A new species of Centaurea sect. Psephelloideae (Compositae) from SW Turkey

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Abstract

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Centaurea hadimensis from the Central Taurus is described as a species new to science and illustrated. It belongs to *C.* sect. *Psephelloideae* and is allied to *C. pyrrhoblephara*, *C. taochia* and *C. holtzii*, which are likewise endemic to a restricted area within Turkey.

Turkey, in particular the Southwest and East of the country, is one of the main centres of diversity for the genus *Centaurea* (Wagenitz 1986). In the 'Flora of Turkey', 172 plus a few additional, imperfectly known species of *Centaurea* were accepted (Wagenitz 1975). Since then the following new species have been described from Turkey:

C. cariensiformis Hub.-Mor. in Bauhinia 7: 179. 1982 *(C.* sect. *Acrolophus)*
C. iconiensis Hub.-Mor. in Bauhinia 7: 77. 1981 *(C.* sect. *Centaurea)*
C. mykalea Hub.-Mor. in Bauhinia 6: 370. 1979 *(C.* sect. *Centaurea)*
C. yozgatensis Wagenitz in Ann. Naturhist. Mus. Wien 98B: 176. 1997 *(C.* sect. *Acrolophus).*

Apparently the hidden treasures of the Turkish flora are still far from exhausted. Recently two of us studied the Gevne valley in the Central Taurus mountains. Besides other interesting findings one plant proved to be a new species.

Centaurea hadimensis Wagenitz, K. Ertugrul & H. Dural, **sp. nova** – Fig. 1-2.
Holotypus: Turkey, C4, Vil. Konya, Konya - Hadim, Gevne Valley, SW of Tosmur Yurdu, rocky places, 1500 m, 30.6.1996, *Ertugrul & Dural 1715* (KNYA; isotypus: GOET).

E *Centaureae* sectione *Psephelloideis* (Boiss.) Wagenitz. Differt a *C. pyrrhoblephara* Boiss. foliis omnibus indivisis, floribus marginalibus vix radiantibus; a *C. taochia* Sosn. et *C. holtzii* Wagenitz caulibus suberectis ultra 20 cm altis, ceterum a *C. taochia* Sosn. pappo longiore et a *C. holtzii* Wagnitz phyllorum appendicibus fere circularibus.

Perennis, basi lignosa, multicaulis. Caules ad 35-40 cm alti, basi curvati, ascendentes, in parte basali ramis axillaribus sterilibus provisi, ceterum simplices, tomentosi, dense foliosi, solum in parte superiori foliis destituti vel sparse foliosi. Folia utrinque appresse griseo-tomentosa, late lanceolata vel oblonga, basalia ignota, inferiora indistincte et breviter petiolata, c. 6 cm longa et 2 cm lata, media et superiora sessilia, media 4-4.5 cm longa et 1.5-2 cm lata, superiora plerum-

Fig. 1. *Centaurea hadimensis* (isotype at GOET).

Fig. 2. *Centaurea hadimensis* – capitulum (isotype at GOET).

que apice appendice hyalina provisa. Sub capitulis nonnulla folia squamiformia appendicibus phyllorum similia. Involucrum 20-25 mm longum, 15-20 mm latum, cupuliforme. Phylla appendicibus totaliter obtecta; appendices in parte basali hyalinae, ceterum dilute brunneae, medio nervo brunneo indistincto, fere circulares, sine mucrone terminali, ciliata ciliis utrinque 8-10, 2-2.5 mm longis. Flores purpurei, marginales steriles, ceteris aequilongi, vix radiantes, staminodiis provisi. Achenia immatura. Pappus duplex, externus multiserialis e setis scabris ad 9 mm longis, internus e paleolis 3 mm longis.

Relationships

The new species shows clearly the characters of *Centaurea* sect. *Psephelloideae*: phyllaries with non-decurrent hyaline appendages lacking a terminal mucro, purple flowers, the marginal with distinct staminodia, and a "double" pappus with inner vow of short bristles.

The allied species differ mainly in the following characters: in *C. pyrrhoblephara* Boiss. the lower leaves are lyrate and the marginal flowers strongly radiant; *C. holtzii* Wagenitz has yellowish-tomentose leaves and ovate appendages with 12-13 cilia on either side; *C. taochia* Sosn. has decumbent stems and a much shorter pappus.

Describing a new species on the basis of a single collection may seem risky. In fact, this is certainly the case in sections with very variable species tending to hybridization as is the case in, e.g., *C.* sect. *Acrolophus* and *C.* sect. *Acrocentron*. In *C.* sect. *Psephelloideae,* however, species are well differentiated and usually allopatric.

In the key of the 'Flora of Turkey' (Wagenitz 1975: 478) the species may be inserted as follows:

19. Appendage with straw-coloured centre, darker (brownish) towards margin
    20. Stems erect or ascendent
        20*. Marginal flowers strongly radiant; appendages c. 12 mm broad, cilia 3-5 mm long; leaves partly lyrate . . . . . *C. pyrrhoblephara*
        20*. Marginal flowers scarcely radiant; appendages 6-7 mm broad, cilia 2-2.5 mm long; leaves undivided . . . . . *C. hadimensis*
    20. Stems decumbent . . . . . *C. taochia*

Centaurea sect. *Psephelloideae* belongs to a group of sections (*Psephellus*-group, Wagenitz & Hellwig 1996) centering in E Anatolia and adjacent parts of the Caucasus and Iran. Thus it comes as a surprise that a new species could be found near the western limit of the group's distribution area in Turkey.

An interesting character present in this and a few other species of this alliance (viz *C. pyrrhoblephara* Boiss., *C. appendicigera* C. Koch) should be mentioned explicitly. The uppermost stem leaves of reduced size have an apical membranous appendage similar to those of the phyllaries and there may be directly below the capitula some bracts that are quite similar to these appendages.

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