

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island

SARDINIA

Species name (Family)

Centranthus amazonum Fridl. & A. Raynal (Caprifoliaceae)

Common name

Camarezza sarda (Italian name), amazon valerian (English name).

Plant description

- ✓ *Centranthus amazonum* is a perennial plant of 45-90 cm tall. Opposite glaucous leaves, from oval-lanceolate to lanceolate, 7-9 cm long and 1,5-2,5 cm wide. Inflorescence in bi-trichotomic corymbs, well separated from the vegetative leaves for 1-2 internodes. Flowers are white-pink; seeds are achenes (3-4 mm; Fridlender and Roques, 1998; Bacchetta et al., 2008).
- ✓ *C. amazonum* is a chamephyte, flowering occurs from May to July and the fruiting from June to July (Bacchetta et al., 2008). Wind is the main seed dispersal agent. This species had a higher proportion of empty seeds (Mattana et al., 2010).
- ✓ This taxon grows in limestone karst mountains. From a bioclimatic point of view, the species can be referred from the Lower Mesomediterranean to the Lower Supramediterranean, from Lower Subhumid to Lower Humid, Euroceanic Weak (Bacchetta et al, 2008).

Distribution

C. amazonum is a narrow endemic plant of Central-Eastern Sardinia (Italy). The species occurs in two sites: in “Monte Corراسi” (Oliena, NU) at 1300 m a.s.l. with a population of less than 100 individuals. Few individuals (2-5) have also been found in “Codula di Luna” (Urzulei, NU) at 140 m a.s.l. (Bacchetta et al., 2008).

Map



Legal status

C. amazonum is included in the Annex II of the Habitats Directive 92/43/EEC. Furthermore, *C. amazonum* is protected by the Municipality of Oliena and it is included in the “category A” (species at very high risk of extinction) on the basis of the municipal resolution n. 7 of 16/02/2007. The growing sites of *C. amazonum* are included in the SCIs (Sites of Community Importance) “Supramonte of Oliena, Orgosolo and Urzulei – Su Sercone” (ITB022212) and “Golfo di Orosei” (ITB020014).

Main threats and conservation status

According to the IUCN Threats Classification Scheme (Version 3.2) the main threats in Sardinia are:

- ✓ 5.2.1: Gathering Terrestrial Plants - Intentional Uses. The main threats for *Centranthus amazonum* were determined by the uncontrolled harvest of individuals or parts of them for scientific or collectionist purposes.
- ✓ 6.1: Recreational Activities. A further threat for the species was due to the trampling by the touristic activities.
- ✓ 10.3: Avalanches/Landslides. This threat consisted in the natural evolution of limestone cliffs which could cause a reduction in the population and modifications in the habitat quality.
- ✓ 2.3.1: Nomadic Grazing. Grazing by mouflons aggravated the conservation status of this taxon.

This *taxon* was assessed as Critically Endangered (CR) at global and regional level (Bacchetta et al., 2008; Orsenigo et al., 2018).

Conservation action carried out in the CARE-MEDIFLORA project

The conservation action consists of a management action aimed to reduce the human disturbance in the population located in Codula di Luna, which was carried out in March 2018. The existent pathway through the population area, highly frequented by tourists during the reproductive season of *Centranthus amazonum*, was moved far for the small population area; continuous management of the pathway was ensured to reduce the human disturbance followed by periodic monitoring of all remnant plants. A monitoring plan of the *in situ* action was elaborated and started in March 2018. Monitoring activities measured the effectiveness of management action, which preliminary results showed that all mature plants in the population regularly completed their reproductive cycle without damages caused by tourists. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the *in situ* actions.

Photos



Left: Flowering of *Centranthus amazonum* (photo by Gianluigi Bacchetta). Middle: Individual of *Centranthus amazonum* (photo by Giacomo Calvia). Right: New path away from the population of *Centranthus amazonum* (photo by Giuseppe Fenu).