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Section 5. *PREAUXIA* (Schultz Bip.) C. J. HumphriesARGYRANTHEMUM sect. *PREAUXIA* (Schultz Bip.) C. J. Humphries, comb. nov.*Preauxia* Schultz Bip. in Webb & Berthel., Phyt. Canar. 2 : 244, 250 (1844).*Chrysanthemum* sect. *Preauxia* (Schultz Bip.) Christ in Bot. Jb. 9 : 146 (1887).

Plants tomentose to glabrous. Leaves bipinnatifid to bipinnatisect, sessile. Ray florets white. Ray cypselas turbinate, erect, trigonous when single, wingless, and fused together in groups of 2-5; pappus a small marginal ridge or absent; disc cypselas obconical, terete, wingless; pappus absent.

22. *Argyranthemum adauctum* (Link) C. J. Humphries, comb. nov. (Text-fig. 3W, x, y, 25, 26.)*Pyrethrum adauctum* Link in Buch, Phys. Besch. Canar. Ins. : 149, 181 (1825).

Stems 70-90 cm, erect, branched throughout the plant or only from the base, densely tomentose to glabrous. Leaves 2-8 (-10) × 0.5-4 (-5) cm, obovate, bi- to tripinnatifid (or pinnatisect), sessile; primary lobes 4-24, 2-30 × 0.5-15 mm, acute. Inflorescence corymbose with 5-20 capitula; bracts leaf-like to linear-oblong; peduncles 1-8 (-15) cm. Involucre 4-12 mm in diameter; bracts in 3 series; triangular to obovate-oblong in outline; outer bracts fleshy with a narrow scarious border; inner bracts scarious, usually with an expanded, hyaline apex.

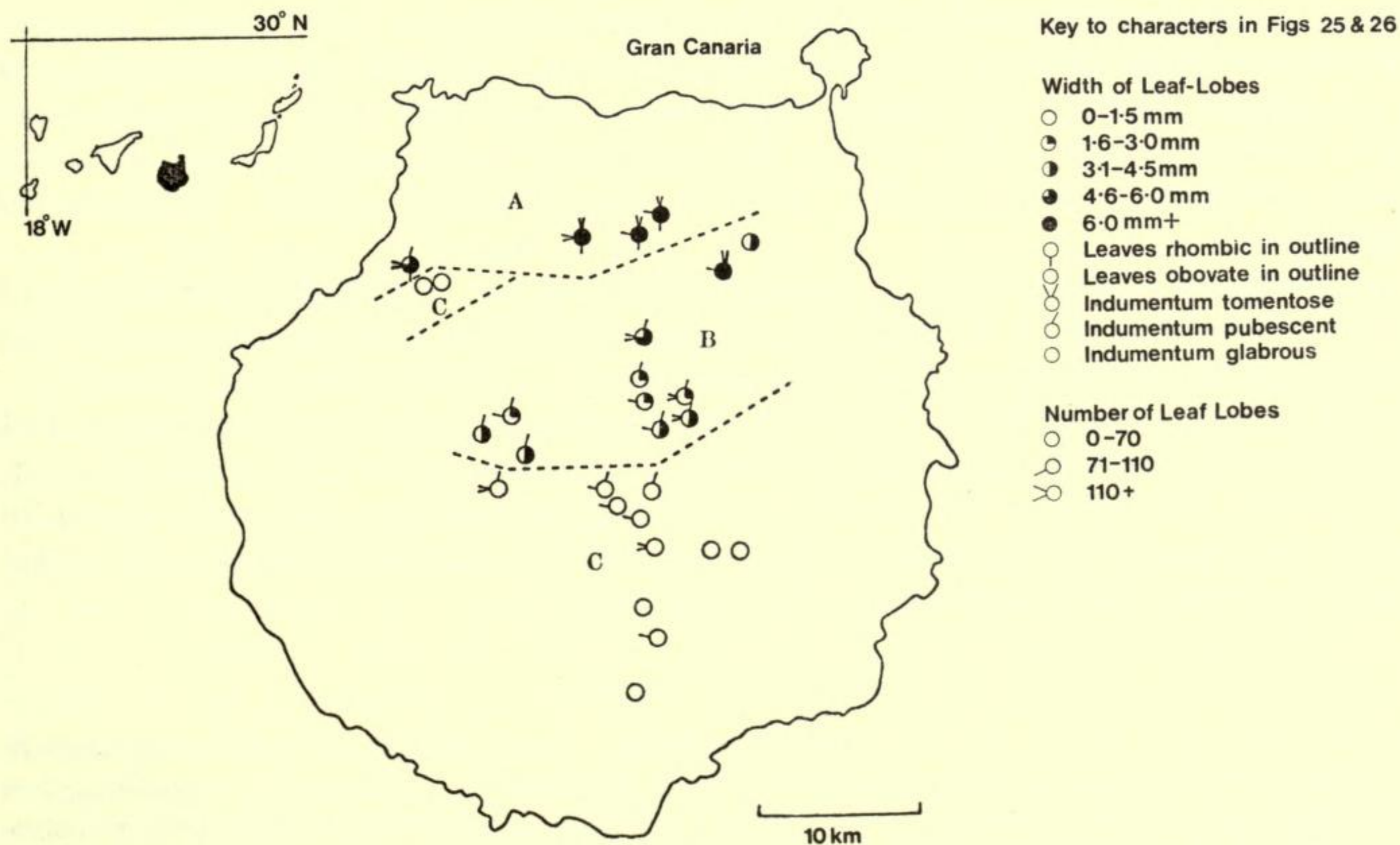


FIG. 25. Distribution and variation of subspecies of *Argyranthemum adauctum* on Gran Canaria: A, subsp. *jacobaeifolium*; B, subsp. *canariense*; C, subsp. *gracile*.



FIG. 26. Distribution and variation of subspecies of *Argyranthemum adauctum* on Tenerife and Hierro: D, subsp. *dugourii*; E, subsp. *adauctum*; F, subsp. *erythrocarpon*.

Ray florets 10–15 × 2–3.5 mm, white, the apex 1–3-fid; *disc florets* 3–4 mm, the corolla lobes yellow, the tubes white. *Ray cypselas* 2.5–4.5 × 1.3–6.5 mm, turbinate, ± trigonous to semi-terete in transverse section, the dorsal surface arcuate, the ventral surface slightly concave or flat, wingless, coalesced together in groups of 2–5; pappus absent or present as a narrow marginal ridge with a convex-conical floret abscission scar at the apex; *disc cypselas* 1.6–2.2 × 0.5–1 mm, obconical, terete, wingless, usually sterile; pappus nil. *Flowering period*: February to September.

A. adauctum is a relatively widespread species of the western Canary Islands of Gran Canaria, Tenerife and Hierro, in montane scrub, broad-leaved forest and *Pinus canariensis* forest habitats between 350 and 1950 m. Widely dispersed populations are often morphologically distinct and can be grouped into morpho-geographical entities on the basis of vegetative characters. The pictorialized dot maps (Figs 25, 26) indicate the range of distribution and variation in the species with respect to width and number of leaf-lobes, leaf shape and indumentum density. By using these characters, six subspecies can be recognized.

KEY TO SUBSPECIES

- Ray cypselas dark brown, the apex becoming black; inner involucre bracts only slightly expanded at the apex, the margins dark brown, scarious f. *erythrocarpon*
 Ray cypselas yellow to chestnut brown; inner involucre bracts with an expanded, scarious, hyaline apex, the margins light brown to translucent:
 Primary leaf lobes 2–12 mm wide:
 Mature leaves rhombic in outline c. *jacobaeifolium*

Mature leaves obovate in outline :

Indumentum subglabrous to glabrous ; basal lobes of leaves usually undivided

a. *adauctum*

Indumentum scabridulous, sometimes tomentose ; basal lobes of leaves divided at least once b. *canariense*

Primary leaf-lobes up to 2 mm wide :

Indumentum subglabrous to glabrous c. *gracile*

Indumentum scabrid to tomentose e. *dugourii*

a. subsp. *adauctum*. (Text-fig. 2V 4.)

Chrysanthemum grandiflorum [var.] α *adauctum* (Link) DC., Prodr. 6 : 66 (1838).

Preauxia perralderii Schultz Bip. ex Sauer, Cat. Pl. Canar. Ins. : 24 (1880), *nom. nud.* —

Pitard & Proust, Îles Canar., Fl. Archipel : 231 (1908), *nom. nud.* 'Perraudieri'.

Chrysanthemum perralderii Christ in Bot. Jb. 9 : 168 (1887) *nom. nud.*

Chrysanthemum anethifolium sensu Burchard in Bibliotheca bot. 98 : 200 (1929), quoad specim. a Cumbre de Bolico ; non Buch.

Stems 80–120 cm, ascending, branched throughout, subglabrous to glabrous. *Leaves* 4–9 × 2–4 cm, bipinnatifid to bipinnatisect, subglabrous to glabrous ; primary lobes 4–14, opposite to subopposite, dentate, acuminate. *Inner involucre bracts* expanded at the apex. *Ray cypselas* 2.5–4.4 mm ; *disc cypselas* 1.5–2.2 mm, light brown to chestnut in colour.

Tenerife: Moro de Gaitero, 1700 m, 14 Apr. 1969, *Bramwell* 1316 (RNG, neotypus). Los Raices, Monte de Esperanza, 2 Apr. 1971, *Bramwell & Humphries* 3190 (BM ; RNG). Mirador Ortuño, 2 Apr. 1971, *Bramwell & Humphries* 3186 (BM ; RNG). Ladera de S. Ursula, *Laurus* wood, 800 m, *Larsen* 1315 (C). Aguamansa, Los Organos, 1200 m, 3 May 1933, *Asplund* 1070 (S). Same locality, 1400 m, 8 May 1969, *Bramwell* 1482 (RNG). Same locality, 1000–1200 m, 28 Jan. 1933, *Lems* 6850, 6893, 6902, 7175 (MICH). Guimar, Bco. del Rio, 700 m, 1933, *Asplund* 939 (G ; S). Bco. del Agua, May 1855, *Bourgeau* 1387 (C ; FI ; G ; K ; P ; W ; Z). Same locality, 1000 m, 27 Feb. 1855 and 11 Oct. 1855, *Perraudière* (P). Bco. de Valle, 23 May 1879, *Hillebrand* in herb. Christ (Z). La Orotava, 400 m, 27 Sept. 1965, *Lems* 6384 (MICH). Cumbre de Bolico, by streams in laurel forest, 1100 m, May 1923, *Burchard* 123 (G ; S ; Z). *Broussonet* (BM).

An endemic locally abundant as isolated populations growing along the central Pinar range of Tenerife from Los Raices on the Bosque de la Esperanza to the cliffs at Ladera de Guimar. A single collection is known from the Cumbre de Bolico above the Teno promontory (Fig. 26).

It is usually found growing between 400 and 900 m in *Pinus canariensis* forest, but several collections have been made from *Laurus azorica* forest at lower altitudes. It is also found on rare occasions in the leguminous scrub surrounding the pine forests on the north-west-facing slopes. The basal rocks consist of various types of volcanic lava from the Miocene and later periods.

No particular specimens are indicated in Link's protologue for *Pyrethrum adauctum* which can be traced to the original basic collections of the L. von Buch herbarium at Berlin. As with Bolle's specimens it is likely that all of Link's and indeed Choisy's 'types' for new taxa of Macaronesian Chrysantheminae were destroyed in

the great fire of 1943. Link does, however, give the 'locus classicus' as 'Realejo (Realejo) 3300 ft [1000 m]', a locality on the north-facing slopes of Tenerife. This locality must be near the 'Moro de Gaitero' on the Pinar range and in the absence of any possible authentic material I propose to designate a specimen collected by D. Bramwell as the neotype: 'Moro de Gaitero, 1700 m., 14 April 1969, no. 1316'. The specimen is conserved at RNG.

The habit is characteristic for this subspecies. The plants are very diffuse, with straggling, divaricate branches to form large sub-shrubs with relatively few capitula. It is similar to subsp. *canariense* but differs in the larger, glabrous leaves.

Transitions to subsp. *dugourii* are found above the Ladera de Guimar as the pine forests are replaced by leguminous sub-alpine scrub and the habitats become much more exposed and arid.

b. subsp. *canariense* (Schultz Bip.) C. J. Humphries, comb. et stat. nov. (Text-fig. 2V 1.)

Preauxia canariensis Schultz Bip. ex Webb & Berthel., Phyt. Canar. 2: 252 (1844), excl. forma *gracilis*.

Chrysanthemum canariense (Schultz Bip.) Christ in Bot. Jb. 9: 146 (1887), excl. var. *tenuisectum*.

Preauxia jacobaeifolia sensu Pitard & Proust, Îles Canar., Fl. Archipel: 231 (1908), non Schultz Bip.

Chrysanthemum canariense var. *jacobaeifolium* Bornm. ex Burchard in Bibliotheca bot. 98: 201 (1929) pro parte, non *Preauxia jacobaeifolia* Schultz Bip.

Stems up to 60 cm, ascending, usually branched throughout the plant, pubescent to scabridulous. Leaves 1.5–9 × 0.6–4 cm, bipinnatifid to bipinnatisect, pubescent to tomentose; primary lobes 4–20, 2–25 × 2–12 mm, opposite or almost so; secondary lobes 2–6, 1–9 × 3 mm, opposite to alternate, tomentose to pubescent, acute. Inner involucre bracts expanded at the apex. Ray cypselas 2.5–4.2 mm; disc cypselas 1.6–2 mm, light brown to chestnut in colour.

Gran Canaria: in summis Canariae montibus la Cumbre propre montem Saucillo, Despreaux in herb. Schultz Bip. (P, holotypus). Bco. Guinguada, 400 m, amongst rocks, 27 Mar. 1901, Bornmüller 2461 (G; L; Z). Monte Lentiscal, 450 m, 20 Mar. 1966, Kunkel 8857 (BM; G). Same locality, Lowe (BM; K). San Mateo, 1700 m, 20 May 1900, Bornmüller 811 (G; P; V; Z). Same locality, 1100 m, pine forest, 15 Feb. 1905, Pitard 192 (FI; G; L; Z). Same locality, 18 May 1894, Murray (BM; RHS). 2 km south of San Mateo, 650 m, 17 Mar. 1971, Bramwell & Humphries 3008 (RNG). Lagunetas, 24 May 1897, Gelert (C). Rincon de Tenteniguada, 600 m, 19 Mar. 1971, Bramwell & Humphries 3009 (RNG). Same locality, 900–1000 m, Apr. 1924, Burchard 246 (G; S; Z). Same locality, 1200–1500 m, 30 Oct. 1965, Lems 6201 (MICH). Cueva Corcho, 9 km south of Valleseco, 700 m, 17 Mar. 1971, Bramwell & Humphries 3005 (RNG). Saucillo, 28 Apr. 1855, Bourgeau (L). Same locality, 2 May 1894, Murray (G). Summit of the Cumbre, Apr. 1839, Despreaux in herb. Webb 21 (FI). Cruz de Tejada, 27 Mar. 1969, Bramwell 1082 (RNG). Artenara, 17 Feb. 1966, Hulthen (S). Tirajana, Paso de la Plata, Apr. 1846, Bourgeau 536 (BM; FI; G; K; P; W; Z). June 1912,

Pitard in herb. Alleizette (L). Lomo Mangrera, 1350 m, 17 Mar. 1967, *Kunkel 10692* (G). 1860, *Despreaux 72* (G). *Christian Smith* (C).

A common plant on the northern slopes of Gran Canaria, extending from Monte Lentiscal in the north-eastern part of the island to Cruz de Tejeda in the west central slopes (Fig. 25). Usual habitats are *Pinus canariensis* savanna at higher altitudes and xerophytic scrubland dominated by *Cytisus canariensis* and *Euphorbia obtusifolia* on lower slopes; 400–1200 m. The basal rocks consist mainly of Miocene basalts, tufts and pouzzolane.

Populations of subsp. *canariense* in the xerophytic scrub of Paso de la Plata, in central Gran Canaria, intergrade with populations of subsp. *gracile*. The transition from one to the other in respect of the habit, and the tomentose, wide, leaf-lobes to glabrous or glabrescent narrow leaf-lobes is very abrupt and instantly recognizable. The vegetative characters are variable between isolated populations throughout the ranges of the recognized subspecies, but generally fall naturally into the two major groups.

c. subsp. ***gracile*** (Schultz Bip.) C. J. Humphries, comb. et stat. nov. (Text-fig. 2V 2.)

Preauxia canariensis forma *gracilis* Schultz Bip. in Webb & Berthel., Phyt. Canar. 2: 252 (1844).

Preauxia canariensis sensu Pitard & Proust, Îles Canar., Fl. Archipel: 231 (1908), non Schultz Bip.

Chrysanthemum canariense sensu Burchard in Bibliotheca bot. 98: 201 (1908), excl. var. *jacobaeifolium*; non Christ.

Stems 50–60 cm, branched from base, subglabrous to glabrous. *Leaves* 0.5–5 × 0.2–3 cm, bipinnatisect, usually glabrous; primary lobes 4–18, opposite to alternate, 0.2–1.8 × c. 0.2 cm; secondary lobes 2–12, 0.1–1.8 × 0.1–0.2 cm, subopposite to alternate. *Bracts* and *cypselas* as in subsp. *canariense*.

Gran Canaria: in altibus montibus, *Despreaux* in herb. Schultz Bip. (P, holotypus). Near Tejeda, eastern slopes of Roque Ventaige, 22 Mar. 1966, *Hulten* (S). Los Ardennes de la Mina, 1800 m, May 1914, *Burchard 396* (K; W). Pasa de la Plata, 2 km north of Paso de la Plata, 20 Mar. 1971, *Bramwell & Humphries 3039* (RNG). Same locality, 3 km north, 20 Mar. 1971, *Bramwell & Humphries 3034* (RNG). Artenara, Mna. de Brezo, 1200 m, 28 Mar. 1969, *Bramwell 1121* (RNG). Caldera de Tirajana, below Roque Nublo, 1400 m, 27 Feb. 1969, *Bramwell 1027* (RNG). Same locality, 1000 m, 19 Apr. 1936, *Brookes 116* (BM). San Bartolomé, 3 km north, 780–800 m, 19 Mar. 1971, *Bramwell & Humphries 3014* (RNG). Same locality, 800 m, 18 May 1957, *Larsen* (C). Same locality, 950 m, 16 Feb. 1905, *Pitard 193* (G; L; P; Z). Santa Lucia de Tirajana, 2 km north, on cliffs, *Lems 6230* (MICH). Same locality, 1 km south, 19 Mar. 1971, *Bramwell & Humphries 3013* (RNG). Bco. de Tirajana, *Kunkel 12442* (BM). Temisas, 6 km west, 900 m, 19 Mar. 1971, *Bramwell & Humphries 3010* (RNG). Hoya de la Vieja, 1854, *Bolle* (Z). Bco. de Fataga, 200 m, 30 Aug. 1969, *Bramwell 1184* (RNG). Below Fataga, 200 m, 21 Mar. 1971, *Bramwell & Humphries 3046* (RNG). Near Maspalomas, 9 May 1894, *Murray* (BM; RHS). Pinos de Tamadaba, 25 Mar. 1971, *Bramwell &*

Humphries 3110 (RNG). Above Mogan, *Lowe* (BM). Same locality, 1250 m, 10 May 1967, *Kunkel 11056* (G) June 1839, *Despreaux* in herb. Webb 12 (FI).

A locally common subspecies from the central south-east and southern slopes of Gran Canaria from Artenara and Paso de la Plata, particularly along the barrancos of Tirajana and Fataga. Two distinctive populations have also been collected from the high pine forests at Pinar de Tamadaba (Fig. 25). It is usually found in *Euphorbia obtusifolia* and *Cytisus proliferus* scrub on central and southern slopes but also in open *Pinus canariensis* savannah in the central mountains; 400–1400 m. The basal rocks consist mainly of Pliocene and more recent phonolytes and trachytes.

d. subsp. ***jacobaeifolium*** (Schultz Bip.) C. J. Humphries, comb. nov. (Text-fig. 2U; Pl. 28.)

Argyranthemum jacobaeifolium Webb in Webb & Berthel., Phyt. Canar. 2: t. 90 (1839), *nom. invalid.*

Preauxia jacobaeifolia Schultz Bip. in Webb & Berthel., tom. cit.: 251 (1844).

Chrysanthemum jacobaeifolium (Schultz Bip.) Christ in Bot. Jb. 9: 168 (1887).

Preauxia canariensis subsp. *jacobaeifolium* (Schultz Bip.) Bornm. in Bot. Jb. 33: 484 (1903), *nom. provis.*

Chrysanthemum canariense var. *jacobaeifolium* Bornm. ex Burchard in Bibliothca Bot. 98: 201 (1929), *excl. descr.*

Stems 70–120 cm, ascending, branched throughout the plant, densely tomentose when young, becoming glabrous when mature. *Leaves* 2–14 × 0.5–6.5 cm, rhombic, bipinnatifid, dark green, pubescent to tomentose; primary lobes 8–32, 0.5–3.5 × c. 1.5 cm; opposite or almost so; secondary lobes dentate, acute; apex of *inner involucrel bracts* expanded, scarious, hyaline. *Ray cypselas* 2.5–4 mm; *disc cypselas* 1.5–2 mm.

Gran Canaria: 1837, *Despreaux 188*, in herb. Webb (FI, holotypus). Pinos de Tamadaba, 1300 m, pine forests, 23 June 1969, *Bramwell 2226* (RNG). Same locality, 1350 m, pine forest cliffs, 25 Mar. 1971, *Bramwell & Humphries 3111* (BM; RNG). Firgas, 13 May 1891, *Murray* (K; RHS; S). Monte Doromas, high rocky regions, 5 May 1855, *Bourgeau 1389* (C; FI; G; K; Z). Casa Doromas, 26 May 1882, *Hillebrand* (Z). Teror, 20 May 1894, *Murray* (K). Bco. de la Vingua, 13 May 1892, *Murray* (K; S). 'S.S. Virginis', 30 Mar. 1846, *Bourgeau 537* (BM; FI; G; K). *Broussonet* (G). 4 May 1894, *Murray* (K). *Lowe* (K). *Webb* (K).

A rare endemic of north and north-west-facing slopes of Gran Canaria at Firgas, San Matheo, Monte Dormas and steep cliffs at Pinar de Tamadaba (Fig. 25). A tall straggling shrub usually found in shaded *Pinus canariensis* forest and rarely in open scrub of rocky, mountain slopes; 450–1400 m.

Schultz Bipontinus (1844a) considered subsp. *jacobaeifolium* to be a distinct species, *Preauxia jacobaeifolia*. On the basis of the diagnosis, 'Planta herbacea, hirta, receptaculo elongato-conico, foliorum pinnatifidorum lobis oblongis, obtusis dentatis', he separated it from *Preauxia canariensis* (*Argyranthemum adauctum* (Link) C. J. Humphries), 'Planta fruticulosa, hirta, receptaculo depresso-conico, foliorum pinnatipartorum lobis linearibus, acutis, subdentatis'. The separation

has its shortcomings as all species of *Argyranthemum* are perennial and have convex-conical receptacles. Also, in sect. *Preauxia*, variation follows more or less a continuum throughout its distribution range in habit, foliage, and fruit characters. From Figs 25 and 26, it is possible to see that there is a parallel north-south cline in reduction of indumentum and leaf area from different localities on Gran Canaria and Tenerife and considerable overlap of variation in most characters in similar habitats from Gran Canaria, Tenerife and Hierro. Thus, populations from north Gran Canaria referable to '*jacobaeifolium*' can only effectively be separated from all other populations in section *Preauxia* by their rhombic-shaped leaves. In general facies, subsp. *jacobaeifolium* is more like its Teneriffean and Hierrean counterparts, referable to subsp. *adauctum* and subsp. *erythrocarpon*.

e. subsp. ***dugourii*** (Bolle) C. J. Humphries, comb. et stat. nov. (Text-fig. 2V 3.)

Preauxia dugourii Bolle in Bonplandia, Hannover 7: 297 (1859). – Pitard & Proust, Îles Canar., Fl. Archipel: 231 (1908).

Chrysanthemum dugourii (Bolle) Christ in Bot. Jb. 9: 146 (1887).

Chrysanthemum canariense var. *tenuisectum* Christ, loc. cit. '*tenuisecta*'.

Stems 60–80 cm, branched from the base, scabridulous to tomentose. *Leaves* 2–6 × 0.3–2 cm, bipinnatisect, scabridulous to tomentose; primary lobes 6–22, 0.5–2 × c. 0.2 cm, opposite or almost so; secondary lobes 2–10, 0.2–0.6 × c. 0.15 cm, opposite to alternate, acute. *Bracts* and *cypselas* as in subsp. *canariense*.

Tenerife: Las Cañadas, El Portillo, between El Cabezón and El Portillo, 2000 m, 14 Apr. 1969, *Bramwell* 1315 (RNG). El Sombrerito, 2000 m, 30 Apr. 1969, *Bramwell* 1411 (RNG). 2000 m, 11 May 1957, *Larsen* (C). Same locality, 1700 m (Cult. No. 83), *Larsen* (C). Same locality, 1882, *Askenasy* in herb. Christ (Z). Fasnea, 17 June 1855, *Perraudière* (P). Peñones, 6 May 1956, *Lems* 2611 (MICH). Llano de Ucanca, 2100 m, 22 May 1957, *Larsen* (C). El Retamar, 2300 m, 10 Apr. 1971, *Bramwell & Humphries* 3386 (RNG). Vilaflor, 2 km north-west, 10 Apr. 1971, *Bramwell & Humphries* (RNG). Granadilla, 1954, *Wall* 554 (S). Tamadaya, near Arico, 1 Mar. 1855, *Bourgeau* 1388 (C; FI; G; K; P; W). Near Arico, 700 m, 1926, *Burchard* 312 (G; S; Z). In Pinetis convallis Tamadaya, *Bourgeau* 1388 (C; FI; G; K; P, neotypus; W). Same locality, 17 July 1855, *Perraudière* (P). Same locality, 1200 m, 18 June 1855, *Perraudière* (P).

The distribution extends from El Portillo in the north-east region of the Cañadas on Tenerife to the south-facing slopes of Barranco de Pasa Jiron, Lomo de Retama and Vilaflor (Fig. 26). It is a dominant plant of the *Pinus canariensis* forests and also occurs in the sub-alpine, *Spartocytisus supranubius* scrub: 800–2100 m. The basal rocks consist entirely of Quaternary phonolytes.

Subsp. *dugourii* is rather variable in foliage and indumentum characters. It resembles and is often confused with *A. tenerifae* in its chamaephytic habit and erect pinnatisect foliage. It differs, however, by the sectional characters, i.e. the epappose and wingless ray and disc cypselas, the sessile leaves and the obspathulate, inner involucre bracts.

Morphologically it is most similar to subsp. *gracile*, but the leaves are usually larger, more dissected and tomentose.

Bolle's specimens on which he based the description of *Preauxia dugourii* (= *A. canariensis* subsp. *dugourii*) were originally deposited at the Berlin (Dahlem) herbarium. However, there is no material there on which Bolle can be assumed to have based his descriptions, and it seems likely that the specimens were in the herbarium fire of 1943, in the bombing of Berlin, which destroyed them. There are no duplicates at C, FI, W, or Z, where more of Bolle's collections and duplicates are kept.

In the absence of suitable material from the 'locus classicus' (Bco. de Pasa Jiron) cited in Bolle's protologue a neotype has been selected from Bourgeau's well-distributed collections. The label reads '*Tenerife: Arico in Pinetis Convallis Tamadaya, Bourgeau 1388*'. Conserved at P; isotypes C, FI, G, K and W.

f. subsp. ***erythrocarpon*** (Svent.) C. J. Humphries, comb. nov. (Text-fig. 2V 5.)

Chrysanthemum dugourii subsp. *erythrocarpon* Svent. in Index Sem. Hort. Acclim. Pl. Arautapensi 1968 : 52 (1968), reimpr. ut Pl. Macarones. nov. v. minus cogn. 1 : 10 (1968).
Chrysanthemum broussonetii sensu Burchard in Bibliothca bot. 98 : 231 (1929), pro parte quoad specim. a Ferro; non Pers.

Stems 80–100 cm, branched throughout the plant, subglabrous. *Leaves* 3–10 × 0.8–4 cm, bipinnatifid, subglabrous, to glabrous; primary lobes 6–24, 2–25 × c. 8 mm, opposite to subopposite, the lower lobes undissected; secondary lobes dentate, cuspidate. *Inner involucrel bracts* slightly expanded at the apex. *Ray cypselas* 3.5–4.5 mm, dark brown to black, becoming succose at maturity; *disc cypselas* 1.8–2.2 mm.

Hierro: In the northern pine forests above La Frontera, 10 May 1959, *Sventenius* (TENE, holotypus). La Frontera, 850 m, 7 Mar. 1971, *Bramwell & Humphries* 3309 (RNG). Cumbre de Golfo, 800 m, 2 May 1855, *Perraudière* (P).

Found only in *Myrica faya* and *Erica arborea* forest between 600 and 850 m on Hierro. Central mountains of north-west-facing slopes above La Frontera (Fig. 26).

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