

Project partner: Mediterranean Plant Conservation Unit, Mediterranean Agronomic Institute of Chania

Island

CRETE

Species name (Family)

Horstrissea dolinicola Greuter, Gerstberger & Egli (Apiaceae)

Common name

No common names exist for this species

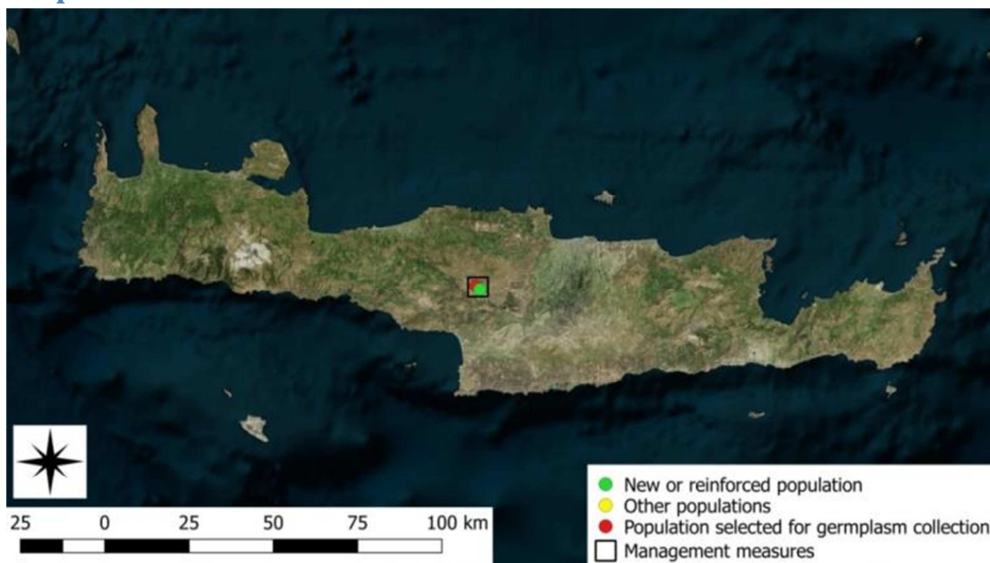
Plant description

- Perennial with a fusiform to cylindrical taproot 1–2 cm in diam. Stem and petioles mostly underground and \pm flexuous, only 2–5 cm appearing above ground. Inflorescence terminal, almost globular, 10–15 mm wide. Petals minute, incurved, white or pinkish.
- Life form: Geophyte; flowering: July-August; fruiting: September-October; pollination: with insects
- It grows only in a few limestone sinks (dolines) at an altitude of 1500 m in a region where many goats and sheep graze during the summer season. These sinks are seasonally flooded as they work as outlets for rain (from autumn to spring) and for melting snow (spring). Habitat 6.4: Miscellaneous inland habitats with very sparse or no vegetation.

Distribution

This species is only found in the Mt. Ida (Psiloritis) mountain range of central Crete.

Map



Legal status

Currently there is no legal protection for this species. The plant is indirectly protected, as its population falls within the Natura 2000 site GR4330009.

Main threats and conservation status

Threat categories according to IUCN classification scheme, version 3.2:

- 2.3.1 Nomadic grazing, 2.3.2 Small-holder grazing, ranching or farming
- 9.3 Agricultural & forestry effluents
- 11.1 Habitat shifting & alteration
- 4.1: Roads and railroads

This species has been categorized as CR (Critically Endangered) according to IUCN Red List Criteria B1ab(ii,v)+2ab(ii,v); C2a(i); D ver 3.1. (Iatrou & Fournaraki 2006)

Conservation actions carried out in the CARE-MEDIFLORA project

The actions included both *in situ* and *ex situ* conservation for the unique population on Mt. Ida (Psiloritis mountain). *In situ* conservation involved the reinforcement of the population and actions for the establishment of a Plant Micro-Reserve (PMR) in the area, in the context of which the plant will be legally protected. For *ex situ* conservation, seeds were collected in 2017.

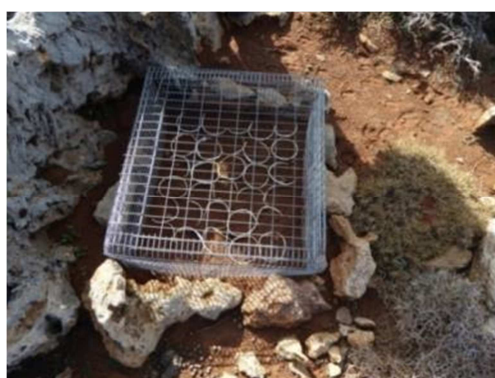
For the reinforcement seeds stored in the Seed Bank of MAICh (collection 2007) were used to produce seedlings to be planted at selected sites, or were sown directly. Other management measures included placement of protective structures to protect the re-introduced individuals from human activities and prevent their grazing by animals.

Actions for the establishment of the PMR were initiated in cooperation with the Municipality of Anogeia, the Forest Directorate of Rethymno and local shepherds. A detailed inventory of population boundaries and density was conducted and four dolines, about 4 ha total area, were proposed to constitute the PMR. Existing livestock installations were relocated outside the proposed PMR and a small plot was fenced for long term monitoring of the effect of grazing on the species. Dissemination actions were implemented for the local stakeholders (information day, leaflets, t-shirts, etc.).

Photos



Horstrissea dolinicola habitat; *H. dolinicola* in flowering



Livestock and installations prior to their relocation & fencing of the area; Protective structure for pots planted with seeds/seedlings



Information day for local stakeholders at Anogeia Primary School; Dissemination materials for *H. dolinicola* Micro-Reserve