

Project partner: Department of Biological, Geological and Environmental Sciences, University of Catania

Island SICILY

Species name (Family)

Dianthus rupicola Biv. subsp. *rupicola* (Caryophyllaceae)

Common name

Garofanino delle rupi (Italian name), Jarofalu sarvaggiu (Sicilian names), rupestrin pink (english name)

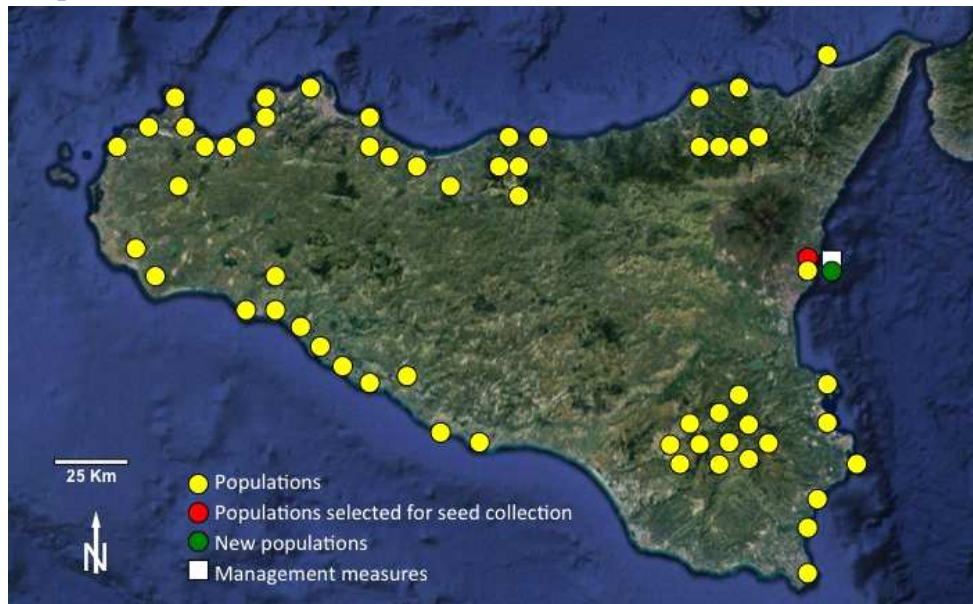
Plant description

- *Dianthus rupicola* subsp. *rupicola* is a small shrub, 50 cm tall. Stems with many branches, with leaves green, fleshy, acuminate. Petals pink- purplish to purplish, 37-40 mm long, spatulate at the limb. Fruits are capsules with seeds black and flattened. Plant with hermaphrodite flowers blooming from late Spring to early Autumn. Main pollinators are insects, probably *Lepidoptera*, while seeds do not show evident morphological adaptations for dispersion, that is simply due to falling from mother plant, waving movements of the capsules (semachory) or by rain drops hitting the capsules (ombrochory).
- This species grows on the cliffs or walls of different substrates (e.g. limestone, dolomite, gypsum or, more rarely, volcanic rocks) within the thermo- or meso-Mediterranean belts, ranging from the sea level up to 800 m of altitude.

Distribution

It is endemic to southern Italy (Campania, Basilicata and Calabria) and Sicily.

Map



Legal status

D. rupicola is included in the Annex II and V of the Directive 92/43/EEC.

Main threats and conservation status

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

- Threat 1.3 Tourism & recreation areas.
- Threat 7.3 Ecosystem modifications, such as quarries or wall cleaning where *D. rupicola* grows.
- Threat 8.1.2 Invasive non-native/alien species, such as *Opuntia* sp. pl., can contribute to a population decline of the taxon.

At European level, this *taxon* is classified as Near Threatened (NT), while Least Concern (LC) in the Italian Red List.

Conservation actions carried out in the CARE-MEDIFLORA project

- Seed collection
- A new population of *Dianthus rupicola* subsp. *rupicola* was established within the Nature Reserve “*Isola Lachea e Faraglioni dei Ciclopi*” (eastern Sicily)
- An area of ca. 10.000 sqm was manually eradicated. Actually, a huge part of the nature reserve is invaded by *Opuntia ficus-indica* L. (Cactaceae), which represents a severe threat for the coastal rocky vegetation of Sicily.
- In order to preserve the new population and, particularly, for avoiding damages caused by visitors or small animals a wooden fencing was realized.
- A restoration plan of the natural vegetation was implemented by using native thermo-xerophilous species.

Photos



Left: Flowers of *Dianthus rupicola* subsp. *rupicola*; Middle: Seedlings of *Dianthus rupicola* subsp. *rupicola*; Right: Juvenile plant of *Dianthus rupicola* subsp. *rupicola*



Translocated plants of *Dianthus rupicola* subsp. *rupicola* (N.R. “*Isola Lachea e Faraglioni dei Ciclopi*”)



Eradication of *Opuntia ficus-indica* from the Lachea islet