

## A Contribution to the Study of *Lotus* L. on Gran Canaria

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### Resumen

Contribución al conocimiento del género *Lotus* L. en Gran Canaria: Se describe *Lotus callis-viridis* como nueva especie, y se presenta una nueva combinación: *L. kunkelii*.

Recent investigations of the genus *Lotus* in the Canary Islands (Davis, 1971) have necessitated the publication of the following taxonomic notes concerning those species of Gran Canaria.

1. The critical study of a number of herbarium specimens collected by D. Bramwell and C. J. Humphries on the west coast of the island between Tirma and Barranco Aldea de San Nicolás in March 1971 has shown that they represent a previously undescribed species belonging to section *Pedrosia* (Lowe) Brand.

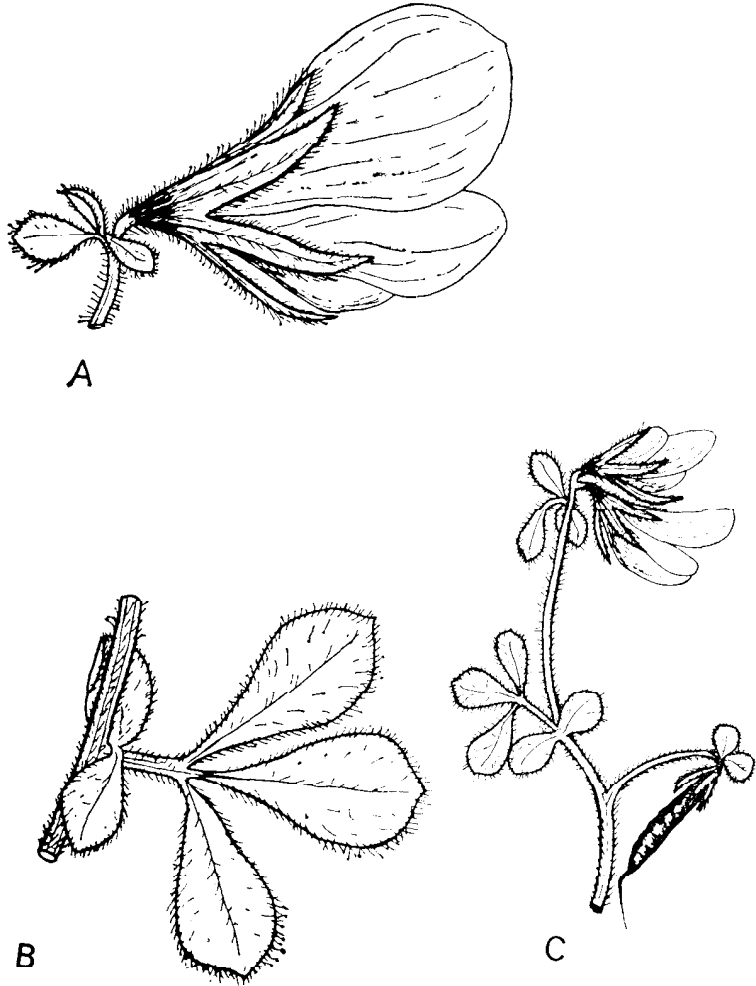
***Lotus callis-viridis* Bramwell & D. H. Davis, sp. nov.**

*Lotus emeroides* R. P. Murray affinis, a qua imprimis differt floribus magnis, calyce tubo brevissimo, et carina apice non purpurata.

Holotypus: Gran Canaria, Andén Verde, Los Herreros, Paso del Herrero, 28. 3. 1971, D. Bramwell & C. J. Humphries 3156. In Herb. Univ. Radingensis (RNG) servatus.

Sparsely villous, much-branched perennial with woody stock. Stems up to 40 cm, procumbent. Rhachis 2-4 mm,  $\pm$  as long as the lower leaflets. Three upper leaflets 3-5 (—8)

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Legend to Fig. 1 *Lotus callis-viridis*, A. flower, B. leaf, C. general aspect. (drawn by Mrs. R. M. Schouster).

x 2-3.5 mm, obovate to triangular, the apex rounded; lower pair of leaflets 2-4 x 2-3 mm, broadly elliptical, the base rounded or occasionally subcordate. Peduncles up to 3 cm, slender, 1— to 2—flowered. Calyx 8-9 mm, the ribs and margins sparsely villous; tube 2-4 mm, the teeth more than

twice as long as tube. Corolla 15-17 mm; standard equalling or exceeding the keel. Legume 10-20 x 2 mm. (Fig. 1).

*Distribution* (Fig. 2).

*Lotus callis-viridis* is found on basalt cliffs between 50 and 200 m.s.m. at Andèn Verde near Los Herreros on the west coast of Gran Canaria. It is frequent in this single locality but has not been recorded from elsewhere.

2. *Lotus lancerottensis* Webb & Berth. subsp. *kunkelii* Esteve.

The taxon known from the coastal region of Barranco Jinamar on Gran Canaria was described by Esteve (1972) as a subspecies of *L. lancerottensis*. However, further study has shown that it differs from that species in a number of characters (table 1) which in our view suggest that it is best considered as a distinct species.

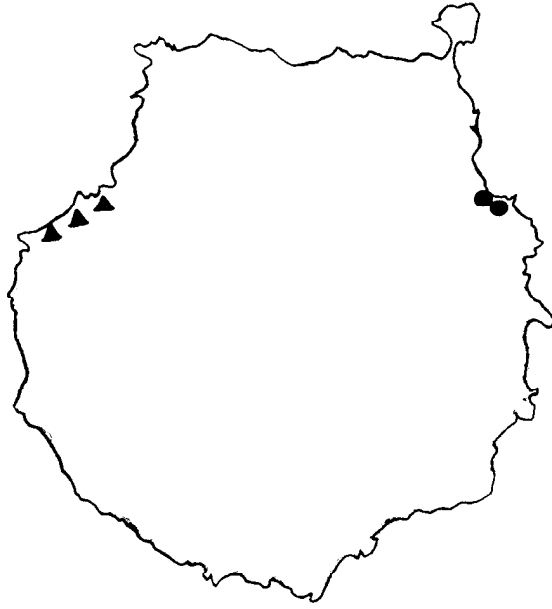
<i>L. kunkelii</i>	<i>L. lancerottensis</i>
stem hairs patent	stem hairs appressed
mature stems densely villous	Mature stems subglabrous
Leaflets more or less sessile, very succulent, suborbicular.	Leaflets usually with pronounced petiole, not usually succulent, broadly spatulate.
Calyx ca. 6 mm; teeth shorter than or equal to the tube.	Calyx 7 - 8 mm; teeth longer than the tube.
Surface of mature legume rough	Surface of mature legume $\pm$ smooth.

Table 1. The morphological differences between *L. kunkelii* and *L. lancerottensis*.

***Lotus kunkelii*** (Esteve) Bramwell & D. H. Davis, *stat. nov.*

Basionym *L. lancerottensis* Webb & Berth. subsp. *kunkelii* Esteve, *Cuad. Bot. Canar.* 14-15: 44 (1972).

*Lotus lancerottensis* is listed by Esteve (1972) as a vicariant of *L. creticus* L., a widespread species of the Mediterranean region. These two species belong, however, to different sections of the genus (*L. lancerottensis* to section *Pedrosia* (Lowe) Brand; *L. creticus* to section *Lotea* (Medicus) Willk.). The true Mediterranean vicariant of the endemic Canarian *Lotus* species is *L. arenarius* Brot. which belongs to the section *Pedrosia* and is found in the Iberian Peninsula and Morocco.



Legend to Fig. 2 Gran Canaria: Distribution of  $\blacktriangle$ , *Lotus callis-viridis* and  $\bullet$  *Lotus kunkelii*.

#### Literature

- Davis, D. H. 1971: Studies in the *Lotus glaucus*-*L. sessilifolius* complex in Macaronesia. *M. Sc. Thesis*, University of Reading (unpubl.) 100 pp.
- Esteve Chueca, F. 1972: Nuevas Referencias a la Vegetación Litoral de Gran Canaria. *Cuad. Bot. Canar.* 14-15: 43-48.