A new species of *Campanula* (*Campanulaceae*) from the island of Samothraki, NE Greece

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Received: September 17, 2010 ▷ Accepted: November 02, 2010

Abstract. *Campanula samothracica* (*Campanulaceae*) is described as a new species from the island of Samothraki in NE Greece. Within *Campanula* subgen. *Megalocalyx* it appears most closely related to *C. rimarum* a rare endemic from limestone rock in SW Anatolia.

Key words: *Campanula*, endemic, Greece, new species, Samothraki

During fieldwork on Samothraki (floristic region N Aegean, Nomos Evrou, Eparchia Samothrakis) an unusual species of *Campanula* was discovered in May 2010 from the southeastern part of the island. This area is remote from tourist facilities and has remained undeveloped for a long time. There is now a walking trail from Pachia Ammos to Kipos beach (*ca.* 10.5 km distance as the crow flies) which was opened by a local mountaineering group in 2007. The track is only partly marked and parts of it are a difficult rocky scramble; surely no botanist has visited this remote part of the island before. In June 2008 a single plant of this species was collected in the dried-out gravelly bed of the river Vatos. It was thought to be a variant of *C. erinus* s.l., and as no other material was found, no further investigations were carried out. Other than this, the *Campanula* has never been observed elsewhere on the island by the first author (BB) despite more than ten years botanical exploration of the area.

Fig. 1. *Campanula samothracica* in flower and early fruit (photo B. Biel).

Campanula samothracica Biel & Kit Tan, **sp. nov.** (Fig. 1).

Diagnosis: *Campanula samothracica* differt ab *C. rimarum* foliis inferioribus longioribus, 15–20 (nec 2–15) mm longis, pedicellis crassioribus (nec subfiliformibus), calycis sive corollae lobis externe non villosis. Area geographica per insulam Samothraki restricta (*C. rimarum* endemica in provincia Antalya Anatoliae austro-occidentalis).

Herbaceous annual to 5 cm tall, white hispid-strigose in all parts with unequal setae up to 1.5 mm long and slightly bulbous at the base. Stems few, sparingly branched, slender, procumbent-spreading to weak-

ly ascending, to 7 cm long, suffused reddish-purple. Leaves greyish-green, basal and lower ones spathulate-oblanceolate to narrowly obovate-oblanceolate, 15–20 × 5–7 mm, obtuse, narrowing into short petiole up to 3 mm long, entire to shallowly crenate, densely white hispid-strigose. Cauline leaves sessile to subsessile, elliptic-ovate to oblanceolate, 9–16 × 3–6 mm, obtuse to subacute. Flowers 1–2, terminal at the ends of branches, pedicellate. Bracts entire, lanceolate, as long as calyx. Calyx tube short, cup-shaped, *ca*. 1 mm long, widening to *ca*. 4 mm diam. in fruit; lobes 5, erect, triangular-lanceolate, 1.8–2.5 mm, longer than ovary, elongating to 4–7 mm in fruit and concealing capsule, acuminate, white-strigose. Appendages in between calyx lobes large and conspicuous, oblong, 4–4.5 mm, reflexed, obtuse-rounded, in fruit nearly as long as calyx lobes and slightly longer than capsule. Corolla bluish-purple, tubular, 4–5 mm, externally glabrous; tube *ca*. 3 mm; lobes 5, triangular, *ca*. 1.5 mm, obtuse-rounded. Ovary 3-locular; stigmas 3, styles included. Capsule blackish-brown, broadly obconical, *ca*. 3.5 mm long, pendent at maturity, dehiscing by three basal valves. Seeds narrowly oblong, 0.6–0.7 × 0.2–0.3 mm, pale brown, darker at both ends, shiny.

Type. Greece: Samothraki, E-NE of Pachia Ammos, steep rocky slope above coast, granitic gravel with phrygana dominated by *Satureja montana*, 140 m, 40°24′N, 25°37′E, 19.05.2010, *Biel* 10.672 (holotype C).

Other specimens collected

E-NE of Pachia Ammos, dry gravelly bed of river Vatos, 5 m, 40°23′N, 25°34′E, 13.06.2008, *Biel* 08.178 (herb. Biel); steep rocky slope above coast, *Sarcopoterium* phrygana, granitic gravel, 120 m, 40°24′N, 25°37′E, 19.05.2010, *Biel* 10.676a (C); 10.676b-c (herb. Biel).

Ecology (Figs. 2 & 3)

In 2008, the plant was collected near the coast *ca*. 5 m above sea level from a flat but stony river bed in the southeastern part of the island and in 2010, from sunny, S- to SE-exposed, steep rocky slopes at two different sites 120 m and 140 m above the coast. The substrate was open gravelly soil weathered down from granite and gneiss. Only a few plants were found late-flowering in May 2010 and most were in fruiting stage. Other plants noted or collected in the vicinity include *Acer sempervirens*, *Ballota acetabulosa, Bupleurum semicompositum, Catapodium rigidum, Cistus creticus, Crassula tillaea, Filago gallica, Galium murale, Legousia speculum-veneris, Leontodon crispus, Psilurus incurvus, Pistacia terebinthus, Polycarpon tetraphyllum, Satureja montana*, *Sarcopoterium spinosum*, *Rumex scutatus* and *Trifolium uniflorum*. The new species is probably endemic to Samothraki (Fig. 4).

Fig. 2. *Campanula samothracica*: E-NE of Pachia Ammos, *locus classicus* in foreground and Vatos river mouth in background (photo B. Biel).

Fig. 3. *Locus classicus*: steep rocky slopes above coast in southeastern part of island (photo B. Biel).

Affinities

Campanula samothracica belongs to *Campanula* subgen. *Megalocalyx* Damboldt, a small group of *ca.* 12 species (Damboldt 1978; Sáez & Aldasoro 2003) characterized by an annual habit, generally slender and subdichotomously branched stems, included styles, conspicuous calyx appendages which are accrescent in fruit, and calyx lobes concealing the capsule, the latter opening by three basal valves. Its members are distributed in SW Asia, S and W Europe, N Africa and Macronesia (Canary Islands) and comprise several local endemics. The most species occur in SW Asia. Within this group it is closest to *C. rimarum* Boiss., a small spreading white-hispidulous annual with solitary flowers restricted to

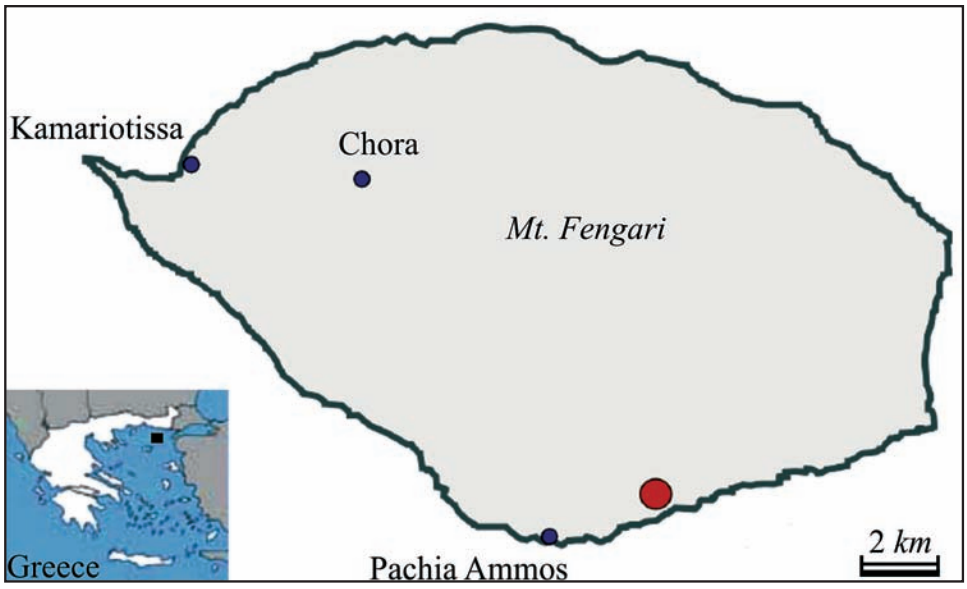

Fig. 4. Map of Samothraki showing location of *Campanula samothracica*.

limestone rocks in the province of Antalya in SW Anatolia. The latter is considered related to *C. camptoclada* Boiss. from Anti-Lebanon, a mountain range in W Syria east of and parallel to the Lebanon Mountains (highest peak Mt Hermon). *Campanula samothracica* differs from *C. rimarum* by its longer lower leaves (15–20 mm not 2–15 mm), stouter pedicels (not slender-filiform), narrower calyx lobes and corolla with lobes which are not villous-hairy outside. Moreover, its isolated occurrence on the island of Samothraki in the N Aegean area in northeastern Greece is geographically distant.

Acknowledgements. We thank Prof. Manfred A. Fischer (Vienna) for kindly translating our diagnosis to Latin.

References

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