

SEX IN RUBUS

by L.B. Moore

Everybody is talking about sex just now and at least two liberation groups maintain that there should be no clear line of demarcation between the roles of male and female. The New Zealand flora has an exceptionally large proportion of species with unisexual flowers, either on different plants or distinct staminate and pistillate flowers on one plant, but there are intermediates too.

The genus Rubus is credited with over 1000 species in many parts of the world. The five New Zealand species differ from most in that they have male and female flowers on different plants, at least as a general rule. In late December 1974, in Montgomery Park, Hilltop, I idly picked a bunch of bush-lawyer berries that were overhanging the track. Looking at them at home I was surprised to find remains of stamens at the base of the green fruits. Without leaves the species could not be certainly determined. Next I heard from Bruce Irwin of Dunedin about flowers complete with both stamens and carpels in Rubus parvus, the west coast species that has simple leaves, and a quick look in the herbarium at Botany Division, DSIR, showed that this was not an isolated case. Seven of the 26 sheets of R. parvus had neither flowers nor fruits, twigs on 4 sheets had male flowers, 4 more seemed to be wholly female, but on the other 11 sheets there were clear signs of stamens associated with fruits at various stages of development. One of these was an oddity in which a leafy shoot had grown out from the apex of each fruit. In describing this phenomenon Connor and Penny (1960) stated: "The flowers are said to be dioecious (Cheeseman 1925), but the plants in the Botany Division collection appear hermaphrodite as do some herbarium specimens".

Obviously it could be useful for our members to take a second glance at the flowers of all species of bush-lawyers to see just how strictly the sexes are segregated.

- Cheeseman, T.F. 1925: "Manual of the New Zealand Flora"  
2nd ed.: p.501.
- Connor, H.E.; Penny, E.D. 1960: Note on proliferation in Rubus parvus Buchanan. N.Z.J.Sci.  
3: p.396-8.