

[Home \(http://threatenedconifers.rbge.org.uk/\)](http://threatenedconifers.rbge.org.uk/)

[Index of species \(http://threatenedconifers.rbge.org.uk/species/\)](http://threatenedconifers.rbge.org.uk/species/)

[Threats](http://threatenedconifers.rbge.org.uk/threats/)
Fire in Italian Araucaria forests is a major threat

[About \(http://threatenedconifers.rbge.org.uk/about/\)](http://threatenedconifers.rbge.org.uk/about/)

Threatened conifers of the world

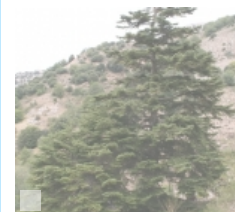
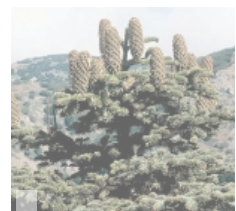
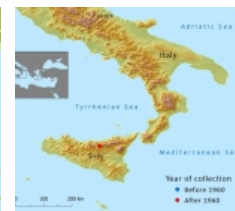
A resource compiled by the International Conifer Conservation Programme, Royal Botanic Garden Edinburgh
(<http://threatenedconifers.rbge.org.uk/>)

Abies nebrodensis (Lojac.) Mattei

PINACEAE

A narrow endemic native to the Madonie Mountains of Sicily where the entire population consists of only 30 individuals.

Associated Names:
Sicilian fir and Nebrodi fir



Description

Habit

Forms a broad, conical tree between 15–18m tall. Branches spreading horizontally. Bark smooth in young trees but exfoliating in small plates with age, exposed bark brown, later grey.

Foliage

Leaves 1–2 x 2–3.5cm, spirally arranged, the upper leaves covering the shoot and directed forward, the lower parted with two greenish white stomatal bands beneath. Vegetative buds conical, slightly resinous.

Region



- [Eastern Mediterranean](http://threatenedconifers.rbge.org.uk/taxa/category/east-mediterranean)
(<http://threatenedconifers.rbge.org.uk/taxa/category/east-mediterranean>)

References and further reading

Cones

Female cones 10–18 cm, cylindrical, maturing from green or reddish-brown to brown; bracts exserted, reflexed, triangular and long pointed. Male cones lateral, crowded, 1.5-2 cm long, greenish yellow with purple microsporophylls.

Distribution

The Sicilian or Nebrodi fir is endemic to the north–central part of Sicily. It once had a much broader distribution across the Nebrodi Mountains after which it was named but today it is limited to slopes above Polizzi Generosa in the valley of Madonna degli on Mt. Scalone. (Knees 2011).

Habitat and Ecology

This species is scattered across a north west–facing cirque on steep limestone slopes with *Crataegus monogyna*, *Daphne laureola*, *Fagus sylvatica* (stunted), *Ilex aquifolium* and *Prunus spinosa*. The forest was formerly dominated by *Abies nebrodensis* and *Fagus sylvatica* (Knees 2011).

Human Uses

This species is too rare to be exploited. Historically the timber was used for construction.

Conservation Status

CR - Critically Endangered D

Rationale

[Details hidden, click to show >](#)

Threats

[Details hidden, click to show >](#)

Conservation Actions

Conservation actions

[Details hidden, click to show >](#)

- Conte, L., Cotti, C., Schicchi, R., Raimondo, F. M. & G. Cristofolini. (2004). Detection of ephemeral genetic sub-structure in the narrow endemic *Abies nebrodensis* (Lojac.) Mattei (Pinaceae) using RAPD markers. *Plant Biosystems*. 138(3) 279-289.
- Ducci, F., Proietti, R. & J.-M. Favre. (1999). Allozyme assessment of genetic diversity within the relic Sicilian fir *Abies nebrodensis* (Lojac.). Mattei. *Ann. For. Sci.* 56: 345-355.
- Farjon, A. and Page, C.N. (compilers) (1999). Conifers. Status Survey and Conservation Action Plan. IUCN/SSC Conifer Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.
- Knees, S.G. (2011). Phylogeny, Systematics and Conservation of *Abies*, especially those around the Mediterranean Basin. Reading. Unpublished PhD Thesis, University of Reading.
- Morandini, R. (1969). *Abies nebrodensis* (Lojac.) Mattei. – Inventario 1968. *Pubbl. Ist. Sper. Selvic. Arezzo*
- Morandini, R., Ducci, F., & G. Menguzzat. (1994). *Abies nebrodensis* (Lojac.) Mattei. Inventario 1992. *Ann. Ist. Sper. Selv.* 22:5-5 1.
- Parducci, L., Szmids, A.E., Ribeiro, M.N. & A. D.Drouzas. (2001). Taxonomic position and origin of the endemic Sicilian Fir *Abies nebrodensis* (Lojac.) Mattei based on allozyme analysis. *Forest Genetics* 8(2) 119-127.
- Raimondof, M., Venturella, G., & di Gangif. (1990). Variazioni fenotipiche in *Abies nebrodensis* (Lojac.) Mattei e comportamento vegetativo nella sua discendenza. *Quaderni di Botanica Ambientale Applicatu.* 1:183-2 10.
- Silva, J. P., Toland, J., Jones, W., Eldridge, J., Thorpe, E., Campbell, M. & E. O'Hara. (2008). LIFE and Europe's endangered *Abies nebrodensis*.
- Sottano, P. (2004). Conservazione di *Abies nebrodensis* e ripristino torbiere di Geraci Siculo. Parco delle Madonie.
- Thomas, P. 2011. *Abies nebrodensis*. In: IUCN 2012. IUCN Red List of Threatened Species. Version 2012.2. . Downloaded on 07 March 2013.
- Vendramin, G.G., Michelozzi, M., Tognetti, R., F. Vicario. (1997). *Abies nebrodensis* (Lojac.) Mattei, a relevant example of a relic and highly endangered species. *Bocconea* 7: 383-388.
- Vicario, F., Vendramin, G. G., Rossi, P., Liò, P., & R. Giannini. (1995): Allozyme, chloroplast DNA and RAPD markers for determining genetic relationships between *Abies alba* and the relic population of *Abies nebrodensis*. *Theoretical & Applied Genetics*. 90: 101 2-101 8
- Virgilio, F., Schicchi, R. and La Mela Veca, D.

(2000). Aggiornamento dell'inventario della popolazione relitta di *Abies nebrodensis* (Lojac.). *Naturalista Siciliano* 24 (1-2): 13–54

Entry information

Entry authors

- [Schicchi, R. \(mailto:schicchi@unipa.it\)](mailto:schicchi@unipa.it)
- [Knees, S.G. \(mailto:s.knees@rbge.org.uk\)](mailto:s.knees@rbge.org.uk)
- [Gardner, M.F. \(mailto:m.gardner@rbge.org.uk\)](mailto:m.gardner@rbge.org.uk)

Entry first added:
28 Jan 2012

Entry last edited:
1 Mar 2016

Recommended Citation

Schicchi, R., Knees, S.G., and Gardner, M.F., 2016. *Abies nebrodensis*, from the website, Threatened Conifers of The World (<http://threatenedconifers.rbge.org.uk/taxa/details/78>).

Downloaded on 17 January 2017.



Royal
Botanic Garden
Edinburgh

(<http://www.rbge.org.uk>)

[Accessibility \(http://www.rbge.org.uk/accessibility\)](http://www.rbge.org.uk/accessibility) · [Sitemap \(http://www.rbge.org.uk/sitemap\)](http://www.rbge.org.uk/sitemap) · [Privacy Policy \(http://www.rbge.org.uk/privacy-policy\)](http://www.rbge.org.uk/privacy-policy) · [Terms & Conditions \(http://www.rbge.org.uk/terms-and-conditions\)](http://www.rbge.org.uk/terms-and-conditions)

Threatened Conifers of the World is a subsite of the [Royal Botanic Garden Edinburgh Website](http://www.rbge.org.uk/).

(<http://www.rbge.org.uk/>) Copyright © 2017 Royal Botanic Garden Edinburgh · The Royal Botanic Garden Edinburgh is a charity (registration number SC007983)

Site designed and built by Nye Hughes, Dalrymple