

Bursaria spinosa Sweet Bursaria



***Bursaria spinosa*: Above:** In full bloom at Wilson's Promontory National Park, VIC. Photo: twothylacines, inaturalist.org CC BY-NC. **Below:** Thorny branch. Photo: subsp. lasiophylla, Tony Rodd, Flickr CC BY-NC-SA 2.0

Overview

(Australian Native Plants Society and Australian National Botanic Gardens)

Bursaria spinosa is a member of the Pittosporaceae family. Its common names include 'Sweet Bursaria, Native Blackthorn and Christmas Bush. First Nations People know it as 'geapgna and kurwan (Dharawal). *Bursaria* is derived from the Latin origin word 'bursa' referring to 'a purse'. This relates to the shape of its fruit (Flora of Australia). ***spinosa*** refers to its a distinctive prickly / spiny branch.



Description

(Australian National Botanic Gardens)

This prickly bush can grow between 3 to 4 metre in height. It has elongated oval-shaped leaves approximately 20-45 mm in length. Its creamy white sweet-scented flowers are generally seen in mid-summer and during the Christmas period, which reflects its common name 'Christmas Bush'. When living in Tasmania, during the Christmas period, we picked the prolific flowers from this plant which had a slightly sweet scent.

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It is described as a 'rather drab and unlovable shrub'. Nevertheless, it is a very tough plant which is long lived, from 25 to 60 years, which is able to resprout after bushfires.

Distribution

(Macquarie University)

Bursaria spinosa is mostly found in woodland Eucalypt and open forests along the coastal regions of Tasmania, Victoria, South Australia including in the Cumberland Plain of Sydney, New South Wales. It's underground network of rhizomes is extensive. This makes it an intriguing shrub for biologists as stands of these plants can cover a significant area but are genetically identical because of their substantial underground rhizomatous network. However, individual shrubs (phenotypes) can be distinct in their appearance and may differ from each other.

Uses and medicinal qualities

(Macquarie University, Plant of the week, *Bursaria spinosa*)

A feature of *Bursaria spinosa* is that the macerated leaves when immersed in boiling water turn the water blue in sunlight. This is a result of the plant's production of the chemical aesculin which can absorb UV light and used for sunscreen from the European early settlers in Australia. Esculin is currently used for a variety of biological and medicinal applications. This includes for bacteria identification and treatment of diverse medical conditions.

Pollinators and predators

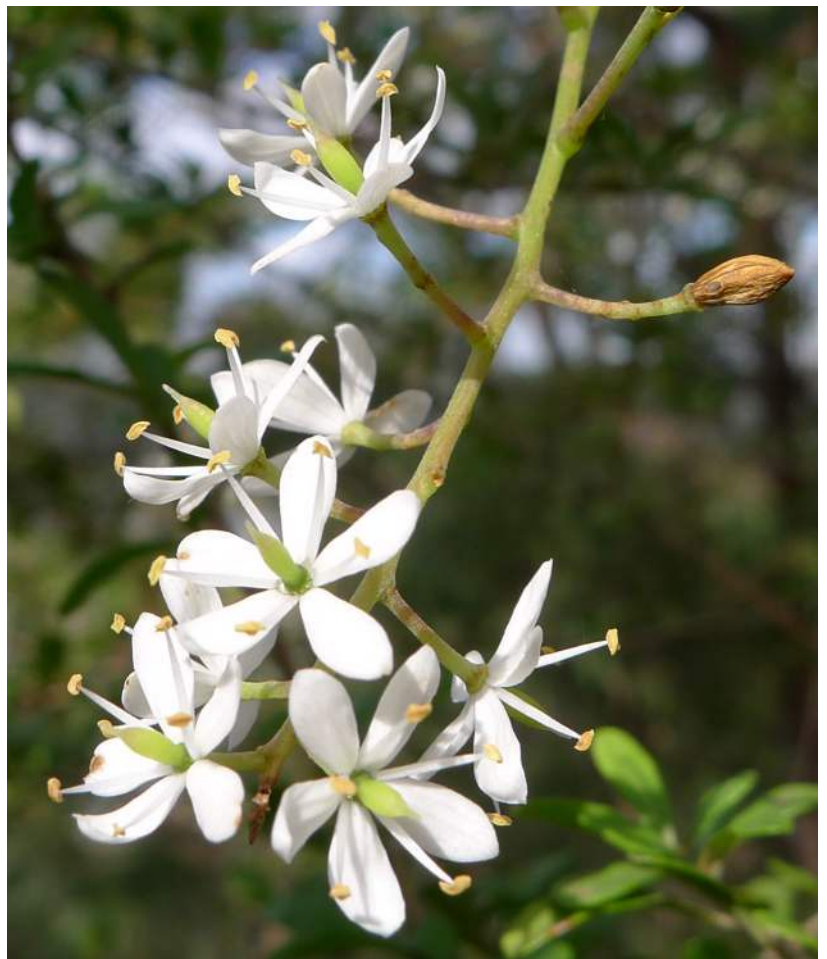
(ABC Gardening Australia and Talking Plants)

When in flower, *Bursaria spinosa* attracts lots of insects, including butterflies, moths, bees and beetles; while the native bee is the usual pollinator and the Pittosporum Beetle, named from its association with the *Pittosporum*, a close relative of *Bursaria*, is a frequent visitor at Mount Annan Botanic Gardens. This bug has a distinctively bright red head.

Bursaria spinosa is a hero plant in attracting predatory insects such as the orange assassin bug and native wasps. These predators control the brown apple moth, which, when they are caterpillars, devour the leaves of grapes and fruit trees.

The nectar, as well as the insects, also attracts plenty of birds. Small birds, like the Blue Wren, can nest safely in the prickly branches.

This plant also attracts the Eltham Copper butterfly *Paralucia pyrodiscus* which has a complex and unique symbiotic relationship with an ant mostly the *Anonychomyrma nitidicep*. Adult butterflies lay their eggs on the roots and stems of Sweet Bursaria. Once the eggs hatch, the ants guard the caterpillars (providing protection from predators) ushering the larvae to and from the ant nest at the base of the shrub, to feed on the Sweet Bursaria leaves at night. In return the ants feed on the sugar secretions exuded from the body of the caterpillar.



Bursaria spinosa: Above: Flowers.

Photo: John Tann, Wikimedia Commons CC BY 2.0.

Below: Fluorescence of Aesculin in UV light.

Photo: Opuntia, Wikimedia Commons CC BY-SA 3.0





Top: **Pittosporum Beetle**
Lamprolina impressicollis,
 inaturalist.ala.org.au CC BY-NC.
 Bottom: **Orange Assassin Bug**
Gminatulus australis,
 inaturalist.ala.org.au CC BY-NC.



View a snap shot about Bursaria Spinosa

You can view a segment about Bursaria Spinosa/ Sweet Bursaria on ABC iView / Garden Australia 2024 – 17 May 2024 - <https://www.abc.net.au/gardening/how-to/plant-profile-sweet-bursaria/103861196> -

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Photos from the top:

Eltham copper butterfly

Paralucia pyrodiscus ssp. lucida

View of wings from above and from underside. Photos by gggpellas, inaturalist.ala.org.au CC BY-NC-ND

Paralucia pyrodiscus ssp. lucida

Eltham copper larva is protected by ants which receive a sweet reward. Photo by wattlelife. inaturalist.org CC BY-NC.



Sweet Bursaria photos from top:

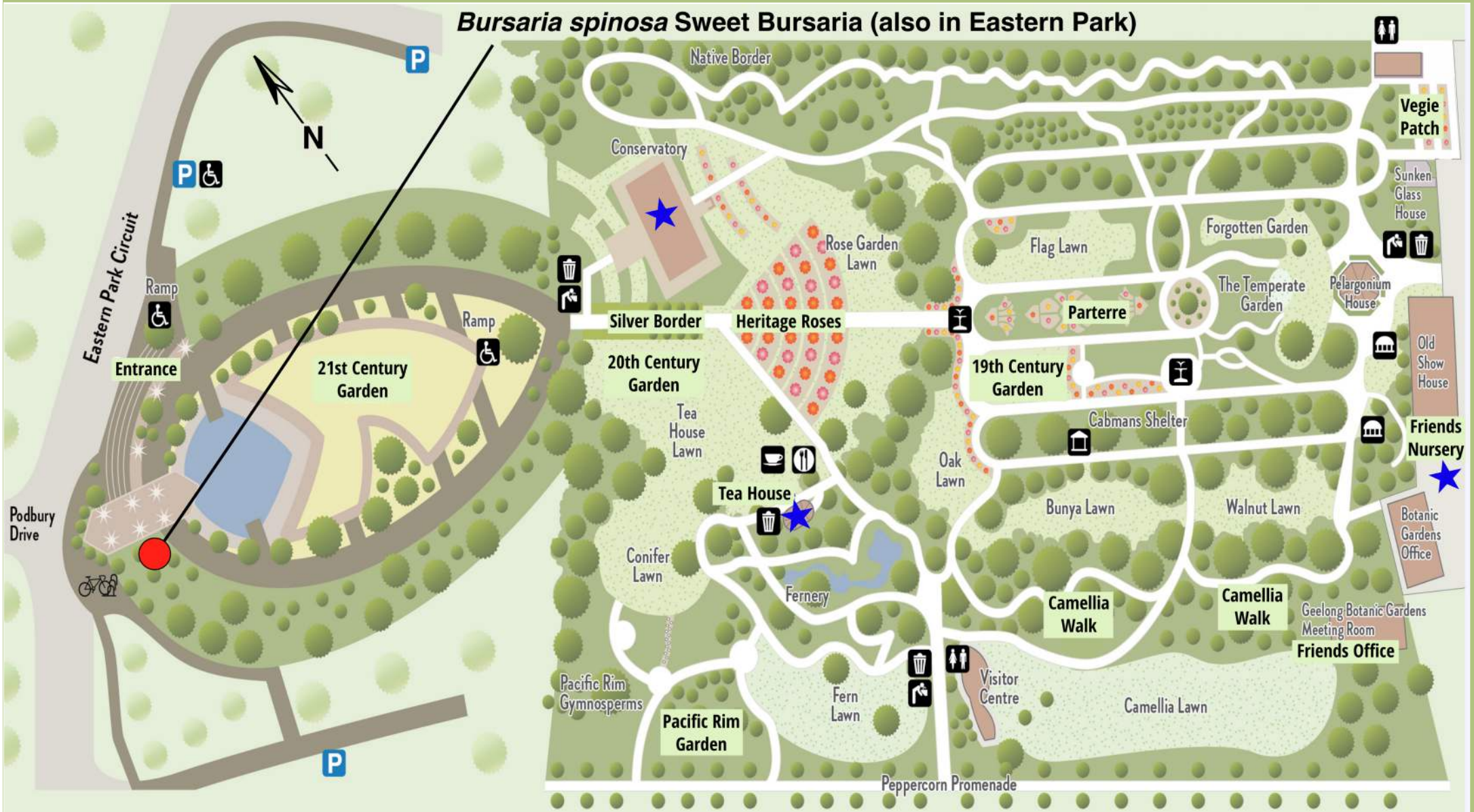
Leaves (left) and trunk (right). Agriculture Victoria (Victorian Government) vro.agriculture.vic.gov CC BY-NC.

Fruit shaped like a tiny purse. Photo: John Tann, Wikimedia Commons CC BY 2.0.

Flowers. Photo: John Tann, Wikimedia Commons CC BY 2.0.

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