

Sweet Bursaria

BURSARIA SPINOSA

Family:

Pittosporaceae (also includes the local genus *Billardiera* or apple berry; and *Pittosporum bicolor* or banyalla).

Bursaria= bursa (purse, bag, pouch). The seed capsule is purse like.

Spinosa= spiny, prickly

Other common names are native boxthorn and Christmas bush.

Description:

Very variable shrub to small tree. In the Upper Barwon region, sweet bursaria ranges from a shrub (3-5 m tall) to a medium size tree. The shrub grows mostly on the Otway Range from the inland foothills all the way up and over the ridge to the sea. The tree (8-10m tall) tends to be out on the Basalt Plains. Some particularly large trees are located around Winchelsea and Buckley and would have to be very old.

The variation is due to environmental reasons (rainfall, soil, age) rather than genetic. Also, as the plant ages, the slender spines along the stems disappear.

The coastal provenance flowers in late spring and seed matures around February-March. Inland provenances (shrub and tree) flower in late December-January and seed matures in late March-April. Flowers are creamy white and very aromatic and showy.

Seed should be sown (either fresh or properly stored) in April-May. The seed needs cold temperatures to germinate and around the shortest day of the year they will start to pop their heads up. These young seedlings are very susceptible to fungal diseases (damping off) and thus TLC and IPM are both needed!! *

Bursaria coppices easily from the base of the plant and also suckers readily. With the thorny nature and its suckering ability, many bursaria individuals are able to survive browsing and rubbing from cattle sheep and roos.

Uses

An excellent long lived (and sometimes slow growing) tough windbreak shrub. Can grow in full sun or part shade. Enjoys moist but not waterlogged sites. Usually found on light country more than heavy.

Very important for local farm plantings due to its long life, coppicing ability, bird and insect habitat, summer flowering (most other local plant species are spring flowering), nectar and pollen source. Bursaria's nectar attracts predatory thynnid wasps. These insects parasitise Christmas beetle larvae (eucalypt leaf chewing insects). Bursaria also hosts tachinid flies who parasitise destructive insects such as the larvae of various moths and butterflies, beetles and grasshoppers.

A number of important butterfly species (particularly the "Copper" butterflies) are reliant on Bursa-

ria for their existence. The female Copper butterfly lays eggs on the plant. The newly hatched larvae crawls down the stem and goes underground where it seeks shelter within an ant nest (genus: *Notoncus*). At night the larvae feeds on the leaves of the *Bursaria* and secretes a sweet sugary substance which the ants feed upon. Later on, when the larvae emerge as an adult butterfly, the *Bursaria* is in full flower providing a rich nectar source for the butterfly before the whole life cycle begins again.

It was discovered during the 1940's that *Bursaria* contained the suncreening compound Aesculin. The RAAF utilised this compound from *Bursaria* during WW2 for pilots and gunners. The original aesculin came from the bark of the *Aesculus hippocastanum* tree (horse chestnut) but the tree had to be cut down to utilise the chemical. Because *Bursaria* coppices so well, it can be assumed the plants would grow back readily after harvesting the leaves for this compound.
Tender loving care and integrated pest management.

References

Meanders Quarterly, Friends of Edgars Creek, Feb 2008
Species Notes, *Bursaria spinosa*, Corangamite CMA
The Honey Flora, Dept of Agriculture, Victoria