

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island SARDINIA

Species name (Family)
Astragalus gennarii Bacch. & Brullo (Fabaceae)

Common name

Astragalo di Gennari (Italian name), Gennari milkvetch (English name).

Plant description

Astragalus gennarii is a dwarf shrub forming a dense, compact, spiny cushion, 20-80 cm tall. Woody stems, densely branched, tough, with persistent stipules and rachis in the old parts of the branches. Imparipinnate leaves, raceme 2-4 flowered and corolla white to yellowish. Reniform, brown-olivaceous seeds, often blotched, smooth and laterally compressed (Bacchetta and Brullo, 2006).

The species is a chamaephyte, the flowering occurs from May to June and the fruiting from June to July. The reproductive biology of this species has not yet been studied (Cogoni et al., 2014).

A. gennarii is an orophilous plant species occurring at an altitude of 800-1055 m a.s.l., in a very restricted area of Monte Albo (Lula, NU; north-eastern Sardinia). The species grows on Mesozoic limestones. From a bioclimatic point of view, the species can be referred to the Upper Mesomediterranean, Lower Humid, Euoceanic Weak (Cogoni et al., 2014).

Distribution

The species is a narrow endemic plant that grows in a single population located in Punta Turuddò (Monte Albo, Lula, NU) consisting of ca. 40-45 mature plants (Cogoni et al., 2014).

Map



Legal status

The plant is not listed in any international, national or local regulations.



Main threats and conservation status

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

- 10.3: Avalanches/Landslides. This main threat, which consists in the natural evolution of limestone cliffs, could cause a reduction of the population and a modifications in the habitat quality.
- 6.1: Recreational activities. The tourism and recreational activities, in particular the hiking, could represent a serious threat to the species.

The species was assessed as Critically Endangered (CR) at global and regional level (Cogoni et al., 2014; Orsenigo et al., 2018).

Conservation actions carried out in the CARE-MEDIFLORA project

For A. gennarii long-time conservation (base collection at -25°C) to ensure the ex-situ conservation was carried out in seed bank (BG-SAR). Plants were propagated both from vegetative stems and seeds in the nursery of Fo.Re.S.T.A.S. Agency. A translocation action has been performed to boost the number of mature individuals. It has been conducted near the natural population, where the probability of plant survival and reproduction is greater. Plants were propagated both from vegetative stems and from seeds and then 350 plants, codified with a label for the future monitoring activities, were translocated in March 2018. Fence protection has been placed in order to prevent grazing. Periodic monitoring of the translocated plants was elaborated, and it started in Spring 2018. The preliminary results of the monitoring showed a high survivorship rate of transplanted individuals. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the in situ actions.

Photos





Individual of *Astragalus gennarii* (photo by Gianluigi Bacchetta) & Plant production of *Astragalus gennarii* in the Forestas Nurcery (photo by Giuseppe Fenu).



Figure 3: Translocation of Astragalus gennarii (photo by Giuseppe Fenu).