



Topic 19: Boronias and other Rutaceae

THE FAMILY RUTACEAE

Did you know that,

- Rutaceae is named after the European herb *Ruta graveolens*, a small rounded shrub to about 1 m.
- Rue comes from the Greek word "rueo", to set free, referring to the value of this herb as a medicine.
- The large family Rutaceae is worldwide and contains about 150 genera and over 1800 species including citrus trees and many ornament shrubs.

Within this family is the Tribe Boronieae with about 320 species in 41 genera which are almost exclusively Australian, being represented in all states and from diverse habitats. In all species, trees and shrubs, the leaves are dotted with glands containing strongly aromatic volatile oils. The flowers are regular with 4 or 5 petals and the number of stamens is usually equal to or twice that of the petals. The ovary is always superior. The fruits consist of 4 or 5 joined carpels. Most are dry and open explosively but some rainforest genera have succulent fruits.

Boronia ledifolia – an erect shrub abundant in coastal sandstone communities. The leaves can be simple or trifoliate with recurved margins, dark green and shiny above and paler below. The stems are cloaked in a rusty layer consisting of tiny glands covered in rough microscopic rusty star hairs. Bright pink star shaped flowers with 4 petals can be solitary or in small axillary cymes. It flowers winter and early spring.



Boronia pinnata – an erect hairless shrub about 1m tall found in moist sheltered places in dry woodland. The leaves are compound with 5 to 9 leaflets. The leaflet margins are entire. They are aromatic when crushed. Clusters of flowers are bright pink and borne in the upper axils of the leaves. Spring flowering.



Boronia serrulata – a small slender erect heath plant usually under 1m tall. Leaves are erect, diamond shaped, finely toothed and flat concealing the stems. The bright pink flowers slightly cupped, are in dense terminal cymes. Flowering time September-October. The tight clusters of flowers have a resemblance to roses Native Rose.



Boronia mollis – an erect shrub 1.2m high found in moist sandstone gullies. Uncommon in area. It is closely related to *Boronia fraseri* and is distinguished mainly by its conspicuous hairiness. The branches and leaf stalks are densely covered in soft stellate hairs. Flowers are bright pink in axillary cymes. Flowers Spring.

Boronia floribunda – erect shrub about 1.5m found in sheltered moist places in woodland. It is rather uncommon but it occurs in the gardens. Its flowers are pale pink and have a distinctive perfume. Distinguished from *B pinnata* by its swollen stigma.



Boronia thujona – light pink flowers in dense axillary cymes and bipinnate leaves with 3 -15 leaflets which are finely toothed due to oil glands on the margins. Branchlets with 2 grooves separated by decurrent leaf bases. It exudes a powerful and disturbing odour somewhat like mentholated dried meat.

Zieria laevigata - a common shrub 50-60 cm tall with hairless slightly angular stems. The 3 leaflets are linear with margins curved to the undersurface. Flowers are pale pink or white inflorescences in the leaf axils, on stalks shorter than the leaves Flowers July-October.



Correa reflexa – a common small shrub 50-80cm tall with opposite broad heart shaped leaves which are stem claspings, dark green and rough from a covering of short hairs. The flower is a cylindrical tube 2-3cm long drooping from the ends of the branchlets. It can be yellow green or red with yellow green tips and it is uncommon to find both colour forms growing near each other. Flowers May-September.



Phebalium squamulosum – fairly common shrub found on sandstone heath. This species show considerable variation and 4 subspecies occur in the Sydney area. The most common is *Phebalium squamulosum ssp squamulosum*. Its leaves are narrow, oblong, shiny green above with the underneath covered by a mixture of silvery grey hairs and brownish scales (rusty spots). Flower petals are yellow inside and rusty outside. Flowering time August

Leionema dentatum (formerly *Phebalium dentatum*)

– a tall slender shrub growing in sandstone gullies. It does not have scurfy scales but young stems have minute star hairs. Leaves are slender and flexible with conspicuous oil dots, dark green above, greenish white below. The margins are curved under, hiding the dentate (toothed) edge. Flowers are pale yellow borne in short stalked umbels in the leaf axils and they often hide the stems with their masses of stamens projecting beyond the petals.



Crowea saligna – small erect shrub with alternate leaves that have a distinct mid-vein. Flower is bright pink and resembles *Eriostemon* except that the anthers have long bearded appendages. Its flowering time is in Autumn and early Winter when *Boronias* and *Eriostemons* are not in flower.



Eriostemon australasius - An erect shrub to 1.5m
With showy pink flowers. Leaves, grey-green in colour
are lanceolate to linear with an inconspicuous mid-vein.
The petals have a waxy texture and are solitary in the
leaf axils. After flowering the petals close to protect
the developing cocci.



Philotheca myoporoides (formerly *Eriostemon myoporoides*) - an attractive bush shrub to 2m tall, with hairless green stems densely covered with raised oil glands. Leaves are narrow, greyish to dark green, dotted with oil glands and have a prominent midrib. The white flowers and pink buds are in clusters of 2 to 5 flowers on a common stout stalk from the leaf axils. Popular garden plant.



Philotheca salsolifolia - Small erect shrub of variable habit. Leaves are narrow, linear, dotted with oil glands and crowded on the stem. Flowers are mauve and conspicuously hairy with stamens united at the base and free above. They are mostly solitary at the ends of the branches. Under 50cm high



REFERENCES:

Beadle, N et al Flora of the Sydney Region 1982

Tony Edmonds & Joan Webb. *Sandstone Flora-A Beginner's Guide to Native Plants.* NSW University Press.

A Fairley & P Moore *Native Plants of the Sydney District.* Kangaroo Press.

Les Robinson *A Field Guide to the Native Plants of Sydney.* Kangaroo Press.

Australian Plant Society. Sutherland Group. *Coastal Plants of the Royal National Park 2006*

Acknowledgements:

These notes contain hyperlinks to materials, including images, illustrations, plant descriptions and a glossary from PlantNET, with the courtesy of **The Royal Botanic Gardens & Domain Trust, 2011.**

For general access to **PlantNET** see also <http://plantnet.rbgsyd.nsw.gov.au/>

Walks and Talks, Australian Plants Society, North Shore Group. Revised: HT 2011