

Project partner: Hortus Botanicus Karalitanus of the University of Cagliari

Island

SARDINIA

Species name (Family)

Senecio morisii J. Calvo & Bacch. (Asteraceae)

Common name

Senecio di Moris (Italian name), Moris groundsel (English name).

Plant description

- *Senecio morisii* is a rhizomatous plant, 0.5–1.5 m tall. Basal leaves are oblanceolate, subentire to distantly dentate, glabrescent. Cauline leaves are lanceolate, semiamplexicaul and concolorous. Ligulate florets 6-8, 6-8.9 mm long. Achenes 3.2-3.8 mm long, subcylindrical, glabrous.
- *S. morisii* is a geophyte rhizomatous plant flowering in summer (May-June) and seeds ripen in July-August. Wind is the main seed dispersal agent.
- *S. morisii* growing in watercourses of plain to montane levels.

Distribution

S. morisii is a narrow endemic species growing in the Sarcidano and Ogliastra regions, Central-Eastern Sardinia. Only six populations are currently known.

Map



Legal status

The species 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 in Sardinia are:

- 2.3 Livestock Farming & Ranching - 2.3.1 Nomadic grazing. The main threat was the grazing, which caused the disappearance of stems during the flowering period then the less seed dispersion in some populations.
- 4.1 Roads & Railroads. The extension of the current roads could increase the risk of population damage.
- 6.1 Recreational activities. For several populations like Funtanamela, located within a public area, the recreational activities were a threat for the remnant reproductive plants.

Senecio morisii was assessed as Vulnerable (VU) on the IUCN Italian Red List.

Conservation actions carried out in the CARE-MEDIFLORA project

Seeds from a representative population were collected for *in situ* conservation actions. Plants were cultivated in the greenhouse of the Sardinian Germplasm Bank (BG-SAR). We selected two different sites in Funtanamela population with the same ecological conditions, near the wild population but within an area managed by the Fo.Re.S.T.A.S. Agency. Before the *in situ* action, in these two sites located along the same stream, all the alien species were eradicated and the natural vegetation was removed to create the open areas for the plant translocation. Both areas were fenced to avoid the grazing of wild horses and boars. In March 2018, a total of 125 individuals *ex situ* multiplied, were transplanted in these two sites (64 and 51 individuals, respectively) and each plant was labelled for the future monitoring activities. The monitoring plan of the translocation and the fence protection started in spring 2018. Success indicators for the translocation action were the effectiveness of fence protection and the survivorship rate of transplants. The preliminary results of the monitoring showed the integrity of the protective fences and a high survivorship rate of the 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



Left: *Flowering of Senecio morisii* (photo by Alba Cuena Lombraña). Right: *Individual of Senecio morisii* (photo by Gianluigi Bacchetta).



Translocation of Senecio morisii (Photo by Giuseppe Fenu)