.; Phytogr. Canar. 3:101 (1845) *

Sideritis argosphacelus (Webb) Clos. (1861).

var. *argosphacelus* — T.

incl. var. *tomentosa* Pit., Iles Can. 313 (1908) — T.

= *S. argosphacelus* f. *tomentosa* (Pit.) Bornm.

var. *spicata* Pitard, loc. cit. 314 (1908)

S. argosphacelus var. *spicata* (Pit.) Bornm. — G.

Leucophaë bolleana Bornm., Feddes Repert. 19:277 (1924)

Sideritis bolleana Bornm. (?), l.c. 1924 — ?P.

Leucophaë cabreræ (Ceb. & Ort.) Kunkel, **comb. nov.**

Sideritis cabreræ Ceballos & Ortuño, Not.Fl.Canar.

(Inst. For. Invest. Exper. 18) No. 33:25 (1947) — G.

Leucophaë canariensis (L.) Webb & Berth., Phytogr. Canar. 3:101 (1845).

Sideritis canariensis L. (1753); *S. phlomoides* Salisb.;
Marrubiastrum tomentosum Moench

var. *canariensis* — P. T.

var. *pannosa* Christ, Bot. Jb. 9:137 (1888)

(Pitard mentioned also var. *orotavensis* and *mercedesi*, sub-taxa hardly to be accepted).

Leucophaë candicans (Ait.) Webb & Berth., Phytogr. Canar. 3:101 (1845)

Sideritis candicans Ait. (1789); *S. candida* Salisb.;

S. stricta Webb ex Christ; *S. cretica* auct. non L.

* quizás correctamente *L. argosphacela* (?)

var. *candicans* — T. P.

var. *anagae* Christ. Bot. Jb. 9:139 (1888)

(incl. var. *stricta* Webb. nom. nud. s. Svent. 1968:1142. Ceb. & Ort. 1951 incl. here also var. *eriocephala*, not mentioned by other authors.)

***Leucophaë cystosiphon* (Svent.) Kunkel, comb. nov.**

Sideritis cystosiphon Sventenius, Ind.Sem.Hort.Acclim. Pl.Arautap. 1968, p.49 (1969) — T.

Leucophaë dasygnaphala Webb & Berth., Phytogr. Canar. 3:101 (1845) — C.

Sideritis dasygnaphala (Webb & Berth.) Clos. (1861)
S. *candicans* auct.canar. non W & B.; S. *candicans* f. *dasygnaphala* (W & B) Burchard; L. *eriocephala* Webb ex Christ (?)

Leucophaë dendro-chahorra (Bolle) Christ, Bot.Jb. 9:138 (1888)

Sideritis dendro-chahorra Bolle (1860)

var. *dendro-chahorra* — T. P. G. H. C (?)

var. *albida* (Pitard) Kunkel, **comb. nov.**

S. *massoniana* var. *albida* Pitard in Pit. & Proust, Iles Can., Fl. Arch. p.312 (1908) — T.

var. *soluta* (Webb ex Clos) Kunkel, Monogr. Biol. Canar. 3:65 (1972)

Sideritis soluta Webb ex Clos (1861); L. *soluta* (Webb ex Clos) in Lems (1960), nom. inval.; S. *dendro-chahorra* var. *soluta* (Webb ex Clos) Svent. (1968) — T, H, C.

Sventenius (l.c. p.1152) included this variety under above mentioned species, citing its occurrence for Gran Canaria (Arinés, 600 m.). The same author (p. 1151) mentioned *L. dendro-chahorra* as "bastante frecuente en la isla". Until now, however, I failed to confirm *L.d.* for C.: the species forms a rather critical complex.

Leucophaë discolor (Willd. ex Benth.) Wedd. ex Christ, Bot. Jb. 9:137 (1888)

Sideritis discolor Willd. ex Benth. (1837)

S. *macrostachyos* s. Bolle, non (Poir.) Webb & Berth. C.

Leucophaë x engleriana Bornm. Fedd. Repert. 19:279 (1924)

Sideritis x engleriana Bornm. (? Canar.)

Leucophaë sventenii Kunkel, sp. nov. — C.

L. erythroglossa Kunkel, Monogr. Biol. Canar. 3:64 (1972) nom.nudum

Frutex erectus, ad 70 cm altus, ramosus, caule et ramis lignosis; ramuli quadrangulares, pallide fusci, pilis brevibus molliter sericeis, albidis, dense obtecti. Folia opposita, petiolo usque ad 2 cm longo, superiora fere sessilia; lamina triangularis-subcordata, basi leviter incurvata, margine crenato. Lamina foliorum inferiorum usque ad 5 cm longa, 2 cm lata, leviter plicata, nervis vix expressis; folia superiora plerumque lanceolata, leviter incurvata, a binis foliis proxime inferioribus valde remota (usque ad 10 cm); folia pagina superiore lutescentia, inferiore albo-sericea. Inflorescentia usque ad 15 cm longa, erecta, floribus in verticillos dispositis; flores 15-18 in singulis verticillis, bracteis lanceolatis valde deminutis vix expressis. Flores purpurei; calix tubulosus dense pubescens ad 7 cm longus, ordinate dentatus, dentibus triangularibus instructus; petala incurvata, labio inferiore subtriangulati; stamina inclusa. Semina complanata, plus minusve triangularia, rubescentia.

Habitu laxius ramoso, floribus purpureis, dentibus calicinis apice acuto destitutis a *L. dasygnaphala* differt.

Erect shrub up to 70 cm. tall, ramified, with woody stem and branches; quadrangulate and pale brownish branchlets densely covered with short, fine silky whitish hairs. Leaves opposite, stalks up to 2 cm. long, upper leaves almost sessile; blade triangulate-subcordate with slightly incurved base and crenate margin, the lower ones having a blade up to 5 cm. long and 2 cm. broad, slightly folded, with inconspicuous nerves; upper leaves almost lanceolate, somewhat recurved, being very much separated (up to 10 cm.) from the next lower pair; leaves yellowish on the upper side and white silky below. Inflorescence up to 15 cm. long, erect, verticillate, with 15 to 18 flowers per verticillate section, and very much reduced, almost hidden lanceolate leaves. Flowers purplish, with tubular, densely pubescent calyx up to 7 mm. long, regular triangularly dentate; petals recurved, the lower lip being sub-triangular in shape, stamens not protruding. Seeds flattened, more or less triangular in shape, purplish.

Differs from *L. dasygnaphala* being less densely bran-



Leucophaë sventenii Kunkel. Drawing: M. A. Kunkel.

ched and having purplish flowers, calyx teeth not sharply pointed.

Holotypus: *Kunkel* 14815, Gran Canaria 450 m., Presa La Gambuesa - La Tecera; 5-IV-1973 (in F.). Isotypes: Herbarium kunkelianum (Tafira), and Herbarium Jardin Canario (Tafira).



Community of *Leucophaë sventenii* in its natural habitat.

This species grows over a limited rocky area with a westerly orientation. In its' locality (approx. 1.000 square m. total known area) it is common. Some solitary specimens

have also been found on slopes between Ayagaures and Los Vicentes.

Accompanying species: *Lavandula minutolii*, *Cistus monspeliensis*, *Chamaecytisus proliferus*, *Euphorbia obtusifolia* ssp., *Echium onosmaefolium*, *E. decaisnei*, *Periploca laevigata*, *Kickxia scoparia*, *Asphodelus microcarpus*, *Artemisia canariensis*, *Micromeria benthami*, *Asparagus plocamoides*, *Salvia aegyptiaca*, *S. canariensis*, *Hyparrhenia hirta*, *Aristida coerulescens*, *Carlina canariensis* etc. In more moist localities (below) *Pinus canariensis*, *Phoenix canariensis*, *Arundo donax*, *Rumex lunaria*, *Ferula linkii* and others have been observed.

The species was first mentioned in Monogr. Biol. Canar. 3:44 as "*L. erythroglossa*", and the description was supposed to appear under the authorship of Kunkel & Sventenius. However, as E. R. Sventenius died while preparing the translation of the Latin diagnosis, I like to dedicate this new species to his memory. I wish to express my thanks to Prof. Moggi, Florence, for providing the final translation.

Leucophaë gomerae (De Noé ex Bolle) Kunkel, **comb. nov.** — G.
Sideritis gomerae De Noé ex Bolle, Bonpl. 8:286 (1860)
S. gomeraea De Noé in Bourg., nom. nud.

Leucophaë infernalis (Bolle) Christ, Bot. Jb. 9:140 (1888)
Sideritis infernalis Bolle (1860) — T.

Leucophaë kuegleriana (Bornm.) Kunkel, **comb. nov.** — T.
Sideritis kuegleriana Bornmüller, Fedd. Repert. 19:
273 (1924)

Leucophaë lotsyi Pitard in Pit. & Proust, Iles Canar. 314
(1908). *Sideritis lotsyi* (Pit.) Ceb. & Ort. (1951)
var. *lotsyi* — G.
var. ***mascaënsis*** (Svent.) Kunkel, **comb. nov.** — T.
Sideritis lotzyi (sic!) var. *mascaënsis* Sventenius,
Collect. Bot. 7:1154 (1954)

Leucophaë macrostachys (Poir.) Webb & Berth., Phytogr.
Canar. 3:102 (1845)
Sideritis macrostachya Poir. (1804-13) — T.P.
The correct spelling of *L. macrostachys* (—*stachyos*) remains critical.

Leucophaë marmorea (Bolle) Christ, Bot. Jb. 9:139 (1888)
Sideritis marmorea Bolle (1860) — G.
S. argosphacelus var. *marmorea* (Bolle) Ceb. & Ort.

- Leucophaë massoniana* Webb & Berth., Phytogr. Canar. 3:102 (1845) (? p.p.)
 (other works mention Benth., Lab. p. 573, 1860)
Sideritis massoniana (W & B) Benth. (1860)
 var. *massoniana* (prob. exclus. Madeira)
 var. *crassifolia* Lowe (Madeira)
 var. *pumila* Christ, Bot. Jb. 9:138 (1888) — F. L.
Sideritis massoniana f. *pumila* (Christ) Lindinger
 Pitard mentioned also var. *albida* from T.
- Leucophaë nervosa* Christ, Bot. Jb. 9:139 (1888) — T.
Sideritis nervosa (Christ) Lindinger (1926)
- Leucophaë nutans*** (Svent.) Kunkel, **comb. nov.** — G.
Sideritis nutans Sventenius, Addit. Fl. Canar., p.53
 (1960)
- Leucophaë penzigii* Pitard in Pit. & Proust, Iles Canar. 312
 (1908) — T.
Sideritis penzigii (Pit.) Bornm. (1926)
- Dubious species:
- Leucophaë punctata* (C. Sm.) (not seen)
Sideritis punctata Chr. Sm. in Tuckey, Congo, p.251
 "Ins. Canar." in Kew Ind. 902).

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