

Acacia dealbata



Taxon	Family / Order / Phylum
<i>Acacia dealbata</i> Link	Fabaceae / Fabales / Plantae

COMMON NAMES (English only)

Silver wattle
Blue wattle

SYNONYMS

Acacia decurrens var. *dealbata* (Link) Mueller
Racosperma dealbatum Pedley
Acacia derwentii Siebert & Voss
Acacia puberula Dehnh.
Racosperma dealbatum (Link) Pedley

SHORT DESCRIPTION

This fast growing tree can reach up to 30m in height. Leaves are greyish-green and segmented, leaf axis has glands only at the insertion of the pinnae. Flower heads are 5-6mm in diameter, pale yellow. Legume is compressed, scarcely constricted between the brown seeds.



Detail of *Acacia dealbata* flower and leaves

Photo: Helia Marchante

BIOLOGY/ECOLOGY

Dispersal mechanisms

Seeds are dispersed by animals, namely birds and ants, and by sporadic strong winds. However, the majority of the seeds accumulate under the tree.

Reproduction

It is a prolific seed producer. Seeds are triggered to germinate *en masse* following fires. It also has vegetative reproduction, forming new shoots from lateral roots.

Known predators/herbivores

Palatable to livestock. In the native habitat several *Coleoptera*, *Lepidoptera* and *Hemiptera* attack this species.

Resistant stages (seeds, spores etc.)

Large amounts of long-lived seeds can accumulate in the soil seed banks that can persist for around 50 years.

HABITAT

Native (EUNIS code)

C3-Littoral zone of inland surface waterbodies, G-Woodland and forest habitats and other wooded land (Grows in mountain forests and along watercourses and in dry sclerophyll forest on a variety of soils, often on slopes and creek banks, remaining shrubby under dry conditions.)

Habitat occupied in invaded range (EUNIS code)

B1-Coastal dune and sand habitats, C3-Littoral zone of inland surface waterbodies, G-Woodland and forest habitats and other wooded land (mainly G1-Broadleaved deciduous woodland, G2-Broadleaved evergreen woodland, G3-Coniferous woodland, G5- Lines of trees, small anthropogenic woodlands, recently felled woodland, early-stage woodland and coppice), I1- Arable land and market gardens (specifically abandoned fields), J1-Buildings of cities, towns and villages, J4-Transport networks and other constructed hard-surfaced areas.

Habitat requirements

It prefers moist but not waterlogged soils, especially stream-sides. However, it tolerates drier soils. It also tolerates strong wind, moderate frosts and snow (down to -7 °C).

DISTRIBUTION

Native Range

Australasia - Australia (Victoria, New South Wales, Tasmania)

Known Introduced Range

Europe: France, Spain, Baleares, Canaries, Portugal, Madeira, Italy, Corsica, Sardinia, Turkey; South Africa, New Zealand, California, India, Chile, Madagascar.

Trend

There is increasing invasion after fire and in disturbed areas, or areas that neighbour invaded places.

MAP (European distribution)



Legend

	Known in country		Known in CGRS square		Known in sea
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INTRODUCTION PATHWAY

It has been known in Europe since at least 1824. It is still planted for forestry, as an ornamental plant and for soil stabilization. In some areas is used for basket-work and extraction of essential oils.

IMPACT

Ecosystem Impact

It can form dense, almost impenetrable stands that compete with and prevent the development of other species. It has allelopathic properties. It is an N fixing species that increases N soil content. Dense thickets disrupt water flow and increase erosion along stream banks.

Health and Social Impact

Allergies to its pollen are frequently reported.

Economic Impact

Invasion of forests implies economic impacts with decreases in productivity. Control actions undertaken in several areas involve enormous economical costs, mainly due to the necessity of several follow up control actions.

MANAGEMENT

Prevention

Preserving natural woods with dense cover and preventing its commercialization will reduce the risk of invasion.

Mechanical

Seedlings and very small trees can be pulled or dug out, but larger ones must be cut. These operations are more effective in humid soil to prevent root fragmentation. It readily re-sprouts both from the cut stump and from lateral roots connected to it, implying that steps must be taken to kill the stump and its root system. Cutting the stump level, close to the ground, and covering it with one or more layers to 10 mm black plastic, or follow up control must be assured to remove re-sprouts from lateral roots and/ or stumps. Ringbarking (i.e. bark removal from 1m high to ground level) is also effective and decreases resprouting.

Chemical

Glyphosate application at the stump level is quite efficient. This must be conducted immediately after cutting to be effective. Foliar sprays can also be applied.

Biological

Melanterius maculatus Lea (*Curculionidae*) is a seed-feeding weevil that destroys its seeds. This agent was released in South Africa and its establishment has been confirmed, despite the damage caused having not been quantified yet.

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