

Fig. 8. *Sonchus palmensis* (Sch. Bip.) Boulos, herbarium specimen, près de San Pedro, Santa Cruz, La Palma, 5 August 1962, Boulos (CAI!).

which is endemic in Madeira Island for the following main reasons:

1. *Sonchus palmensis* may attain a height of 2.5 metres, with a thick base up to 12 cm in diameter and sometimes with the aspect of a small tree. The plant grows at an altitude of 200–700 m, mainly on the borders of cultivated fields and in moist places. *S. pinnatus*, however, grows at an altitude of 1,000–1,400 m, in rocky, dry habitats.

2. In *Sonchus palmensis* the heads are numerous and small; the number of flowers per head is 36–48 which is the lowest among the known species of

*Sonchus*. In *S. pinnatus* the heads are few, voluminous, with 100–150 flowers.

3. The peduncle in *S. palmensis* is much shorter (0.2–2.2 cm, usually less than 1.5 cm long) than in *S. pinnatus* (1–9 cm, usually 3–9 cm long).

4. The taxa are geographically isolated from each other.

Already LOWE (1868) pointed out the difference when he writes: 'The Canarian var.  $\beta$  *palmensis* WB. T. 130, with its much smaller flowers, etc. requires further investigation. It looks something very different from any from the Madeira plant'.

#### 9. *Sonchus canariensis* (Sch. Bip.) Boulos comb. nov.

*S. pinnatus* Ait. Hort. Kew. (ed. 1) 3:

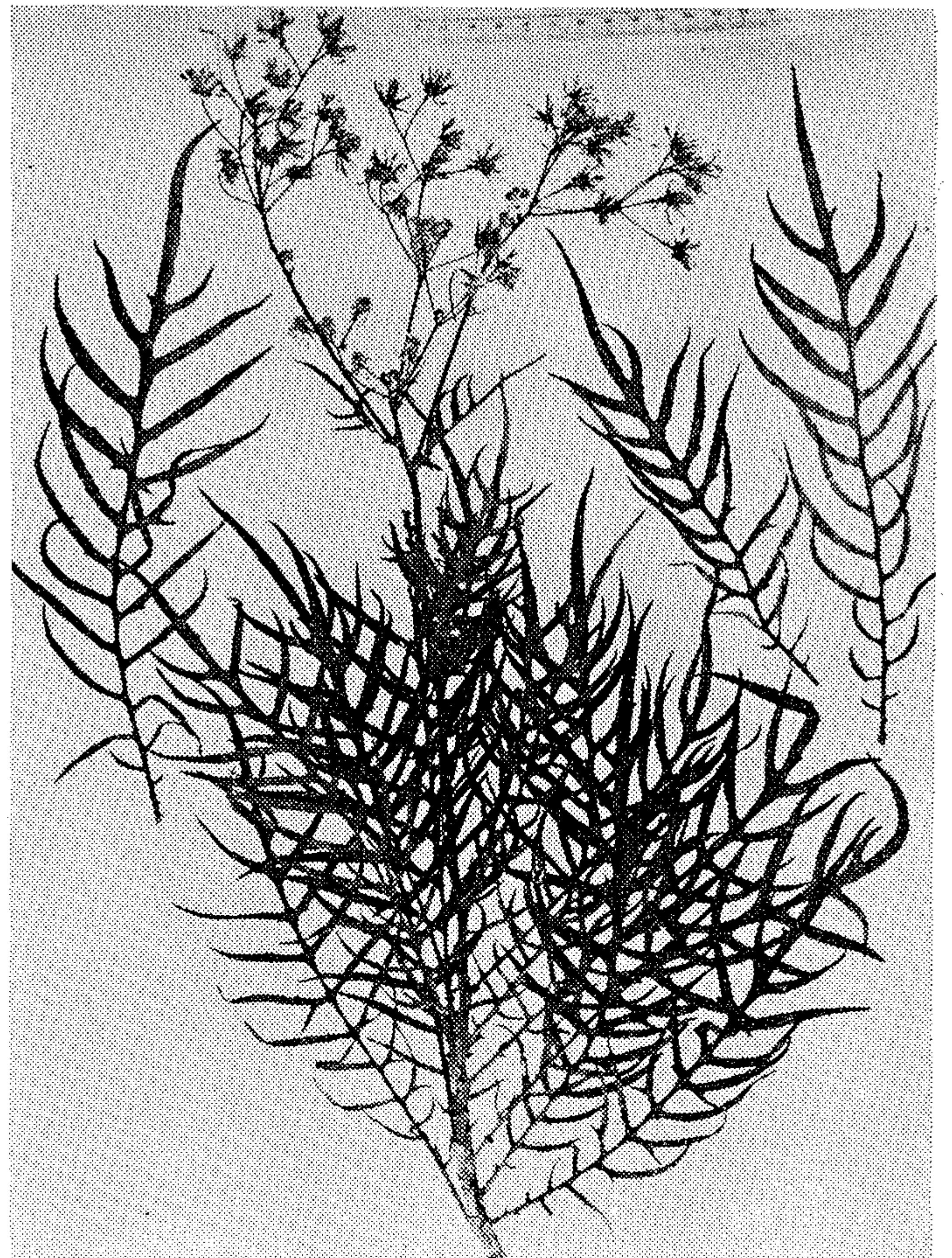


Fig. 9. *Sonchus canariensis* (Sch. Bip.) Boulos subsp. *orotavensis* Boulos, type specimen, Tenerife, Orotava, Barranco San Antonio, 13 April 1944, E. Sventenius (CAI!).



Fig. 10. *Sonchus lidii* Boulos, type specimen, labelled *Sonchus pinnatus* Ait. var. *canariensis* Sch. Bip., Hierro, El Golfo, Los Llanillos 16 May 1901, J. Bornmüller (G!).

116. 1789, var. *canariensis* Sch. Bip. in Webb et Berth. Hist. Nat. Iles Canar. 3: 411. 1849–1850.

Distribution: Tenerife and Gran Canaria, Canary Islands, rare.

This species is characterized by the high number of involucre scales, 40–57 per head. The outer and intermediate involucre scales are often glandular-hairy. Leaf lobes are entire or slightly denticulate and are not broader than 1 cm. Regarding the variability of the leaves, it is one of the few polymorphic species of subgenus *Dendrosonchus*.

*Sonchus canariensis* with its large heads and high number of flowers (94–164) is easy to differentiate from *S. palmensis* which possesses small heads with a low number of flowers (36–48).

10. ***Sonchus canariensis*** (Sch. Bip.) Boulos subsp. ***oronavensis*** Boulos subsp. nov.

Frutescens. Folia conferta, auriculata, in lobis linearis integris regulatim pinnatisecta. Capitula parva, flores plus minusve 50 in capitulo.

Frutescent; leaves 15–25 cm long, in dense groups below the richly branched inflorescence, auriculate, pinnatisect, lobes narrow,  $\pm$  linear; peduncle 1–2.5 cm long, heads small, with  $\pm$  50 flowers. Holotype: Tenerife, infra oppidum Orotava; Barranco San Antonio versus 250 m supra mare. Valde paucus, 13. 4. 1944, E. Sventenius; labelled: *Sonchus arboreus* DC. (CAI!).

Distribution: Tenerife, Canary Islands.

This sub-species is known only from the collection of the type and is named after Orotava, the locality where it was collected.

11. ***Sonchus lidii*** Boulos sp. nov.

Frutescens, erectus, 80–140 cm altus. Folia ad 55 cm longa, glabra, coriacea, in lobis suboppositis plus minusve 12-jugis dissecta. Pedunculus 3–8 cm longus, leviter tomentosus. Flores circa 200 in capitulo. Bractae involucri imbricatae, circa 52. Corolla flava, 16–18.5 mm longa, ligula corollae tubum aequantibus. Tubus staminibus 4–4.5 mm longus. Achenium 3–3.5 mm longum, valde transverse-rugosum. Pappus 8–10 mm longus plus minusve deciduus, pro parte setiformis, pro parte piliformis.  $2n = 18$ .

Frutescent, 80–140 cm high, rarely branched at the base. Leaves glabrous, coriaceous, 30–55 cm long, shorter towards the richly branched leafless inflorescence, pinnatisect, with  $\pm$  12 pairs of subopposite lobes, 3–7 cm long, 0.5–2 cm