A new species of *Cephalaria* (*Dipsacaceae*) from southern and northern Pindos, Greece

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Abstract. *Cephalaria kofinasii* (*Dipsacaceae*), a new species from northwest Greece is described. Its closest affinities are with *C. leucantha* (*Cephalaria* sect. *Fimbriatocarpus*) from which it differs by its non-pinnatisect basal leaves and flower colour. It differs from *C. fanourii* (*C.* sect. *Leucocephalae*) with which it has been misidentified, by its involucel which has a short scarious corona and no setae.

Key words: *Cephalaria*, new species, northern Greece, taxonomy

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Introduction

Cephalaria Schrader is an Old World genus comprising *ca.* 30 species distributed in Europe, W Asia and N Africa. The generic name originates from the Greek word '*kephale*' meaning 'a head' and refers to the inflorescence which is often globose or hemispherical. Szabó (1940) provides a monographic account of the genus and Ferguson in Tutin & al (1976) includes six species from Greece in his treatment of the European taxa. Nine species of *Cephalaria* have been reported from Greece some of which are casual or of uncertain status due to lack of adequate or recently collected material. Three species occur in the Greek mountains, i.e., at or above an altitude of 1600 m, viz., *C. flava* (Sm.) Szabó, *C. tenuiloba* Strid and *C. fanourii* Perdetz. & Kit Tan.

Whilst travelling in S Pindos in June 2024 Giannis Kofinas (Athens) noticed a tall slender species of *Cephalaria* by the roadside, the general facies of which reminded him of *C. fanourii*, a serpentine endemic of Mt Bouchetsi in northwest Greece. He sent some photos of the plant which was not in full flower to Kit Tan who had described this species together with Dimitris Perdetzoglou when the latter was carrying out research at the University of Copenhagen (Perdetzoglou & Tan 1995).

Intrigued by the close resemblance Kit Tan, together with Gert Vold, went in late October 2024 to see the plants for themselves. There were large populations, the plants had finished flowering but were in full fruit. Much fully developed fruit was available with viable-looking seed and some was collected. It was thought the plants probably represent *C. fanourii* although the substrate was not serpentine but limestone.

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On returning to the herbarium it was a surprise to find the plants were not *C. fanourii* but more closely related to *C. leucantha* (L.) Roem. & Schult.; this is a white-flowered Mediterranean taxon originally described by Linnaeus from Narbonne, southern France. Its native distribution is south and south central Europe and NW Africa. The plants collected from S Pindos represent a new species which also occurs in N Pindos in north-west Greece but had been erroneously identified as *C. leucantha* or *C. fanourii*. We name it after our friend Giannis Kofinas, an excellent naturalist and hairdresser who had kindly cut our hair in Athens. He had alerted us to its presence in S Pindos and we found it on the way to the historic villages of Souli in Epirus.

Material and methods

The plants were collected and identified using standard botanical literature and herbarium material. Voucher specimens are deposited in the herbaria of University of Copenhagen (C), the Goulandris Natural History Museum (ATH) and University of Patras (UPA).

Fig. 1. *Cephalaria kofinasii* with young inflorescences (photo G. Kofinas).

Results and discussion

Cephalaria kofinasii Kit Tan & G. Vold, **sp. nov.** [sect. *Fimbriatocarpus* Szabó] (Figs. 1-2)

Greece, S Pindos, Nomos Thesprotias, Eparchia Souliou: NE of Gliki, limestone slopes, rock crevices and screes, 520 m, 39°19'N, 20°36'E, 26 October 2024, *Kit Tan & G. Vold* 33275 (Holotype C; Isotypes ATH, UPA).

Description of species

Perennial herb woody at base. Stems several, erect-ascending, simple or branched, slender, 60–100 cm, glabrous. Basal rosette leaves petiolate, pinnatilobed or lamina entire, narrowly spathulate-obovate, 3–7 × 1–2.5 cm, with a few small lateral lobes in lower third, mid-green, with conspicuous stramineous midrib, ± glabrous, sparsely ciliate, broadly toothed. Cauline leaves pinnatisect with few slender, lateral linear-lanceolate lobes and a broader terminal lobe, glabrous. Peduncles 15–40 cm long, glabrous. Capitula solitary, globose, 1.5–2.0 cm diam. Receptacular scales scarious, slightly longer than involucral bracts, lanceolate, 6.5–8.0 mm, silky adpressed-pubescent on outside. Involucral bracts imbricate, coriaceous, 3–4-seriate, free; middle ones broadly ovate, 5–7 × 3–4 mm, subacute to obtuse, silky adpressed-pubescent, ciliate. Florets dense in capitulum, hermaphrodite, marginal and central ones similar. Calyx cupuliform, without setae. Corolla tubular-infundibuliform, 4-lobed, 10–12 mm long with *ca*. 3 mm lobes, pale creamy yellow, pubescent on outside. Stamens 4, epipetalous; filaments long-exserted; anthers pale yellow. Involucel (basal epicalyx) 4-angled, distinctly and broadly 8-ridged, *ca*. 6 × 2 mm in fruit, dry and indehiscent, villous-pubescent, without setae but with a short, scarious, minutely denticulate, pubescent corona *ca*. 1 mm.

Rocky limestone slopes, 520–1500 m. Flowering from

Fig. 2. *Cephalaria kofinasii*: **a**, basal leaves; **b**, cauline leaves (photo G. Kofinas).

early August, fruiting till late October. Large populations exist, also in rock crevices higher up the slope together with the rare *Lomelosia epirota* (Halácsy & Bald.) Greuter & Burdet. The seldom-collected *Genista willingii* Kit Tan & Ziel. occurs several bends further along the road, this is the only known locality in Greece.

Cephalaria pastricensis Dörfl. & Hayek, a species described from the border area of Albania and Kosovo, was reported by Babalonas (1983: 22) from the Smolikas area in N Pindos. According to Constantinidis & Phitos (2004: 74) this collection as well as a later one from the same locality probably represents *C. fanourii*. However, these plants from Smolikas do not represent *C. leucantha* (sect. *Fimbriatocarpus* Szabó) to which they were originally assigned nor to *C. fanourii* (sect. *Leucocephalae* Szabó) by which they were subsequently named (Strid 2024: map 2625). They belong to *C. kofinasii*. *Cephalaria fanourii* was described from the summit area of Mt Bouchetsi, and remains restricted to this serpentine massif in the Gramos range, N Pindos in northwest Greece. There it is locally abundant mainly on shallow, unstabilized gravelly scree and under no threat; the populations are numerous and flourishing. It differs from *C. kofinasii* by its stems sparsely covered with short, retrorse setae, the calyx with setae 1.5–3.0 mm long, and the involucel which has 4 short teeth alternating with 4 minute ones.

The affinities of *C. kofinasii* therefore lie with *C leucantha* on account of its involucel with a short scarious corona, and not to *C. fanourii* which has an involucel with 4 short prominent teeth alternating with 4 minute ones. However, *C. leucantha* has deeply pinnatifid to pinnatisect basal rosette leaves and white or off-white flowers with pale pink to white anthers, whereas in *C. kofinasii* the basal leaves are not pinnatisect and the corolla and anthers creamy yellow.

Additional specimens cited from N Pindos

Nomos & Eparchia Grevenon: Mt Smolikas, E ridge by Skotidi, 3 km SSW of Samarina, *Pinus nigra* woodland, 1300–1500 m, 40°04'N, 21°00'E, 15 August 1975, *Hartvig* & *al.* 4341 (herb. Strid) as *C. fanourii*; Mt Smolikas, great SE ravine 3.5 km SW of Samarina, openings in *Pinus nigra* forest, 1250–1275 m, 40°04'N, 21°00'E, 28 August 1975, *Hartvig* & *al.* 4913 (ATH, B, LD, herb. Strid) as *C. fanourii*.

Nomos Ioanninon, Eparchia Konitsis: ridge 1.5 km WNW of Loutra Amarantou, rocky limestone slopes, 1500 m, 40°11'N, 20°43'E, 4 August 2020, *Strid* & *Hartvig* 60483 (B, LD, UPA, herb. Strid) as *C. fanourii*.

References

Babalonas, D. 1983. Neue Fundorte für seltene Pflanzen in Nordgriechenland. – Ann. Mus. Goul. **6**: 17-25.

Constantinidis, Th. & Phitos, D. 2004. *Cephalaria pastricensis* Dörfler & Hayek. – In: **Greuter, W. & Raus, Th.** (eds), Med-Checklist 22. – Willdenowia, **34**(1): 142-143.

Perdetzoglou, D.K. & Tan, Kit. 1995. A new species of *Cephalaria* (*Dipsacaceae*) from northern Greece. – Ann. Bot. Fennici, **32**: 227-228.

Strid, A. 2024. Atlas of the Hellenic Flora. Broken Hill Publ., Nicosia.

Szabó, Z. 1940. Monograph of the genus Cephalaria. – Math. Term. Közlem., **38**(4): viii + 352 pp. (in Hungarian).

Tutin, T.G. & al. (eds). 1976. Flora Europaea. Vol. **4**. Cambridge Univ. Press, Cambridge.