



«Actions to protect, conserve and promote biodiversity. Field studies of endemic, endangered and nationally important species of Greece». Funded by the Natural Environment and Climate Change Agency (NECCA)

TITLE

Biodiversity and conservation of endemic *Allium* species in Evvia island

(Project ID: 14858)

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ABSTRACT

The genus *Allium* L. (Amaryllidaceae, Alliioideae) is one of the largest monocotyledon genera, and the largest genus of the Greek flora. Its remarkable diversification within Greece is highlighted by its high diversity and endemism rate; 116 species, 71 (61.2%) of them endemic species, with usually especially restricted distribution areas. Evvia island constitutes an important diversity center of the genus *Allium* in Greece. Thirty *Allium* spp. are known from Evvia; among them seven species endemic to the island. Two local endemic species have been evaluated as Critically Endangered (CR) according to IUCN criteria: *Allium runemarkii* and *Allium iatrouinum*. The aims of the current proposal are the following: (1) collection and processing of field data for the effective conservation of the two Critically Endangered *Allium* species of Evvia, (2) collection of field data for the other five rare local endemic species of Evvia that have not been evaluated against IUCN criteria, and (3) investigation of the taxonomic relationships and diversification in certain imperfectly known groups of mainly autumnflowering species that include *A. dirphianum* and *A. karistanum* endemic to Evvia, and their relatives. The project will mainly focus on the investigation of the geographical distribution, estimation of population size, study of the reproductive biology, identification of threats, and conservation management proposals for the two CR endemic *Allium* species of Evvia. The project will also contribute to the biodiversity study of the genus *Allium* in Greece, investigating the taxonomic status of *A. dirphianum* and *A. karistanum* within the critical groups of autumn-flowering species they belong (*A. sect. Codonoprasum* and *A. sect. Cupanioscordum*, respectively), using morphological and karyological analyses.
