

Flora News

By Warren Brewer

Karamū, coffee and gardenia

Karamū (*Coprosma robusta*) begins flowering in July with male (below left) and female (below right) flowers on separate plants. Male flowers each have four stamens, capped with a pollen laden anther, dangling to catch any breezes.



The female flowers each have two erect stigmas with furry surfaces to trap pollen from the air.

The fruit that forms on female plants ripens to an orange colour, attracting visits from birds. Māori children were said to snack on the ripe fruit.



The seed from each ripe fruit looks like a miniature coffee bean.



The large genus *Coprosma* has about 100 species; over half of them are endemic to New Zealand. The NZ species have dispersed all over the land mass, colonising habitats from coastal sand dunes to alpine heights. The dune and alpine species have adapted to their harsh surroundings by having a creeping growth habit and forming prostrate mats. Other plants are shrubs with several becoming small trees. Some small leaved coprosma shrubs express the NZ divaricating growth form, displayed on Tiritiri Matangi by **twiggy coprosma** (*Coprosma rhamnoides*).



Tiny ripe black berries on twiggy coprosma

Of the rest of the world's *Coprosma* population, Hawaii has 13 species with Tasmania, Eastern Australia, Borneo, Java, New Guinea and some Pacific Islands making up the rest.

Coprosma belongs in the coffee family, Rubiaceae, described as the world's fourth largest plant family. Most members are tropical and subtropical trees shrubs and climbers. Examples of other family members are *Gardenia* trees with their sweetly scented flowers. *Cinchona* trees from which the drug quinine was extracted, a long time front line medication used against malaria. Also, of course, the coffee plant, *Coffea arabica*.

Coprosma means "dung smell". The botanists on James Cook's second voyage were offended by the odour of a couple of species they were pressing for storing. One was so bad it was named *Coprosma foetidissima* (really stinking).

Tiritiri Matangi has seven *Coprosma* species recorded. Three of them, karamu, twiggy coprosma and **taupata** (*Coprosma repens*) are widespread and easily seen. The other four species have a small presence.