
Cephalanthera cucullata Boiss. & Heldr. ex Reichenb. fil.

ORCHIDACEAE

Endangered

Status

Endangered. An endemic orchid of the mountain forests of Kriti with only a few isolated populations. The total number of these plants in the world may be 100-500. The habitats are extremely threatened by grazing, drainage and deforestation.

Description

Plants with short creeping rhizomes, stems 10-30 cm, with 4 basal sheaths. Cauline leaves 2.5-6 cm, oblong-lanceolate, acute, cucullate. Spike 4-15 cm, 7-24-flowered. Flowers white or pinkish, open. Outer perianth segments 14-20 mm, inner lateral 12-16 mm long. Hypochile with rounded lateral lobes. Epichile cordate, subacute, with 3-6 ridges. Spur 1-2 mm long, conical, obtuse.

History and distribution

It was discovered by Raulin on Mt. Psiloritis (Idi Oros) in May or June 1845. In May the following year, Heldreich collected specimens in coniferous forests of Dikti Oros above Males. The first description and illustration are found in the outstanding "Icones florae germanicae et helveticae", edited by Reichenbach fil. who analysed the specimens of Heldreich. In the following years only a few botanists like Dörfler (31.5.1904) and Renz (23.5.1930), noticed the species on Mt. Psiloritis above Kamares. Fortunately in recent years it was found by Kypriotakis in the vicinity of Gergeri (Idi Oros) at about 770-1050 m (13.6.1987), and surprisingly in the mountain chain of Levka Ori near Imbros at an altitude of 850-980 m (17.6.1986). It was also found in the canyon of Samaria at 1050-1150 m (25.5.1986).

Habitat and ecology

The natural habitat for this species is old oak

woods or mixed forests with coniferous and deciduous trees, which themselves are rare and should be protected. The flowers appear from the end of May to the end of June. The developing plants (at the beginning of April) are in danger from grazing by sheep and goats. The natural habitat is shade to semi-shade and the plants disappear if the area has been opened by destroying the trees. The exact growth conditions must be immediately determined.

Conservation measures taken

The Ministry of Agriculture has protected the known locality on Mt. Psiloritis, above Kamares, since 1985. However, this area is too small and must be enlarged.

Conservation measures proposed

This species is given a high priority in the supplement of the FFH instruction. Based on habitat principles, the Greek government is obliged to notify of all areas to be included in a net of ecological reserves of European importance (NATURA 2000). There must then be precise and lengthy surveys in order to control the development of different populations within their reserves. The commencement and execution of protection measures, ordered by EC law, must be internationally inspected. It is imperative to identify centres of conservation and to organize scientific surveys. We propose to preserve seeds in a seed bank, in order to have genetic material in conservation.

Biology and potential value

The survival of the species in cultivation is impossible, because the plants mycorrhizal association cannot be simulated.

References

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