

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

## **Island**

**SICILY** 

# **Species name (Family)**

Betula aetnensis Raf. (Betulaceae)

#### Common name

Betulla dell'Etna (Italian name), Bituddo, Vitudda (Sicilian names), Etnean birch (English name)

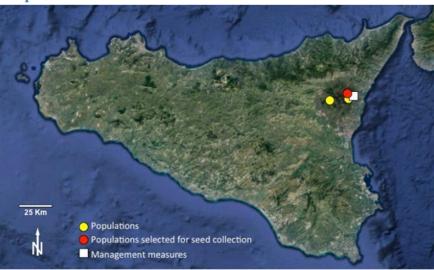
# Plant description

- ✓ Betula aetnensis is a small to medium-sized tree or shrub, 4-15 m tall. Stem with whitish bark. Leaves deciduous with triangular or rhomboidal lamina.
- ✓ Flowers are monoecious; fruits are small brown conical nuts with wings 2-3 times wider than fruit. Male flowers blooms in late summer or autumn, remaining quiescent for all winter, the female one in spring with patent scales, Pollination is anemophilous. Fruits of *B. aetnensis* are winged nuts that promote wind dispersion.
- ✓ *B. aetnensis* typically forms small and floristically poor pioneer woodlands within the supra-Mediterranean bioclimatic belt with humid-subhumid ombrotypes. Optimal altitude is ranging from 1500 mt up to 2000 mt a.s.l.

#### Distribution

B. aetnensis is a narrow endemic plant from Mt. Etna, mostly localized on the north-eastern vent of the volcano. This species grows on initial volcanic soils, particularly rich in skeleton and with no or few litter, thus showing its remarkable pioneer role.

#### Map



## Legal status

none.

## Main threat(s) 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 2.3.1 (Nomadic grazing)
- ✓ Threat 6.1 (Recreational Activities)
- ✓ Threat 8.2.2 (Problematic native species/diseases, e.g. some pathogens belonging to the Armillaria and Heterobasidion genera may cause radical necrosis and consequently death of the weakened individuals)



✓ Threat 10.1 (Volcanoes)

#### No IUCN status

# Conservation actions carried out in the CARE-MEDIFLORA project

- Seed collection.
- Four areas of about 400 sqm were fenced within the widest natural population of *Betula aetnensis* of Mt. Etna (altitude 1700-1900 mt a.s.l.).

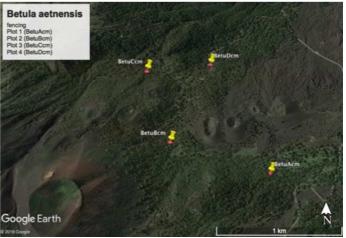
## **Photos**





Individual of Betula aetnensis (Mts. Sartorius, NE Etna) & Inflorescences (male) of Betula aetnensis (Mt. Galvarina, W Etna)





Betula aetnensis-dominated woodland (Mts. Sartorius, NE Etna) & Localization of the fenced areas of Betula aetnensis (NE Etna)





Fenced area with Betula aetnensis