

Viola parnonia (Violaceae), a new species from southern Greece

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Viola parnonia Kit Tan, Sfikas and Vold (Violaceae), a new species endemic to the peak of Mt Parnon in the Peloponnese, southern Greece, is described and illustrated. Its affinities are with *V. euboaea* (Halácsy) Halácsy and *V. graeca* (W. Becker) Halácsy.

Key words: new species, Peloponnese, southern Greece, taxonomy, *Viola*, Violaceae

DESCRIPTION

Viola parnonia Kit Tan, Sfikas & Vold, *species nova* (sect. *Melanium* Ging.) (Fig. 1)

A Viola graeca differt foliis inferioribus petiolo distincto et lamina orbiculato-ovata usque oblongo-ovata; atque a *V. euboaea* differt foliis superioribus confertis petiolo indistincto et lamina pubescente, elliptico-ovata usque elliptico-lanceolata basin versus sensim attenuata.

Type: Greece. Peloponnisos, Nomos Arkadias/Lakonias, Eparchia Kinourias/Lakedemonos: (Parnonas) in cacumine montis Malevo, 5 000'–7 000', 7/19.VI.1857, *Orphanides Fl. Gr. Exs. no. 514* (holotype G-Boiss, isotypes M, WU-Hal).

Herbaceous perennial 5–15 cm tall. Stems slender, 1-flowered, creeping and leafless at base. Leaves alternate, simple, pubescent, 1.5–3 cm. Blade of lower leaves orbicular-ovate to oblong-ovate, crenate, abruptly contracted into the peti-

ole which is equalling or longer than blade; upper leaves closely set, narrowly elliptic-ovate to elliptic-lanceolate, obtuse, 2-toothed or entire, gradually narrowed towards base. Stipules well-developed; in middle part of stem deeply 3–5-partite, 0.5–1 times as long as the petiole of the corresponding leaf; middle (longest) lobe linear-spathulate, entire; lateral lobes linear-lanceolate, near base of stipule. Peduncles bibracteolate, 3–7 cm long, recurved near apex. Sepals 5, broadly oblong-lanceolate, 7–10 × 1.5–2 mm, acute; margins hyaline, appendages truncate, denticulate. Corolla zygomorphic, deep bluish-violet; lower petal paler, 20–25 mm long including the 10 mm, straight to slightly curved spur; lateral petals upwardly directed. Stamens 5; lower 2 anthers with triangular appendage. Ovary superior, 3-carpelate, 1-loculate with 3 parietal placentas; style globose. Capsule ca. 10 mm long, dehiscent by 3 valves. Seeds numerous, obovate, ca. 2 × 1 mm, pale yellowish-brown.

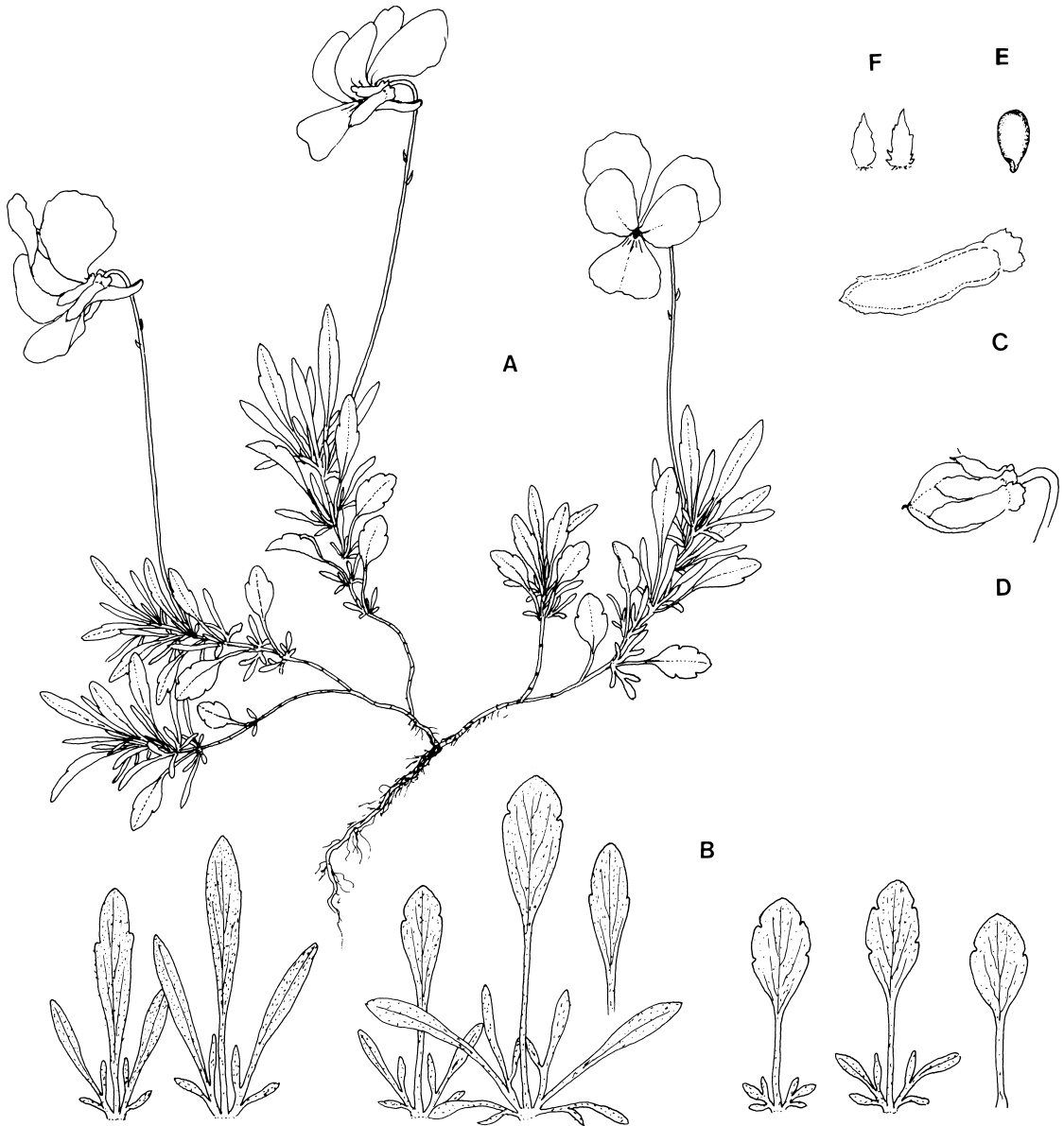


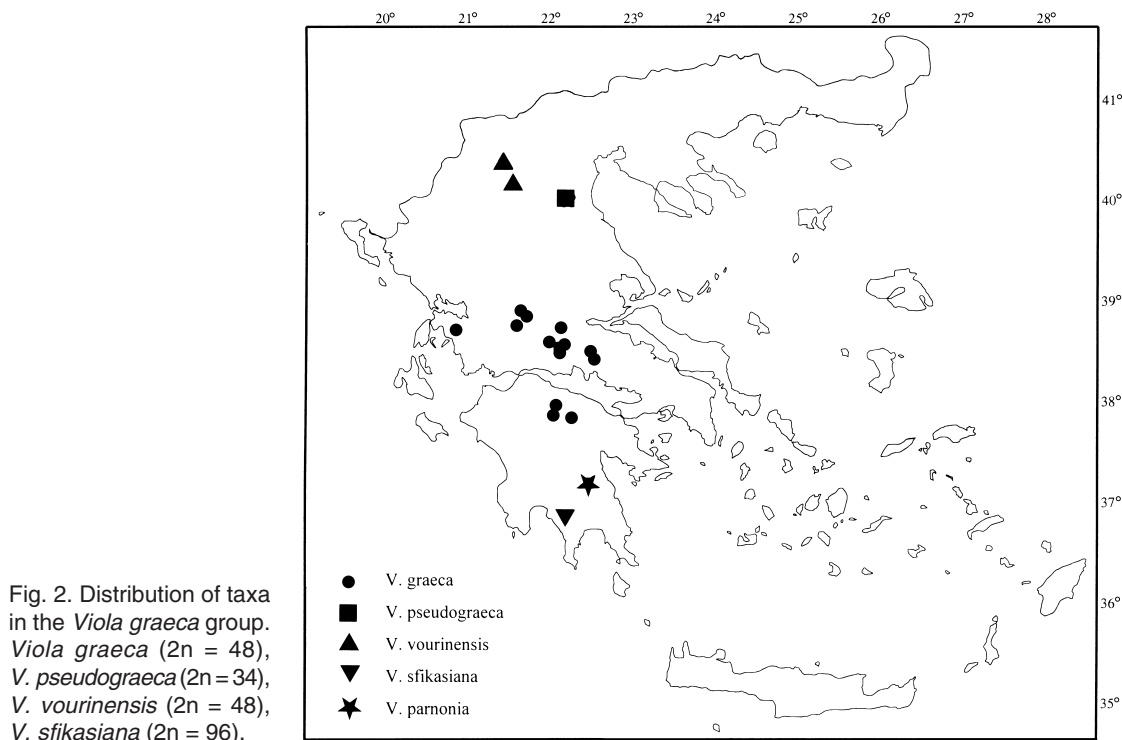
Fig. 1. — A: Habit of *Viola parnonia* Kit Tan *et al.*, x 1. — B: Upper, middle and lower leaves with stipules (left to right), x 2. — C: Sepal with appendage, x 3. — D: Capsule, x 2. — E: Mature seed, x 5. — F: Bracteoles, x 5.

Limestone rock crevices, 1 850–1 930 m.
Flowering in June.

Additional specimens examined (paratypes). — **Greece.** Peloponnisos, Nomos Arkadias/Lakonias, Eparchia Kinourias/Lakedemonos, Parnonas, summit area of Megali Tourla (37°17' N, 22°37' E), limestone rock crevices, 1 850–1 930 m, 16.VI.1996, flowering and fruiting, *Kit Tan & G. Vold 17491* (C, G); Megali Tourla peak, 6.VI.1996, *Sfikas 10438* (10439–10445 are separately numbered collections of the same gathering, all in Herb. Sfikas); *ibid.*, 12.VI.1995, *Berg-*

meier 95-397 (C, sub nom. *V. graeca*), 500 m south of the highest peak, 25.V.1989, *Oxelmann & Tollsten 1209* (C).

The first collection of *Viola parnonia* must have been made by Th. Orphanides from the summit of Mt Parnon in the southeastern part of the Peloponnese, “in montibus Graeciae, in cacumine montis Malevo”, *Orphanides Fl. Gr. Exs. no. 514*, 7/19 Jun. 1857. Material from this collection is represented in several major European herbaria.



It was listed among the several syntypes cited for *Viola heterophylla* Bertol. var. *graeca* W. Becker by Becker (1905) and determined by Boissier (1867) as *Viola gracilis* Sibth. & Sm. Raus (1986) examined material from Mt Parnon (*V. parnonia*) and Mt Taigetos (*V. sfikasiana* Erben) preparatory to his account of *Viola* in the Mountain Flora of Greece but, based on evidence available at that time, treated the entities from both mountains as belonging to a single, highly polymorphic species, *V. graeca* (W. Becker) Halácsy. However, he noted that the material from Parnon had basal leaves with a somewhat orbicular blade and distinct petiole and it was his later opinion (pers. comm. 1996) that *V. sfikasiana*, with a high chromosome number (2n = ca. 96, *Strid 15246*, C!) was a 'good' species. Erben (1985: 478) in his monograph of *Viola* sect. *Melanium* cited *Orphanides no. 514* as one of W. Becker's syntypes of *V. graeca* s. lat. He already was aware that the material from Parnon belonged to a separate taxon but refrained from formally describing a new species owing to lack of cultivated living material and karyological data (Erben 1985: 497).

Two of the present authors (KT and GV) went to Mt Parnon in June 1996 to photograph the rarely

collected *Astragalus agraniotii* which grows only in the summit area. The original description of this species was based on material collected by Orphanides in June 1852 (G-Boiss; WU-Hal). It is stated in Mountain Flora of Greece 1 (Strid 1986: 472) that *A. agraniotii* had apparently not been seen since 1896. However, the species had already been rediscovered in the same area by W. Lippert in 1986, by E. Bergmeier in 1995 and KT and GV in 1996. It was while traversing the limestone screes at 1 850–1 900 m that KT and GV first met the *Viola*, the existence of which they had previously been alerted to by G.S. The latter had discovered the plant nearly ten years ago and had thought it was different from *V. graeca* but kept no herbarium material on which to base further investigations. The collections now made by the individual authors are ample, in full flower and with mature capsules.

Viola parnonia, endemic to Mt Parnon, is obviously related to *V. euboica* (Halácsy) Halácsy, endemic to Euboea. In fact if *V. euboica* is to be maintained as a distinct species, one has to treat the Parnon violet at species rank as it is geographically isolated and also unique in its total combination of characters. It closely resembles *V. eu-*

boea in the shape of its lower leaves and stipules but differs by its leaf indumentum (glabrous in *V. euboica*) and presence of closely set, elliptic-ovate to lanceolate upper leaves without distinct petiole. Raus (1986: 630) also notes that *V. euboica* is "an often misunderstood species distinguished from *V. graeca* on the orbicular to ovate-oblong leaves with distinct petiole and on the lack of linear-lanceolate leaf blades in the upper part of the stem". Both *V. euboica* and *V. graeca* belong to Sect. *Melanium* Ging. which is represented by several complex taxa in Greece. The taxa maintained by Erben (1985) in the *V. graeca* group are geographically isolated (see Fig. 2) and although closely resembling each other, there is no morphological overlap when a total combination of characters is considered. *V. parnonia* differs from *V. graeca* by its orbicular-ovate to oblong-ovate lower leaves with distinct petiole, and the size and shape of the terminal stipule lobes. On Mt Parnon it is restricted to windswept stony places in limestone rock crevices above timberline near the summit. In the immediate vicinity are *Achillea umbellata* Sm., *Anthemis laconica* Franzén, *Asperula malevonensis* Ehrend. & Schönb.-Temesy, *Astragalus depressus* L., *Malcolmia* sp., *Nepeta orphanidea* Boiss., *Sideritis clandestina* (Bory & Chaub.) Hayek, *Stipa pennata* L., *Teucrium montanum* L. and nearer the summit, the rare *Astragalus agraniotii* Boiss.

A note on *A. agraniotii* is worthy of mention. This species is obviously related to *A. idaeus* Bunge, a Cretan endemic known only from two 19th century collections and now possibly extinct. Both belong to Sect. *Hololeuce* Bunge which is represented by several species in Anatolia. Possibly related are *A. sibthorpianus* Boiss. from the Bithynian Olympus (Ulu Dagh) as well as *A. pae-cilanthus* Boiss. & Heldr. and *A. stenosemius* Boiss. & Noë from S Anatolia. No conservation measures are taken for this rare species at present;

it is safe on its isolated mountain top. Cultivation has not been attempted.

Parnon is a phytogeographically interesting mountain range which is relatively less explored as compared with the Taigetos range in the west which is fairly well botanized. Some species previously thought to be confined only to Taigetos have recently been found here and vice versa. A most remarkable recent discovery is the occurrence of *Juniperus drupacea* Labill. on Taigetos; this species is known to exist in Europe only on Parnon. Other species found on Parnon indicate phytogeographical links to Crete, e.g., *Bufoia stricta* (Sm.) Gürke but there are also widely disjunct occurrences of species otherwise known from northern Greece, e.g., *Chamaespartium sagittale* (L.) P. Gibbs. Some remarkable recently discovered local endemics occur in rocky habitats on this mountain at low altitudes, e.g., *Petro-rhagia grandiflora* Iatrou and the white-flowered *Potentilla arcadiensis* Iatrou.

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