

Eucalyptus



Eucalyptus is a genus of over seven hundred species of flowering trees, shrubs or mallees in the myrtle family, Myrtaceae. Along with several other genera in the tribe Eucalypteae, including Corymbia, they are commonly known as eucalypts. Plants in the genus Eucalyptus have bark that is either smooth, fibrous, hard or stringy, leaves with oil glands, and sepals and petals that are fused to form a "cap" or operculum over the stamens. The fruit is a woody capsule commonly referred to as a "gumnut".

Most species of Eucalyptus are native to Australia, and every state and territory has representative species. About three-quarters of Australian forests are eucalypt forests. Wildfire is a feature of the Australian landscape and many eucalypt species are adapted to fire, and resprout after fire or have seeds which survive fire.

A few species are native to islands north of Australia and a smaller number are only found outside the continent. Eucalypts have been grown in plantations in many other countries because they are fast growing and have valuable timber, or can be used for pulpwood, for honey production or essential oils. In some countries, however, they have been removed because they are highly flammable.

Bark

All eucalypts add a layer of bark every year and the outermost layer dies. In about half of the species, the dead bark is shed exposing a new layer of fresh, living bark. The dead bark may be shed in large slabs, in ribbons or in small flakes. These species are known as "smooth barks" and include *E. sheathiana*, *E. diversicolor*, *E. cosmophylla* and *E. cladocalyx*. The remaining species retain the dead bark which dries out and accumulates. In some of these species, the fibers in the bark are loosely intertwined (in stringybarks such as *E. macrorhyncha* or peppermints such as *E. radiata*) or more tightly adherent (as in the "boxes" such as *E. leptophleba*). In some species (the "ironbarks" such as *E. crebra* and *E. jensenii*) the rough bark is infused with gum resin.

Many species are 'half-barks' or 'blackbutts' in which the dead bark is retained in the lower half of the trunks or stems—for example, *E. brachycalyx*, *E. ochrophloia*, and *E. occidentalis*—or only in a thick, black accumulation at the base, as in *E. clelandii*. In some species in this category, for example *E. youngiana* and *E. viminalis*, the rough basal bark is very ribbony at the top, where it gives way to the smooth upper stems. The smooth upper bark of the half-barks and that of the completely smooth-barked trees and mallees can produce remarkable color and interest, for example *E. deglupta*.

Leaves

Eucalyptus leucoxylon var. 'Rosea' showing flowers and buds with operculum present *E. tetragona*, showing glaucous leaves and stems

Nearly all eucalyptus is evergreen, but some tropical species lose their leaves at the end of the dry season. As in other members of the myrtle family, eucalyptus leaves are covered with oil glands. The copious oils produced are an important feature of the genus. Although mature eucalyptus trees may be towering and fully leafed, their shade is characteristically patchy because the leaves usually hang downwards.

Flowers and fruits

Eucalyptus melliodora, showing flowers and opercula Seeds of *Eucalyptus camaldulensis*

The most readily recognizable characteristics of eucalyptus species are the distinctive flowers and fruit (capsules or "gumnuts"). Flowers have numerous fluffy stamens which may be white, cream, yellow, pink, or red; in bud, the stamens are enclosed in a cap known as an operculum which is composed of the fused sepals or petals, or both. Thus, flowers have no petals, but instead decorate themselves with the many showy stamens. As the stamens expand, the operculum is forced off, splitting away from the cup-like base of the flower; this is one of the features that unites the genus. The woody fruits or capsules are roughly cone-shaped and have valves at the end which open to release the seeds, which are waxy, rod-shaped, about 1 mm in length, and yellow brown in color. Most species do not flower until adult foliage starts to appear; *E. cinerea* and *E. peruviana* are notable exceptions.

Eucalyptus oil

Eucalyptus oil is readily steam distilled from the leaves and can be used for cleaning and as an industrial solvent, as an antiseptic, for deodorizing, and in very small quantities in food supplements, especially sweets, cough drops, toothpaste and decongestants. It has insect-repellent properties and serves as an active ingredient in some commercial mosquito-repellents. Aromatherapists have adopted eucalyptus oils for a wide range of purposes *Eucalyptus globulus* is the principal source of eucalyptus oil worldwide.

Musical instruments

Eucalypt wood is also commonly used to make didgeridoos, a traditional Australian Aboriginal wind instrument. The trunk of the tree is hollowed out by termites, and then cut down if the bore is of the correct size and shape.

Dyes

All parts of *Eucalyptus* may be used to make dyes that are substantive on protein fibers (such as silk and wool), simply by processing the plant part with water. Colors to be achieved range from yellow and orange through green, tan, chocolate and deep rust red. The material remaining after processing can be safely used as mulch or fertilizer.

References –

- <https://en.wikipedia.org/wiki/Eucalyptus>