Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

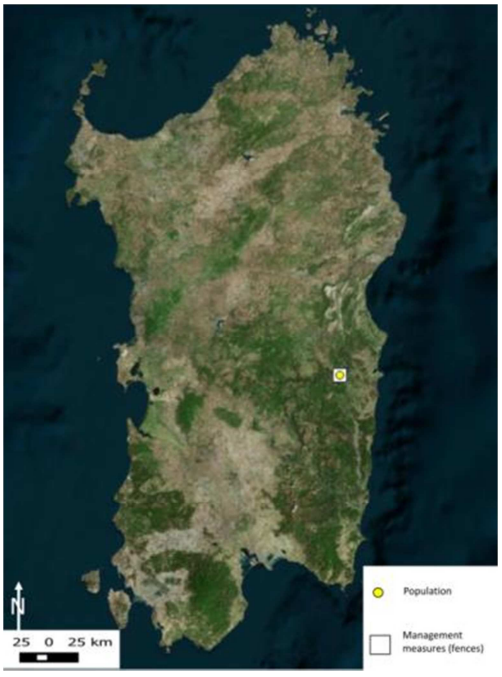
Island
SARDINIA

Species name (Family)
***Centaurea magistrorum* Arrigoni & Camarda (Asteraceae)**

Common name
Fiordaliso dei maestri (Italian name), knapweed of teachers (English name).

Plant description
- ✓ *Centaurea magistrorum* is a woody suffruticose plant, with erect branches or slightly prostrate. Annual stems of 20-30 cm, with linear glabrous bands alternating with woolly-pubescent strips. Grey-green leaves simple (linear or spatulate) or compounds or irregularly imparipinnate. White flowers or slightly pink of 3-5 mm. Black-shiny achenes with greenish reflections of (3)3.2 × 1-1.3 mm, sparsely hairy, with an apical crown; pappus with simple hairs, 0.4-1.2 mm long (Arrigoni and Camarda, 2003; Cogoni et al., 2014).
- ✓ The species is a chamaephyte; the flowering lasts from July to August, and fruiting from August to September. In some cases, a vegetative propagation by radical stems has been observed (Arrigoni and Camarda, 2003).
- ✓ *C. magistrorum* is a heliophilous species which grows only in a single population on granitic substrata and poor soils. From a bioclimatic point of view, the species can be referred to the Lower Mesomediterranean, Upper Subhumid, Euoceanic Weak (Cogoni et al., 2014).

Distribution
Centaurea magistrorum is a narrow endemic species of central-eastern Sardinia (Italy). The only natural population is located in Monte Luas (Villagrande Strisaili, NU) and consists of ca. 90-100 reproductive plants (Cogoni et al., 2014).

Map


Legal status
Currently, species is not listed in any international, national or local regulations.

Main threat and conservation status
According to the IUCN Threats Classification Scheme (Version 3.2) the main threats are:

- 2.2: Wood & Pulp Plantations. The main threat of this species is due to the impact of conifer reforestation and the forestry practices in the Monte Luas area, which determined a loss of habitat quality.
- 2.3: Livestock Farming & Ranching. The high presence of unregulated grazing animals (pigs) leads to considerable damage to the population
- 4.1: Roads & Railroads. The creation of forest roads and the continuous maintenance of these roads represent a threat factor for its habitat and cause the fragmentation of the population area.
- 7.1: Fire & Fire Suppression. Stochastic environmental events such as fires could represent significant potential threats.

This 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

The conservation actions for this species include several actions started in March 2018 to improve the *in situ* conservation status of the only existing population. These include the eradication of the reintroduced conifers and other alien plants (i.e. *Quercus rubra* L.), the cutting of forest to create free-growing space for the natural plant, the erection of protective fences to prevent the grazing and activities related to the reforestation management. A monitoring plan was elaborated and started in Spring 2017. Monitoring activities measure the effectiveness of all management actions by counting the number of reproductive and juvenile plants of *C.magistrorum*. The preliminary results of the management actions show that all plants, juvenile and reproductive, survived, fences positively enhanced the plant's long-term survival and reproductive success. After the end of the project, the monitoring activities will be continued, ensuring the long-term sustainability of the in situ actions.

Photos


Left: Plant of *Centaurea magistrorum* (*photo by Gianluigi Bacchetta)* & Right: Fence erection for *Centaurea magistrorum (photo by Giuseppe Fenu).*

Proctective fence for *Centaurea magistrorum (photo by Gianluigi Bacchetta).*