Notes on the Distribution of Some Canarian Endemic Species

By David Bramwell

Dep. of Botany, University of Reading, England

Resumen

Contribución al conocimiento de la flora canaria, tratando la distribución de 20 especies, endémicas y raras, en las islas occidentales. Se citan localidades para cada especie mencionada y se discute su extensión geografica. Como adición florística para la isla de La Palma se cita Scrophularia glabrata Ait., y como combinación nueva se presenta Crambe gigantea (Ceb. & Ort.) Bramwell comb. nov.

Introduction

In the literature of the Canarian Flora many species are described as having a very restricted distribution often with only a single station and sometimes without any precise locality at all. Unfortunately in many of the important floristic works the information given in such cases by the original discoverer or author is repeated without addition and sometimes abbreviated even more.

There has however, in recent years been a tendancy to study the distribution of Canarian endemics and to publish the information in order to make the knowledge of the flora as complete as possible. Notable contributions in this field have been made by K. LEMS, J. LID and E.R. SVENTENIUS, and for Gran Canaria by G. KUNKEL and P. SUNDING.

In the present paper the author attempts to contribute some of his own observations on Canarian species which have been made during 3 visits to the islands totalling some 15 months in all (1964, 1965, 1968-69).

Acknowledgements

The author would like thank the Consejo Superior de Investigaciones Científicas, Madrid, for a 1 year fellowship to study the Canarian Flora and Professor E. Fernández-Galiano of the Departamento de Botánica, Universidad de Sevilla for allowing him the use of facilities there.

The author is also grateful to the many people who have helped him during his stay in the Canary Islands especially Dr. A. García Cabezón, Dr. E.R.S. Sventenius and Dr. W. Wildpret of Tenerife, Don Jaime Vega Hernández and Don Miguel Trujillo y Trujillo, of Gomera and Prof. G. Kunkel of Gran Canaria.

Dicotyledonae CARYOPHYLLACEAE

Dicheranthus plocamoides WEBB

This species, which is fairly widespread on the north coast of Gomera from San Sebastián to Chipude, was reported from Tenerife by Sventenius in 1948 from the Barranco of Masca on the western side of the island. It also occurs in the Tamaimo area in the Valle de Santiago del Teide, Barranco del Fraile de Guía de Isora and in the Barranco de las Cuevas Negras de Los Silos on the north coast. It is locally abundant at Tamaimo and above the village of Masca. 200-1000 m. asl.

CRUCIFERAE

Crambe scaberrima WEBB in BOURGEAU

In a recent paper (Cuad. Bot. VI) the author reported this species from the western part of Tenerife. It has now also been found in several additional localities in the "Bandas del Sur" in Barrancos Fraile, Infierno and Seco between Guía de Isora and Adeje.

Crambe gigantea (CEB & ORT.) BRAMWELL, comb. et stat nov.

(Basionym C. strigosa L.'Her. var. gigantea CEB, ORT., Notas sobre Flora Canariense 11 (1947).

The author has recently been able to collect excellent material of this species in flower and fruit from the northern part of La Palma and the differences in habit, floral structure particularly the reflexed, scarious —margined sepals and the structure of the fruit with two very prominent ridges seem to warrant the raising of the Palma taxon to species level. The description given by CEBALLOS and ORTUÑO is as follows:

"Caulis praelongus 2-3 m.; panicula laxa amplissima; sepalis rubentibus, margine scariosis; petalis albis, calyce duplo longioribus. Fructo ovatoacuminato 4-costato; costae duae valde prominulis, duae vix notatis."

The leaves are not as rough as *C. strigosa* and are between 15 and 45 cm. long and the inflorescence can be up to a metre in diameter. The present author has observed the species mainly on the north side of the island, Los Tilos, Barlovento, etc. but *SVENTENIUS* (in verbis) has found it also above El Paso.

CRASSULACEAE

Aichryson bollei WEBB ex BOLLE

A. bollei is a very rare species of La Palma which was known only from its original collection by BOLLE. It has recently been found by Sventenius at Tamaraoya above El Paso where the author has also collected it. The author has also found the species on cliffs in the pinar north of Tijarafe, 600-1.800 m. asl.

LEGUMINOSAE

Dorycnium eriophtalmum WEBB & BERTH.

The author has found this rare species at several localities on Tenerife and La Palma.

Tenerife: Bco. de las Cuevas Negras de Los Silos; Massa; Bco. del Infierno de Adeje. It is most abundant on some slopes in the Bco. de las Cuevas Negras at about 220 m.

La Palma: Cliffs north of Puntallana; Bco. de las Angustias.

Lotus borzii PITARD

This Gomeran endemic species is widespread on the northern side of the island from the Degollada de San Sebastian to Valle Gran Rey. It is particularly abundant in Sabinar (Juniperus phoenicea) vegetation in the barranco of Valle Hermoso and on cliffs in the barranco of Alojera. The species belongs to the section Edentolotus wheras the other yellow-flowered endemic Lotus species in the Canary Islands belong to the section Pedrosia.

EUPHORBIACEAE

Euphorbia lambii SVENT.

E. lambii has a very limited distribution on the island of Gomera where it is endemic. It occurs in the Bco. de Alojera on the cliffs of Espina and Lomo de Carretón and in the Bco. of Benchijigua. In these places it occupies an ecologically unique position for a shrubby Euphorbia in the Canary Islands. It is found on and below phonolitic cliffs in the Erica arborea, Myrica faya, Ilex canariensis community generally in moist, shady places.

The species appears to belong to the E. bourgeauana - E. atropurpurea group of species but is very distinct.

ASCLEPIADACEAE

Ceropegia dichotoma HAW.

This species is much more widespread on the island of Tenerife than would appear from the literature. It occurs in various localities along the north coast of the island from Punta de Teno to Taganana and Anaga. The author has recorded it from Teno, Los Silos, Icod, San José, Bco. de Ruiz, Bajamar and Taganana. In the south of the island it occurs at Guía de Isora, Adeje and Guimar.

CONVOLVULACEAE

Convolvulus perraudierii COSS.

The author has collected this species in the Barranco de Masca below the cliffs of Yeje where it was found as a liana on *Cytisus osryoides* Svent.

BORRAGINACEAE

Echium auberianum WEBB & BERTH.

The confusion surrounding this species has been further added to in the recent treatise of LID. E. auberianum is a species very distinct from the "Taginaste" of the Cañadas of Tenerife E. bourgeauanum WEBB in BOURG. (syn. E. wildpretii PEARSON ex HOOK. FIL.) E. auberianum as pointed out by DE COINCY (1907), BURCHARD (1928) and SVENTENIUS (1946) with excellent photographs) is a plant of up to 1 m. tall with blue flowers and it appears to be related to E. pomponium BOISS. of the Mediterranean region. It is not a true monocarpic species as it branches from the root forming new rosettes after flowering. It occurs in the Cañadas of Tenerife at Arenas Negras, Montaña Rajada and El Sombrerito above Vilaflor (BURCHARD). Echium acanthocarpum SVENT.

The species is a recently described endemic from the island of Gomera. It occurs in the area of Roque de Agando on

cliffs with Crambe gomerae. Chrysanthemum callichrysum, Sonchus gonzalezpadronii and Sideritis lotsyi. The author has also discovered a second locality on cliffs in the El Cedro woodland above Hermigua where it occurs in similar communities with Sideritis lotsyi, Sonchus gonzalezpadronii and Crambe gomerae.

Echium acanthocarpum is a member of the E. callithyrsum-E. virescens group of species and is extremely rare.

LABIATAE

Poliodendron heterophyllum (L.'Her.) WEBB and BERTH. (Teucrium heterophyllum L'HER).

Poliodendron heterophyllum is recorded mainly from the eastern region of Tenerife but it also occurs at Teno Bajo and at Tamaimo on the west side of the island. It is locally very common near Tamaimo.

SCROPHULARIACEAE

Isoplexis canariensis (L.) LINDL.

This is generally a laurel forest or *Erica* forest species but the author has found a narrow-leaved apparently xerophytic form in the Barranco del Fraile of Guía de Isora Tenerife in the "Bandas del Sur" where it occurs in xerophytic vegetation with *Echium virescens* var. *angustissimus* and *Dracaena draco*.

Scrophularia glabrata AIT.

S. glabrata has generally been considered as a Tenerife endemic but it is also fairly common in the pine forests of La Palma. It seems only to have been reported from La Palma in the Index Seminum Hortus Arautapae. The present author has collected the species at Tijarafe, El Mazo and Pinar de Fuencaliente.

DIPSACACEAE

Pterocephalus dumetorum (BROUSS.) COULT.

A species of the higher parts of Gran Canaria *P. dumetorum* also occurs on Tenerife on the Ladera of Guimar where it is abundant at 300-400 m. asl.

COMPOSITAE

Chrysanthemum gracile SCH. BIP.

This species was regarded by LEMS (1960) as a form of *C. frutescens* but it is a good species and is probably best considered as a southern vicarient of *C. frutescens*. It is common in the Valle of Santiago del Teide, Guia de Isora and Adeje.

Phagnalon umbelliforme DC.

WEBB recorded this species from La Palma without precise locality. It is, however, fairly common in the lavas of Fuencaliente at the southern tip of the island in the area surrounding Volcan de San Antonio with *Echium brevirame* and *Ceropegia hians*.

Sonchus fauces-orci KNOCHE

S. fauces-orci occurs in several localities in the south west part of Tenerife: — Masca, Tamaimo, Guía de Isora, Barranco del Infierno, Valle Seco Adeje. This is a very distinct species which should perhaps be placed in a separate section or subsection apart from the other "dendrosonchus" species.

Tolpis crassiuscula SVENT.

This is a rare endemic species known only from two localities on Tenerife:— the cliffs of El Fraile west of Buenavista del Norte and the Barranco del Infierno de Adeje. It is locally abundant in both places.

Monocotyledonae

LILIACEAE

Dracaena draco L.

Dracaena draco is perhaps the most famous of all Canarian plants but it is now unfortunately very rare in the wild state. The author has, however, seen spontaneous examples in several places on Tenerife and La Palma.

Tenerife:— Roque de las Animas Taganana, Roques de Anaga, Bco. del Infierno de Adeje, Bco. Igueste de San Andrés, Bco. del Fraile de Guía de Isora, Masca, Cuevas Negras de los Silos.

La Palma:— Barlovento, between Barlovento and Los Sauces.

Bibliography

- D. BRAMWELL, 1968: Notes on the Taxonomy and Nomenclature of the Genus Aichryson.—Bol. Inst. Nac. Inv. Agron. 59, 203-213. Madrid.
 - 1969: The Genus Crambe (Cruciferae) in the Canary Islands Flora.— Cuad. Bot. Canar. VI, 5-12.
- O. BURCHARD, 1928: Beiträge zur Ökologie und Biologie der Kanarenpflanzen.— Bibliotheca Botanica 98, 262p. & 78 pl. Stuttgart.
- L. CEBALLOS y F. ORTUÑO, 1947: Notas sobre Flora Canariense.—Bol. Inst. Forestal de Inv. y Exper. Madrid 33, 1-31.
- A. DE COINCY, 1903: Les Echium de la Section Pachylepis.—Bol. Herb. Boiss. 2e, ser. 3, 261-277 & 488-499.
- K. LEMS, 1960: Floristic Botany of the Canary Islands:—Sarracenia 5, 1-94. Montreal.
- J. LID, 1968: Contributions to the Flora of the Canary Islands.—Skr. Norke Vidensk.—Akad. Oslo 1 Mat. Naturv. Kl ns. 23, 1-212.
- E.R.S. SVENTENIUS, 1944-69: Index Seminum Hortus Acclimatationis Arautapae 1-XXVI. Santa Cruz de Tenerife.
 - 1946: Notas sobre la Flora de las Cañadas de Tenerife.—Bol. Inst. Nac. Inv. Agron. 15, 149-171. Madrid.
 - 1948: Plantas Nuevas o Poco Conocidas de Tenerife: —Bol. Inst. Nac. Inv. Agron. 18, 1-19. Madrid.
 - -- 1969: Plantae Macaronesienses Novae vel Minus Cognitae 1.—Separata de Jardín de Acclimatación de La Orotava, 18p. (Santa Cruz de Tenerife).
- P.B. WEBB & S. BERTHELOT, 1836-50: Phytographia Canariensis sect. 1-3.— París.