
Bupleurum kakiskalae* Greuter*UMBELLIFERAE****Endangered**

Status

Endangered. It is only known from a critically small population. Only 4 or 5 individuals were found in flower in 1971, and there were no flowers when the species was first discovered in 1966, nor any signs of the remains of inflorescences from previous years. Z. Kypriotakis (pers. comm.) estimated the number of flowering plants to be 25 in 1987, but no exact count was possible, less so of sterile rosettes. The species is particularly susceptible because of its reproductive biology: it is monocarpic (i.e. it dies after flowering) but it passes through a long sterile period first. Pronounced fluctuations in population size are therefore bound to occur. If the population drops below a certain level, the chance of cross-pollination is so heavily reduced that in the long term, extinction becomes almost inevitable. This point may be reached at any time, although it is unlikely that the population was much larger in the recent past. Fortunately the locality is of difficult access, probably even to goats.

Description

Monocarpic perennial with a tap root. Sterile plants are up to 12 years old and consist of a single stout unbranched woody stem 1 cm or more thick and about 12 cm long, carrying a tight rosette of 15-30 oblanceolate leaves up to 25 cm long. Fertile stems are up to 1 m high, arising from the previous year's rosettes, bearing a loose, freely-branched panicle of umbels each with 4-6 rays; bracts and bracteoles 5-9 nerved, herbaceous, c. 3 mm long, obtuse or blunt, ligulate or spatulate; petals yellow; ovaries pruinose (with a waxy secretion or bloom on the surface), smooth. Ripe fruits unknown.

Distribution

Kriti. At present it is only known from one locality in the Levka Ori (White Mountains, Nom. Chanion) above the Plain of Ormalos, occurring close to the boundary of the Samaria Ravines National Park.

Out of 155 species known to be endemic to Kriti, 101 are believed to be rare or threatened. Fortunately, 77 of these fall into the Rare category, reflecting their very localized distribution and, in many cases, their inaccessibility in the mountains, especially in crevices of vertical rock faces protected from grazing. Much of the endemic flora is of horticultural merit and includes species of *Campanula*, *Colchicum*, *Crocus*, *Dianthus*, *Eibonia*, *Helichrysum*, *Paeonia*, *Stachelina*, *Tailpa* and the monotypic genus *Petrosavaria* of the *Campanulaceae*.

Habitat and ecology

In crevices of a single vertical rock face in an extensive cliff system of thin-bedded, easily disintegrating, metamorphic calcareous rock (Plattenkalk). It grows at 1450 m with *Dianthus juniperinus*, *Odonites linkii* subsp. *cretica*, *Scabiosa albocincta*, *Crepis auriculifolia*, *Diospharea jacquinii* and *Orobrychis sphaerocera*.

Conservation measures taken

None.

Conservation measures proposed

A detailed search should be made of the surrounding area to see if it occurs elsewhere, and a study made as to whether additional protection of the locality is necessary. It should be brought into cultivation as a matter of urgency so that it can be reestablished in its original locality should it die out in the wild.

Biology and potential value

It is of scientific interest as being taxonomically isolated and possibly the only species in the genus *Bapheurum* with this life-cycle and growth habit.

References

- Greuter, W., 1967: Beiträge zur Flora der Südlägias 9. Drei neuentdeckte, unvollständig bekannte kre- tische Reliktarten. – *Bauhinia* 3: 250-253.
– 1973: Additions to the flora of Kriti, 1938-1972. – *Ann. Mus. Goulandris* 1: 15-83.

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Photo: Z. Kyriotakis

