

## ORNITHOGALUM PERSICUM, A LITTLE KNOWN SPECIES FROM SW ASIA

PER WENDELBO†\*

The genus *Ornithogalum* (Liliaceae) has one centre of maximum variation in S Africa. A second, i.e. Mediterranean, area of great diversity has its obvious centre in Turkey. Cullen & Ratter (1967) reported 24 species known from that country, and as some species described from Turkey were not listed, the number may well be closer to 30.

Eastwards and southwards from Turkey the number of species drops rapidly with Iran having 10 species confined to the west and north of the country. The easternmost species of the genus is *Ornithogalum arianum* Lipsky which reaches the western parts of Afghanistan (Hedge & Wendelbo, 1972).

The genus is notoriously difficult from a taxonomic point of view. This may partly be due to loss of certain characteristics in herbarium specimens such as flower and foliage colour, and shape. The species also seem rather easily modified and are probably also genetically variable. Cullen & Ratter concluded that 'Both the taxonomic and the cytological results show that *Ornithogalum* is an actively evolving state in the East Mediterranean region'. Certain species are, however, rather characteristic, including the more or less neglected *Ornithogalum persicum* Bornm., one of the very few species of the African subgenus *Caruelia* occurring in Asia.

***Ornithogalum persicum*** Hausskn. ex Bornm. in Beih. Bot. Centralbl. 24, 2:102 (1909).

Syn.: *O. persicum* var. *elongatum* Bornm. in Beih. Bot. Centralbl. 24, 2:102 (1909).

*O. persicum* var. *longeciliatum* Rech. f. in Dansk Bot. Arkiv 15, 4:54 (1954-55).

*O. melanogynum* Cullen in Notes RBG Edinb. 27:309 (1967).

This species has hardly been mentioned in botanical literature since it was discovered and little has been known about its variability and distribution. Bornmüller described the plant as having glabrous leaf-margins which led Rechinger (Koeie & Rechinger, 1955) to describe a ciliate-leaved plant as var. *longeciliatum*. Also Cullen (in Cullen & Ratter, 1967) when describing *O. melanogynum* was misled by Bornmüller's description and thought that the difference between Turkish and Iranian plants was greater than it actually is.

†Died 25 September 1981.

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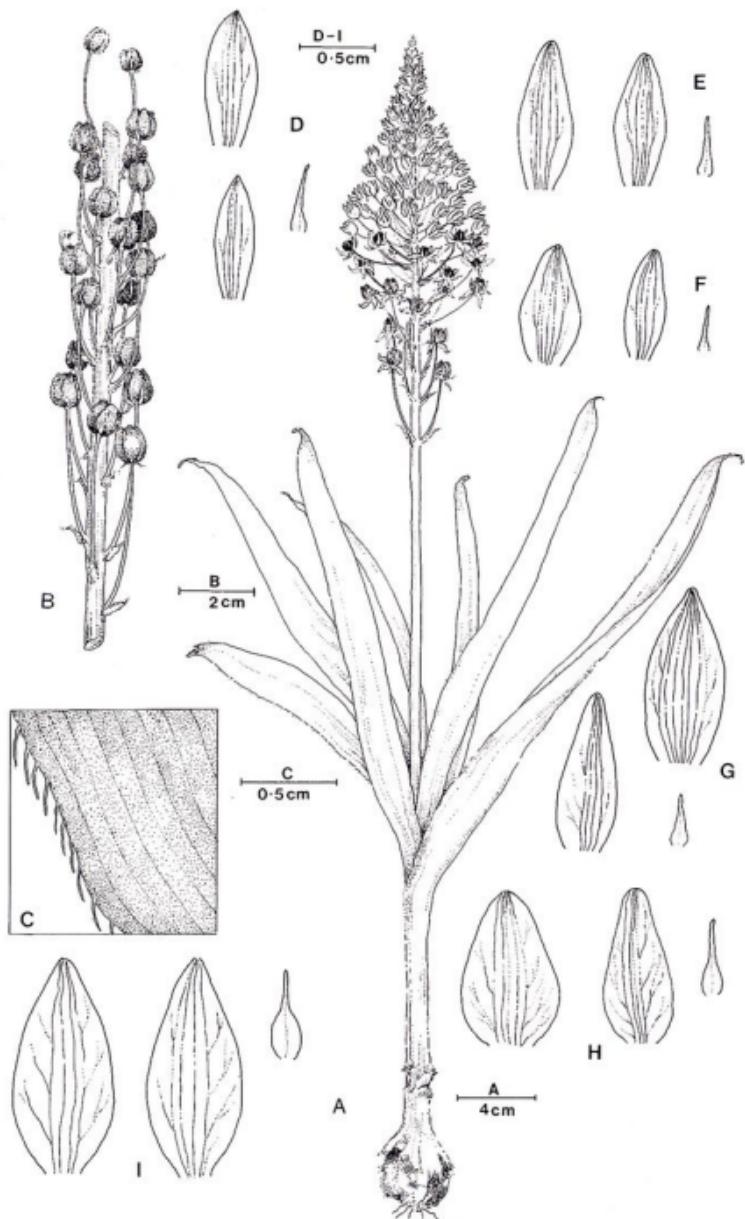


FIG. 1. *Ornithogalum persicum*. A: habit; B: fruiting stage; C: part of leaf with ciliate margin; and D-I: Variation of tepals (D. Gillett 11875, E, Jacobs 6313, F, Wendelbo 1953, G, Stuts 1022, H, Davis & Hedge 29156 and I, Stafp 1215).

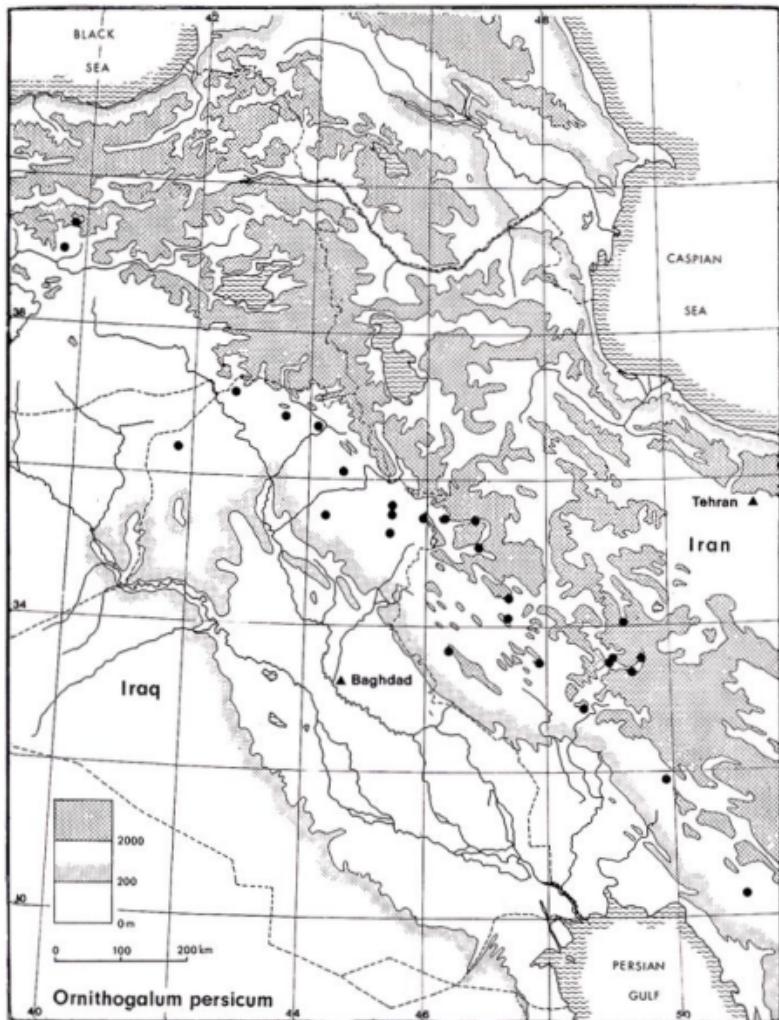


FIG. 2. Distribution map of *Ornithogalum persicum* based on material available.

*O. persicum* is a tall rather stately plant with many, comparatively broad, leaves which characteristically have a long-ciliate leaf-margin (Fig. 1C) but rarely may be glabrous. The inflorescence is broadly conical in the young stage (Fig. 1A) but gradually becomes elongated. In the fruiting stage it becomes cylindrical due to the adpressed capsules on much elongated pedicels (Fig. 1B). The tepals are yellowish white without any trace of green on the outside, and are rather variable in size. (Fig. 1D-I).

Although *O. persicum* shows great variation especially in the size of the tepals it seems to be a well-delimited and characteristic species.

The characteristics of *O. persicum* that lead to it being placed in subgenus *Caruelia* are the broad, conical, young inflorescence, the not green-striped tepals and the blackish green ovary. The only other species of the subgenus in SW Asia are *O. arabicum* L. which is apparently an escape from cultivation, and *O. leichtlini* Stapf. ex Bornm. which only seems to have been collected once. The description of the latter (Bornmüller, 1909) is very short and in German, but the species must be considered validly published. It differs from *O. persicum* mainly in the larger tepals.

A distribution map (Fig. 2) based on all material of *O. persicum* examined for the treatments of Liliaceae in both 'Flora of Iraq' and 'Flora Iranica' shows that this plant is confined to rather low altitudes on the outer slopes of the Zagros mountains of W Iran and their extensions into Iraq. This is a rather typical pattern for many species that have Mediterranean affinities.

Variations of the same pattern in Mediterranean related species are found in species like *Allium olivieri* Boiss. of the Mediterranean section *Melanocrommyum*, and *A. eriophyllum* Boiss. of the likewise Mediterranean section *Molium* (Wendelbo 1971, 33, Fig. 6). Both belong to the Mediterranean element in the Iraq-Iran flora, and are found mainly on the outer slopes of mountains to the west and south-west of the Iranian plateau. The distribution of *Ornithogalum persicum* seems rather odd if the species has its closest relation in subgenus *Caruelia* in S Africa. On the other hand *O. persicum* is not unlike *O. arcuatum* Stev. a related species belonging to the Mediterranean subgenus *Beryllis*, and one may question whether the real affinities are here, rather than with members of *Caruelia*.

Far too little attention has been paid so far to the distribution of SW Asian plants. Thanks to flora work going on in this region these are becoming better known and as more material accumulates, the work of mapping species may become very rewarding and contribute greatly to the understanding of the flora and its history.

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