

# Acacia dealbata

## Ακακία μιμόζα



Silver wattle scientifically known as *Acacia dealbata* is a species of *Acacia* belonging to the *Fabaceae* / *Leguminosae* (Pea family). The plant is native to southeastern Australia in New South Wales, Victoria, Tasmania, and the Australian Capital Territory and widely introduced in Mediterranean, warm temperate, and highland tropical landscapes. It favors disturbed places in coastal prairies, riparian areas and coniferous forests. The Latin specific epithet *dealbata* also means “covered in a white powder”. Few of the popular common names of the plant are **Mimosa**, **Silver wattle**, **Sydney black wattle**, **Wattle bark**, **black wattle**, **blue wattle** and **Tasmania mimosa**.

Silver wattle is often confused with green wattle (*Acacia decurrens*), but is distinguishable by the small, silvery hairs that grow on its twigs. It spreads via rhizomes and seeds, and easily re-sprouts after being cut. *Acacia dealbata* changes soil chemistry by fixing nitrogen and the plants’ fallen leaves may have allelopathic effects that prevent the growth of native understory plants. Like many acacias, silver wattle is commonly planted as an ornamental. The plant is attractive to wildlife, and also is commonly grown by the cut-flower industry both for its foliage and flowers. It also is known for its Nitrogen fixing abilities that benefit other plants growing nearby as well as the tree itself.

## Traditional uses and benefits of Silver wattle

- The essential oil is soothing and reducing the nerves, astringent and antiseptic.
- They are used in the treatment of diarrhea and dysentery, and can also be helpful in cases of internal bleeding.
- When applied externally, as a wash, they are used to treat wounds and other skin problems, hemorrhoids, perspiring feet, some eye problems, as a mouth wash etc.



## Culinary Uses

- Flowers are rich in pollen; they are often used in fritters.
- Gum that exudes naturally from the trunk is edible and is used as a substitute for Gum Arabic.
- Larger quantities can be obtained by tapping the trunk.
- Some species produce a gum that is dark and is liable to be astringent and distasteful, but others produce a light gum and this is sweet and pleasant.
- It can be sucked like candy or soaked in water to make a jelly.

- Gum can be warmed when it becomes soft and chew able.
- Leaves are sometimes used in Indian chutney.

### **Other facts**

- Yellow dye is obtained from the flowers.
- Green dye is obtained from the seed pods.
- Extensive root system of this plant helps to prevent soil erosion.
- Tannin is obtained from the bark.
- It is a satisfactory fuel wood, is used as a furniture timber and occasionally for wood wool, poles, and has good gluing properties.
- Its kraft pulping and paper making properties make it suitable for a range of paper and paperboard products such as liner boards, bag and wrapping papers, white boards and writing and printing paper.
- Flowers are used for perfume production and French manufacturers recognize the extract for its ability as a blender and 'smoothing agent' for synthetics and as a fixative in high grade perfume.
- dealbata is a valuable source of pollen for bees.
- Its gum may be used as a substitute for gum Arabic and occasionally its bark is used for tanning production but is lower yielding and poorer quality when compared with *A. mearnsii*.
- Wool may be dyed yellow-fawn or green using *A. dealbata* leaves depending on the mordents used.
- Its young branches and immature fruit have a whitish-colored powdery or waxy coating that gives them a frosty appearance.
- It has been used in windbreaks and also to control soil erosion, stabilizes hillsides and gullies.
- An essential oil obtained from the flowers is used as a fixative in high-grade perfumery products.
- In some European countries, the flowers are frequently given to Women on International Women's day.



## **Prevention and Control**

### **Cultural Control**

Fire can be used as a control device as it can reduce the soil seedbank by killing seeds or inducing germination which can then be chemically controlled. Note that in cultivation, fire has been used to encourage regeneration in older plantations. Single hot fire favors regeneration of mature acacia stands. After a fire in Sri Lanka, up to 32,000 seedlings per hectare were found and at two years of age had an average height of 3-4m.

### **Mechanical Control**

Weber, 2003 reports mechanical control by ring barking or digging out plants.

### **Chemical Control**

Methods of chemical control are drawn by Delabraze and Valette, Fagg and Flinn, Fagg and Cameron and Campbell et al. but they are expensive. Weber 2003 lists approaches including chemical control by basal stem treatment, stump treatment or foliar application.

## **Biological Control**

Biological control methods are available but are not suitable in regions where other acacias are in commercial use, eg. Black wattle for tannin.

## **Integrated Control**

Cut stumps need to be treated with herbicides to prevent re-sprouting and should be kept less than 15 cm in height while follow up removal of emerging seedlings, control of coppice growth etc. should occur after large clearing attempts.

