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A new species of *Cicer* (*Leguminosae*—*Papilionoideae*) from the Canary Islands

A. SANTOS GUERRA* & G. P. LEWIS†

Summary. A new, distinct species of *Cicer* from the Canary Islands is described and illustrated.

The discovery of a new species of *Cicer* on the Canary Islands represents a noteworthy event in the botanical history of the region. In 1972 the species was discovered near La Cumbrecita in the National Park of La Caldera de Taburiente, La Palma by the late E. Sventenius accompanied by the first author. Due to the strikingly *Vicia*-like foliage of the plant it was initially thought to belong to that genus and was tentatively treated as an undescribed species of *Vicia* (Santos Guerra 1983). However, detailed studies of flowers, fruits and seeds by both authors have demonstrated that the plant is, without doubt, a new species of *Cicer*.† Prior to a botanical expedition to the Canary Islands in 1982, Miss Susyn Andrews found at Kew an unmounted specimen of this new plant collected on La Palma by R. J. Andrews in 1960. This appears to be the earliest collection of the species. Since 1972 it has been found in the pine forests of Garafia and at other locations within the Caldera de Taburiente but reports of it growing near El Cabrito (Mazo) have not been confirmed. In 1983 A.S.G. also collected the plant on the island of Tenerife.

With some adjustments, Van der Maesen (1972) bases his classification of the genus *Cicer* on Linczveski's (1948) concept of Popov's (1929) system and places the type species, *C. arietinum* L. in subgenus *Pseudononis*, section *Monocicer*, series *Arietina*. This placement is nomenclaturally incorrect as following Article 22.1 of the International Code of Botanical Nomenclature (1983) 'the name of any subdivision of a genus that includes the type of the adopted, legitimate name of the genus to which it is assigned is to repeat that generic name unaltered as an epithet . . .'. Thus series *Arietina* should be replaced by series *Cicer*, section *Monocicer* by section *Cicer* and subgenus *Pseudononis* by subgenus *Cicer*. This necessary nomenclatural change is, however, incidental to the placing of the new species as it clearly cannot be comfortably placed, taxonomically, in either of the two subgenera recognised by Van der Maesen having flower size and calyx characteristics intermediate between the two. The combination of characteristics of this remarkable species distinguishes it from all other known species of *Cicer* and it has no obvious affinities with any of the taxa dealt with by Van der Maesen.

After only slight hesitation we here propose a new subgenus of *Cicer* in which to place the new species.

Cicer subgenus ***Stenophylloma*** Santos Guerra & G. P. Lewis subgen. novum
a subgen. *Cicere* floribus majoribus, a subgen. *Viciastro* M. Pop. calyce leviter

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†For details of the relationship between *Cicer* and members of the tribe *Viceae* the reader's attention is drawn to Kupicha's excellent 1977 and 1981 papers.

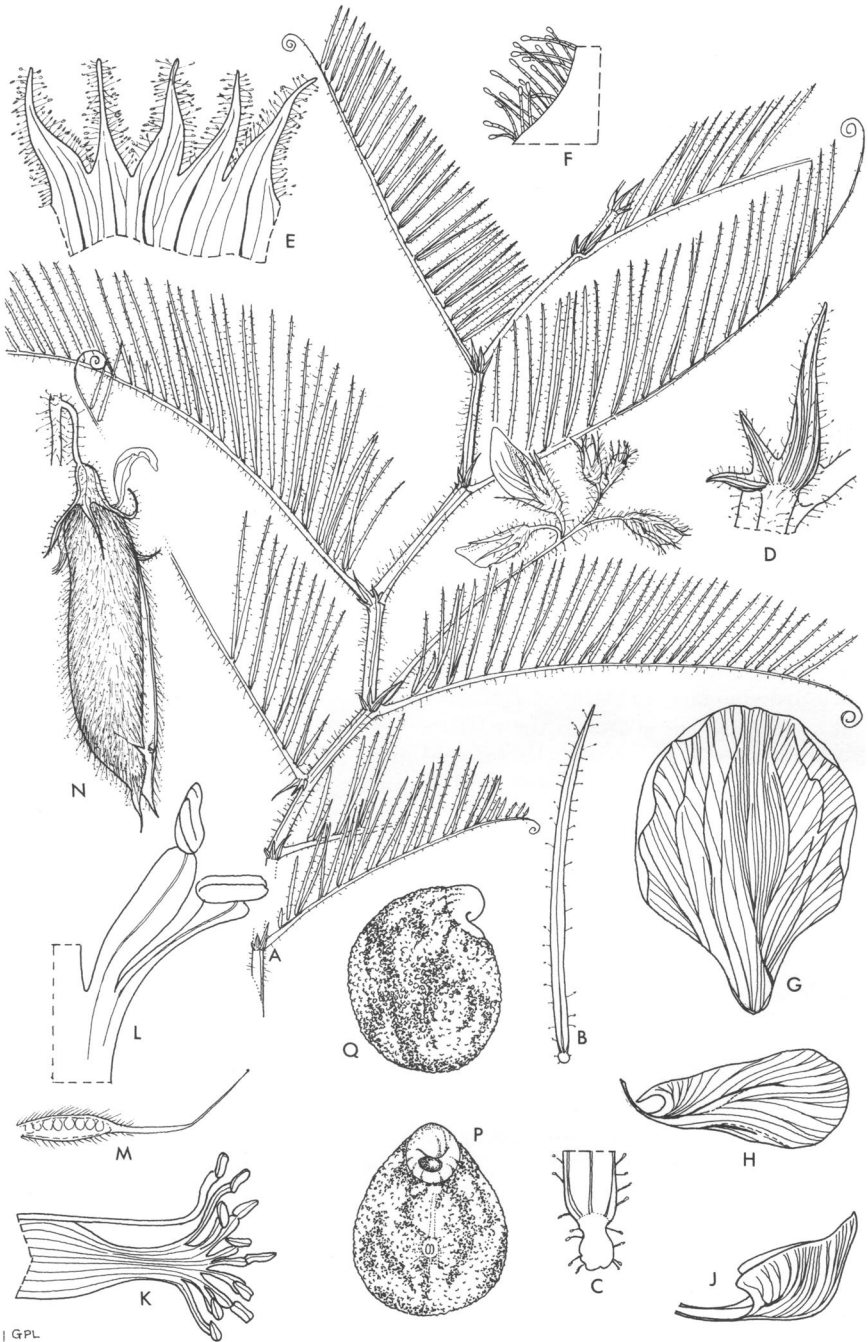


FIG. 1. *Cicer canariense*. **A** habit $\times \frac{2}{3}$; **B** leaflet $\times 2$; **C** pulvinus at leaflet base $\times 8$; **D** stipule $\times 4$; **E** calyx (opened out) $\times 2$; **F** section of calyx tooth showing gland tipped hairs $\times 8$; **G** standard petal $\times 2$; **H** wing petal $\times 2$; **J** keel petals $\times 2$; **K** staminal sheath $\times 2$; **L** two alternate stamens $\times 10$; **M** pistil $\times 2$; **N** fruit $\times 1\frac{1}{4}$; **P** seed (front view) $\times 6$; **Q** seed (side view) $\times 6$; **A** & **D** from *Andrews* R117, **B**, **C** & **E**–**M** from *Santos* & *Fernández* s.n. (Aug. 1983), **N** from *Santos* s.n. (Sept. 1972), **P** & **Q** from *Santos* s.n. (2 Aug. 1983). Drawn by G. P. Lewis.

gibboso lobis calycis aequalibus et ab ambobus foliis propriis 30-foliolatis foliolis linearibus perinsigne.

Cicer canariense Santos Guerra & G. P. Lewis sp. nov. a specibus omnibus adhuc descriptis foliolis linearibus integris differt; praeterea combinatione characterum viz. habito perenni, inflorescentibus 5-floris, foliis simpliciter cirrhatis, floribus 16 mm excedentibus et stipulis dentatis distat. Typus: Canary Islands, La Palma. Santos & Fernández s.n. (holotypus ORT; isotypus K).

Vicia sp. nov. in Vegetación y Flora de La Palma: 207 colour photograph of habit, 208 (1983).

A multiple-stemmed perennial herb usually forming low compact clumps but sometimes scrambling to 2 m; leaves paripinnate ending in a simple (i.e. unbranched) tendril; leaflets in (20–)25–30 opposite to subopposite pairs (on mature leaves), linear, entire, mucronate, 15–30 × 0.5–1 mm; stipules dentate with 2–4 subulate teeth one of which 5–7 × 2–3 mm, always longer than the other(s), peduncles, pedicels, calyces and fruit clothed in abundant multicellular gland-tipped hairs; flowers in axillary racemes with up to 5 flowers per raceme; peduncles 3.5–8 cm, without awns; pedicels 0.5–1 cm, reflexed in fruit. Calyx gibbous at base, tube 3–4 mm long, teeth narrowly triangular, subequal, 7–8 mm long. Corolla variably violet or pinkish, standard with darker purple venation and keel petals with a slightly darker purple apex; standard elliptic-obovate, 16–20 × 13–14 mm, venation highly anastomosed and complex; wing petals obovate, 15 × 5.5–6.5 mm, with some folding (but without petal sculpturing) and a hooked basal tooth; keel petals with a ± triangular blade, 14 (including a claw of 5 mm) × 5 mm. Stamens 9 + 1, the fused portion 9 mm in length, filaments of two lengths but all with an inflated apex; anthers ± uniform but alternately basally or dorsally fixed with the basally fixed anthers on longer filaments. Ovary covered with multicellular gland-tipped hairs, 8-ovulate; style 6–7 mm long tapering to a simple terminal stigma. Fruit an inflated, cylindrical pod initially opening along the lower suture, 6–8-seeded. Seeds black, or brown with sometimes a reticulate pattern of darker spots, subglobular with a prominent apical beak, profusely and finely tuberculate, 4 × 3 mm, the hilum with a prominent raised edge. Germination hypogeal, the seedlings with a purplish-red stem and covered in gland-tipped hairs, first leaf scale-like, minute 2–2.5 mm long, second leaf also scale-like and minute but with a pair of tiny stipules, 3 mm long, third leaf 3-foliolate with alternate, linear leaflets and evident stipules. (Fig. 1); 2n = 24.

Vernacular name: 'Garbancera' as told to A.S.G. by a Garafian local inhabitant who also claimed that the plant grew only in remote areas, being a favourite forage of goats and thus having been grazed out in the more accessible areas.

CANARY ISLANDS. La Palma: Caldera de Taburiente, alluvial soils in pine forest near to Lomo de Las Chozas, 1200 m, Aug. 1983, Santos & Fernández s.n. (holotype ORT; isotype K); same locality, Sept. 1972, Santos s.n. (K, ORT); same general locality at 1100 m (seed only), 2 Aug. 1983, Santos s.n. (K, ORT); Dos Aguas, wet sandy places at edge of ravine, 900 m (seed only), Aug. 1974, Santos s.n. (ORT); El Passo, La Caldera, stream down side of Caldera, 1300 m, 20 Aug. 1960, Andrews R117 (K); Barranco de Las Grajas (Garafia), humid

pine forest, 1400 m, 21 April 1973, *Santos* s.n. (ORT); Barranco de Briestas (Garafia), shady slopes in dry pine forest, 1000 m (locality record only); Tenerife: Tamadaya (Arico), very scarce in the bottom of narrow valleys, 1300 m, Dec. 1983, *Santos* s.n. (K, ORT).

Cicer canariense is the only native species of *Cicer* in the Canary Islands. Centres of diversity within the genus are concentrated in Central and Western Asia with extensions into Eastern Asia and the Mediterranean. In addition, one species is found in Ethiopia and southeast Egypt and one is endemic in Morocco (Van der Maesen 1972). To date, the new species has only been found in the dry mesocanarian bioclimatic zone characteristic of the canarian pine forests although within this zone it tends to seek out the more humid habitats. In the Caldera de Taburiente most of the populations are found close to small, permanent streams.

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