

## *Trifolium andricum* (Fabaceae), a new species from Greece.

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### Abstract

*Trifolium andricum* LASSEN is described as new from the islands of Andros and Tinos, Greece. As currently known it is endemic to the area and vicariant for the closely related *Trifolium pallidum*, but can be expected to occur elsewhere, perhaps in W Anatolia.

**Key words:** Flora of Greece, *Trifolium*, *T. andricum* sp.n., Fabaceae.

### Kurzfassung

*Trifolium andricum* LASSEN wird von den Inseln Andros und Tinos (Griechenland) neu beschrieben. Soweit bisher bekannt, ist die Art endemisch und vikariiert mit *Trifolium pallidum*. Möglicherweise gibt es sie aber auch in anderen Gebieten, vielleicht in Westanatolien.

Among the rich collections from the Cyclades kept in Lund [LD] are several specimens similar to *Trifolium pallidum* WALDST. & KIT., but consistently differing in so many characters that they deserve description as a new species.

*Trifolium andricum* LASSEN, nova species e sectione *Trifolium*, a *T. pallido* differt internodiis superioribus pilis 1 - 1.5 mm longis patentibus nec ad 1 mm appressis obsitis; stipulis breviter nec longe caudatis; capitulis et floribus majoribus; vexillo emarginato (nec acuto ad obtuso), alas 2 - 3 nec 1 - 1.5 mm carinamque 3.5 - 5 nec 2 - 3 mm superante; fauce calycis fructiferi sine callositatibus lateralibus.

Holotypus: Graecia, Andros, 4 km SE of the top of mt Kouvara, rivulet ravine near the road. Alt. 300 m. 1968-05-22, Snogerup & Bothmer 32759 [LD].

Annual plant, usually robust. Stems single or often several, branched above, (1 -) 2 - 3 mm thick and (5-) 25 - 50 cm long, rather glaucous, lower and middle internodes glabrous, uppermost patent-pilose (hairs 1 - 1.5 mm long). Stipules ovate, free part abruptly contracted into an arista 3 - 4 mm long (in middle leaves), uppermost stipules whitish, broader than the rest and ciliate (sometimes also with patent hairs on surface near margin), lower stipules with conspicuous often dark veins, glabrous or with few cilia on the arista. Leaflets patent-pilose, obovate, those of uppermost leaves narrower, finely and sharply denticulate, lateral veins rather prominent. Heads shortly pedunculate or sessile, involucrate by uppermost stipules. Calyx-tube with 10 distinct veins, subglabrous to sparsely hairy on veins, obconical, 2.5 - 3.0 mm long (measured to upper sinus) and c. 2.5 mm wide at mouth when ripe, mouth slightly oblique, open but with a distal zone of short hairs. Upper calyx-teeth united for c. 0.5 mm; all filiform from a triangular 3-veined base, blunt-tipped, patent-pilose, subequal or lowermost tooth up to 1 mm longer, this 6 - 9 mm long. Corolla whitish to light pink, (12 -) 15 - 20 mm long;

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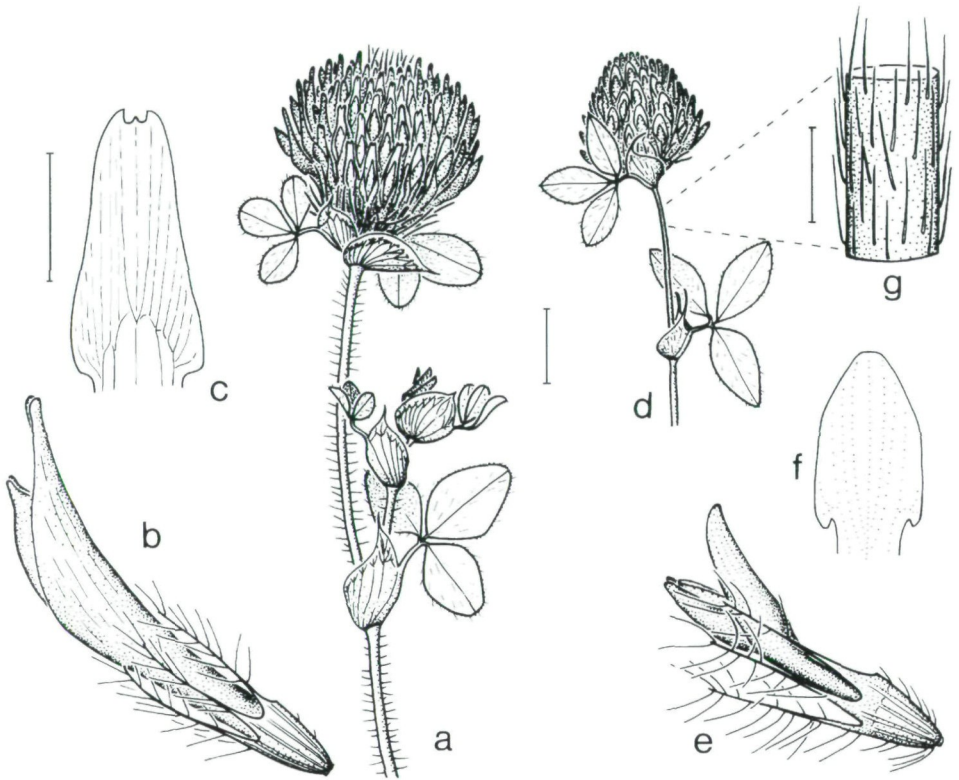


Fig. 1: (a - c) *Trifolium andricum* sp.n., (d - g) *Trifolium pallidum*; (a, d) branch with inflorescence, (b, e) flower, (c, f) blade of vexillum, (g) piece of upper stem with appressed hairs. Bar = 10 mm for a, d; 5 mm for b, c, e, f; 1 mm for g. Drawn by Mrs. Monica Osterkamp-Madsen.

vexillum to 2.5 mm broad when flattened, emarginate, 2 - 3 mm longer than wings and 3.5 - 5 mm longer than keel. Fruit thin-walled with a thick and shiny apical cap, seed light to dark brown, slightly flattened laterally, c. 1.5 mm wide.

The differences from *T. pallidum*, clearly the most similar species, are several: stem usually stouter, with all hairs long and patent (not short appressed); stipules with relatively much shorter arista (less than half as long as basal part of stipule, not more than half as long to equalling basal part); corolla longer (15 - 20, not 10 - 14 mm), with vexillum broad at tip and distinctly emarginate (not tapering, acute to obtuse or slightly emarginate), more exceeding both wings and keel. The calyx differs from both *T. pratense* and *T. pallidum* in its mouth being quite open even at maturity, with short hairs on the inside (the latter two species have at anthesis a bilabiate ridge, in fruit developing into a more or less distinct long-hairy callosity, that constricts the opening to a narrow vertical fissure).

*T. diffusum*, somewhat similar at first sight because of its long patent stem-hairs, differs substantially by the gradually tapering stipules.

*T. andricum* and *T. pallidum* are evidently related to *T. pratense*, which is often (at least in Greece) a very short-lived perennial flowering in its first year. They both differ from the latter in the consistently annual habit, more broadly obconical calyx-tube and less unequal calyx-teeth.

The widespread *T. pallidum* is apparently absent from the Cyclades, but occurs all around: in mainland Greece from the Peloponnisos to the NE, Evvia, N and E Aegean Islands and in Crete. In this way, it very distinctly displays the "Kykladenfenster" of RECHINGER (1950, p. 255). Throughout its large distribution, it seems to be rather constant (except for size of plant) and I have seen no material closely similar to *T. andricum*. There are a few exceptional specimens of *T. pallidum* from Peloponnisos with most hairs on stems patent (but also some appressed); in all other respects they are typical and not at all resembling *T. andricum*.

As yet, *T. andricum* is only known from Andros (with some adjacent islets) and Tinos, and the two species thus appear strictly vicariant. *T. andricum* is conspicuous with its large, whitish to light pink flower-heads and it grows in open, often disturbed habitats. It is therefore unlikely that it has been overlooked in the well investigated Aegean islands. The very restricted distribution of *T. andricum* is unexpected for a ± weedy species of *Trifolium*, and there are few species known to be endemic in Andros and Tinos. An explanation might be that the new species is introduced from its native area. But where is it then "native"? A reasonable suggestion would perhaps be SW Anatolia, floristically less well known than the Cyclades. *T. clypeatum*, a species of similar habitat, is distributed in Anatolia and E Aegean Islands and is also in Andros, it could provide a parallel.

Appendix: Material seen (all LD unless otherwise stated).

**Andros:** In the valley 1.5 - 2 km NW of Kallivari, 1968-06-12, Bothmer 34778. - 1.5 - 2 km WSW of the town of Andros. Phrygana and terraces, 50 - 150 m, 1968-06-14, Bothmer 34837. - (different parts of) The two-parted islet of Theotokos Vrakhos, 2 km S of Akra Gria, [20 m], 1968-05-24, Snogerup & Bothmer 33196, 33215. - ibidem, 1971-04-07, Snogerup & Gustafsson 42106. - ibidem, 1985-04-10, Snogerup 3573. - ibidem, 1991-04-30, Snogerup 7865 [+ B, UPA]. - Katakoilos, c. 3 km E of Batsi, 1990-04-11 Snogerup 6588. - The venetian castle ruin NE of the town [of Andros], 1991-04-30, Snogerup 7869 [+ C]. - Ateni, the beach area, 1995-04-28, Snogerup 12026. - C. 3 km S of the top of mt Rakhii. Wet spot among cultivations, 100 - 200 m, 1968-05-13, Snogerup & Bothmer 31503. - 1 - 1.5 km SSW - S of Opiso Meria, 450 - 550 m, 1968-05-17, Snogerup & Bothmer 32082. - E of the village Sanganiari, 400 - 500 m, 1968-05-21, Snogerup & Bothmer 32705. - 4 km SE of the top of mt Kouvara, rivulet ravine near the road, 1968-05-22, 300 m, Snogerup & Bothmer 32759. - C. 2 km N of the harbour of Korhion, 400 - 500 m, 1968-05-25, Snogerup & Bothmer 33260. - Between the villages of Remata and Arni. Schistose ground with *Quercus* and phrygana, 250 - 300 m, 1975-04-23, Stamatiadou 18290 [ATH].

**Tinos:** SE of Steni, 300 - 350 m, 1968-05-20, Runemark & Engstrand 36547. - Oxoburgo, 400 - 540 m, 1968-05-21, Runemark & Engstrand 36705. - Koumaros, 200 - 300 m, 1968-05-21, Runemark & Engstrand 36734. - The mt E of Falatados, 400 m, 1968-05-24, Runemark & Engstrand 37089.

### References

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