

***Vicia nataliae* spec. nov., a new endemism from La Gomera, Canary Islands (Magnoliophyta, Fabaceae)**

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**ABSTRACT:** In this paper we describe *Vicia nataliae* U. et A. Reifenger, spec. nov., an endemic plant from La Gomera, recently found by the authors.

**Key words:** *Vicia*, endemism, La Gomera, Canary Islands.

**RESUMEN:** Se describe *Vicia nataliae* U. et A. Reifenger, spec. nov., planta endémica de La Gomera, recientemente descubierta por los autores. Palabras clave: *Vicia*, endemismo, La Gomera, Islas Canarias.

DESCRIPTIO

Planta intermedia inter *V. cirrhosam* Chr. Sm. ex Webb et Berth. et *V. scandentem* Murr. differt a *V. cirrhosa* foliis et stipulis latioribus, dentibus calycis omnibus sat insignibus, inter se disparibus, numero florum in racemo notabiliter maiore, corolla longiore, semine quinta parte maiore, hilo fere dupla longitudine et lente longius a radícula distante; a *V. scandente* caule debiliore, non lignificato et brevior, numero florum in racemo et foliolorum inferiore, foliolis brevioribus, indumenti absentia, legumine angustiore, diametro minore et numero maiore seminum, colore testae et hilo brevior.

Caulis angulatus, tenuis, glaber, a base multipliciter ramificatus, usque 2 m longus, base tenaci, quamquam filiformi, flexibili, parte florifera terminali minimum 50 cm longa, unaquaque fere axila foliari racemo florali oriundo.

Folia paripinnata, glabra, plerumque 4 paribus foliolorum alterne dispositorum, obtuse lanceolatorum, 14-18 mm x 2,5-4 mm, in cirrhum vel bi- vel trifidum protracta.

Stipulae binae, nusquam absentes, ca. 2 mm longae, pares inter se, sed forma valde variabili vel inter singulos caules vel in eodem caule, mox tricuspidae, mox late ovaes et acuminatae, 1-1,5 mm latae, semper autem dente laterali, paene eadem longitudine ac principalis, angulo fere recte divergente, glabrae vel, quamquam raro, singulis pilis sparsae.

Racemi florales axillis foliaribus nascentes et rhachim foliolatam ca. duplo exsuperantes usque 18 flores ferunt.

Calyx dentibus inter se plane disparibus, inferiore ca. duplo longitudinis superiorum, at tamen superioribus semper nitide proeminentibus, glabris.

Corolla 12-15 mm longa, alba, sed venis violaceis in vexillo el lata macula violacea apice carinae ornata colorationem pallide violaceam simulat; carina 11-13 mm longa, alae 15-17 mm, vexillum apice emarginatum, medio leniter constrictum, 5 venis maioribus violaceis lineatum.

Stylus 11 mm longus, lateraliter compressus, fere 1 mm latus, stigmatе piloso, praesertim extrorsum, 1,1-1,3 mm longo.

Legumen 40-50 mm x 5 mm, stipitatum, subcompressum, fere rectum, breviter mucronatum, 7-9 spermum, superficie laevi.

Semen compressa ellipsoideum, saepius in formam oblique subquadrangularem modificatum, 3-3,5 mm x 2-2,3 mm x 1-1,8 mm, concavitate prope radiculam plus minusve distincte impressa, testa laeva, albo-griseo maculata et insuper punctillis fuscis agglomeratis vel disseminatis picta; hilo quintam partem circuitus decurrente, lente quarta vel tertia parte longitudinis hili supra posita, lateris recti termino.

Floret: februario, fructificat aprili vel maio.

Habitat: Sabinar, in regione septentrionali Iunoniae minoris (La Gomera)

Locus originis: Lomo de la Culata, 350 m NN.

Leg.: U. et A. Reifenberger, 11 februario 1996.

Holotypus: In herbario TFC (Universitatis Nivariensis) numero 41.356 conservatus.

Isotypi: K, Ma.

Hanc plantam Nataliae Wildpret Zugaza dedicamus.

#### SUMMARIZED DESCRIPTION

Herbaceous plant in many characters intermediary between *V. cirrhosa* and *V. scandens*, predominantly glabrous, stem up to 200 cm, but thin and tough, not lignified, with flowering part of at least 50 cm, bearing inflorescences on nearby each leaf axil. Paripinnate glabrous leaves, with 4 pairs of obtuse-lanceolate leaflets 14-18 mm in length and 2,5-4 mm in width, with bi- or trifid tendrils.

Stipules broadly ovate, tricuspidate or acuminate, but everywhere with divergent lateral tooth, on each leaf axil up to the uppermost ones.

Racemes of inflorescences up to 18-flowered, twice as long as leaf rhachis.

Calyx slightly gibbous with notably unequal teeth, the inferior twice as long as the upper ones (which nevertheless nowhere tend to be reduced or absent), so that, combined with the general abaxial lengthening of calyx, the inferior tooth is equalling the length of tube.

Corolla 12-15 mm long, basically white, but marked with violet veins on the standard and a violet spot on the tip of keel, it looks somewhat violet tinged, keel 11-13 mm, wings 15-17 mm, standard emarginate and slightly platonychoid.

Style laterally compressed, hairy on the apex, particularly on the abaxial side.

Legume distinctly stipitate and slightly compressed, nearly straight, glabrous, with 7-9 seeds.

Seeds 3-3,5 x 2-2,3 x 1-1,8 mm, in shape of compressed ellipsoid, often with slightly oblique quadrangular outline, with a shallow concavity near the micropyle, hilum length 1/5 of circumference, lens in a distance of 1/4-1/3 hilum length in direction of the end which is opposite to the concavity.

#### DIAGNOSIS AND DISCUSSION

*Vicia nataliae* can doubtlessly be classified in the sectio *Cracca* Dum., as evidenced by his laterally compressed style with apical pubescence and his platonychoid vexillum, the stipitate fruit being common to the subgenus *Vicilla*, as defined by KUPICHA (1976), the same as the peduncles distinctly longer than rhachis of subtending leaf.

At first sight it presents itself as intermediary species between *V. cirrhosa* and *V. scandens*, respecting some floral characters as the number of flowers per inflorescence (up to 18 while *V. cirrhosa* does not exceed the maximum of 12, *V. scandens* reaches up to 30), the calyx shape (the abaxial teeth in *V. nataliae* equalling length of tube, but not exceeding it like in *V. scandens*, the upper pair in *V. nataliae* never being so reduced as in *V. cirrhosa*), the length of corolla (max. 15 mm versus max. 12 mm in *V. cirrhosa*, max. 18 mm in *V. scandens*), some quantitative and structural characters in fruit and seed, such as width of pod (5 mm versus 3-4 mm in *V. cirrhosa*, but up to 8 mm in *V. scandens*), the length of seeds (max. 3,5 mm versus max. 3 mm in *V. cirrhosa*, but 5 mm in *V. scandens*), the relative length of hilum (1/5-1/6 of circumference in *V. nataliae* versus 1/8-1/10 in *V. cirrhosa*, while 1/3 of circumference in *V. scandens*), the position of lens (1/4-1/3 hilum length forward from the micropyle-opposite end of hilum, while in *V. cirrhosa* it is distanced 1/2-1 hilum length from the end of hilum, in *V. scandens* on the other hand, it is separated from it by a very short distance).

The foliar characters, however, establish a very independent pattern: The leaflets are shorter than in both *V. cirrhosa* and *V. scandens* (max. 18 mm versus max. 30 mm in *V. cirrhosa* and max. 38 mm in *V. scandens*), while equalling in width (2,5-4 mm) the larger species.

Also in stipules *V. nataliae* maintains constant a specific pattern -more or less broad ovate with divergent lateral teeth- up to the most apical whorls, never reduced to simple entire forms as in *V. scandens* or to linear ones as in *V. cirrhosa*.

The hypothesis that our species could be an hybrid between *V. scandens* and *V. cirrhosa* was taken in account in sight of the intermediary ones of his characters, but had to be rejected by conscientious field observation: The nearer vicinity (500 m around) did not furnish presence of any possible parent, and beyond it, our 14 years thoroughly field observation in La Gomera, particularly intense in the north of the island, had to confirm the absence of *V. scandens* in this island, maintained over all up today editions of the Checklist of vascular plants by HANSEN & SUNDING.

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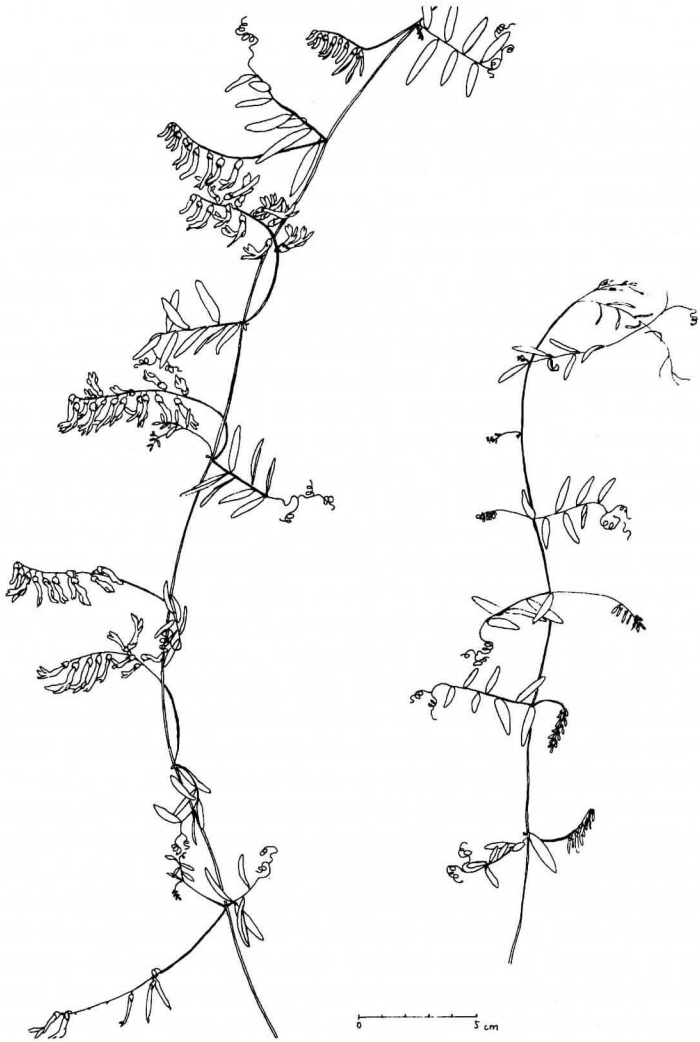


Fig. 1. *Vicia nataliae* U. et A. Reifenberger: Inflorescencebearing terminal part of stem.

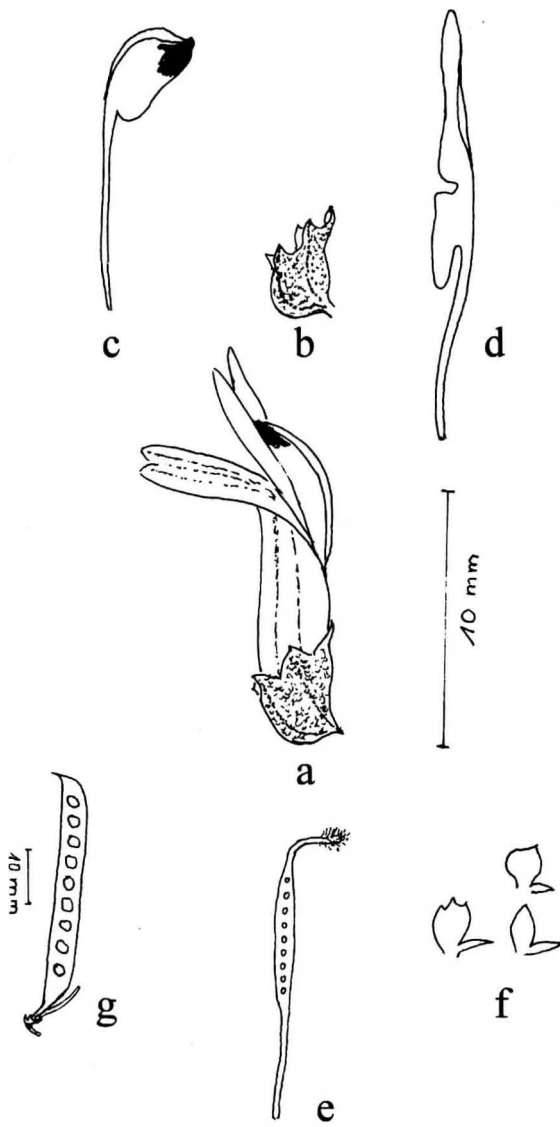


Fig. 2. a) flower, b) calyx shape variant with more unequal teeth, c) keel, d) wing, e) gynoeccium, f) different variants of stipule shape, g) legume.

