

AUSTRALIAN FICUS WILD IN AUCKLANDR.O. Gardner

In the older large gardens of the city there is, besides the well-known Moreton Bay fig Ficus macrophylla a less common, similar but smaller-leaved species the Port Jackson fig Ficus rubiginosa (see Beadle et al. 1976 for identification).

There are a number of F. rubiginosa in Cornwall Park along the path leading from the kiosk to Greenlane Road, presumably being part of the original planting here. As horticultural subjects these trees vary - some have dull rusty foliage while the others are more attractive in their glossy leaves and more vigorous growth; it is this latter form which is the more common elsewhere in Auckland.

However, this variation is intraspecific (Corner, pers.comm.) and the important thing about these trees is what they share, namely the tiny wasp characteristic of the species and essential for pollination. (See Ramirez 1970, Armstrong 1979 on the life history of fig wasps).

F. rubiginosa fruit is produced all the year round (slowly in winter), and the ripe fruit, soft and red has abundant seed - the wasps are certainly doing their work. Look for them at an earlier stage when the figs are yellowish red; here the wasps will be reaching maturity and beginning to emerge from their figs.

Seed germinates easily and this species of fig is beginning to naturalize around Auckland. In Cornwall Park juveniles grow in the deeply-fissured bark at the base of old radiata pine and in Grafton Gully walls (and graves!) carry several perching juveniles and young adults, the largest two of which can be seen in Symonds Street above the motorway on-ramp.

Why then are there no large old wild trees around Auckland, say in the neglected parts of our volcanic cones? Dispersal seems to be uncomplicated and the species has been on the Auckland scene for perhaps a hundred years, being cultivated in Auckland's earliest public gardens (Albert Park, Western Park, Old Government House).

An explanation might be that the wasps have only recently arrived in N.Z., being blown across from Australia. Young adult trees in Auckland seem to have no trouble in acquiring wasps, sometimes from source trees over a kilometre away; so far I have found no Auckland tree without them.

In contrast the Moreton Bay fig lacks its wasp, at least in Auckland; though the figs become red this is only the stage of pollen shed and I have never found any fig with seed. It follows then that the records of wild Moreton Bay fig in New Zealand ("Cornwall Park", "Ninety Mile Beach"; Webb 1981) are probably wrong, the former being based on F. rubiginosa and the later perhaps on a F. macrophylla relic of cultivation.

Similarly I have not noted wasps in plantings of the climbing fig F. pumila and so consider Webb's record for this species naturalized in Auckland to be wrong too.

References

- Armstrong J.A. 1979. Biotic pollination mechanisms in the Australian flora - a review. *New Zealand Journal of Botany* 17: 467-508.  
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 Ramirez B. 1970. Host specificity of fig wasps, *Evolution* 24: 680-91.  
 Webb C.J. 1981. Checklist of dicotyledons naturalized in New Zealand 6. *New Zealand Journal of Botany* 19: 45-51.