GREEN HONEYSUCKLE

Lambertia rariflora Meisn. (PROTEACEAE)

(photo S. D. Hopper)

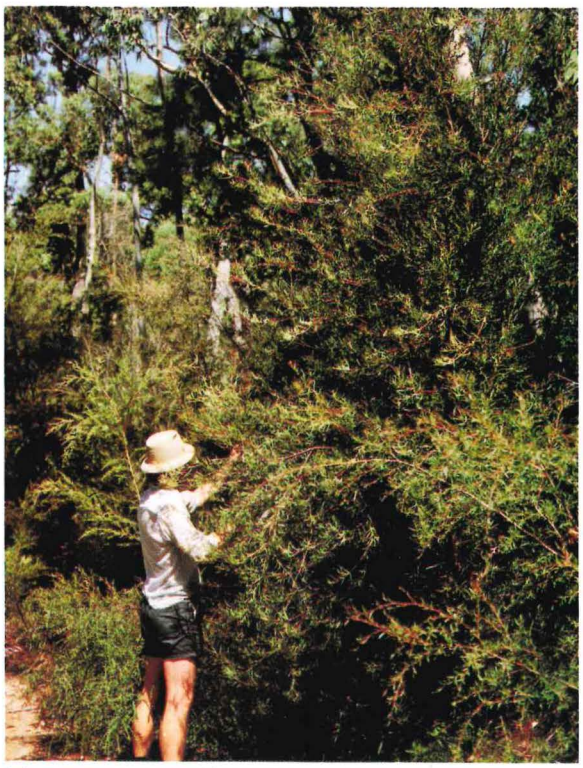
Lambertias are known as ''wild honeysuckles'' because of their rather large tubular flowers with copious nectar. *Lambertia rariflora* is unusual in its summer flowering period and its green flowers. The specific name *rariflora* seems appropriate for this rare plant but actually refers to the scattered solitary flowers of the species rather than its rarity.

The Green Honeysuckle was originally collected by the colonial botanist James Drummond while on his second plant collecting expedition in 1842-43. Carl Meisner, the professor of botany in Basle, Switzerland, named the species in 1848. The site of Drummond's collection was not precisely recorded and it was well over 100 years before the species was relocated in 1973. The species is now known from a number of sites in the Whicher Range region south of Busselton.

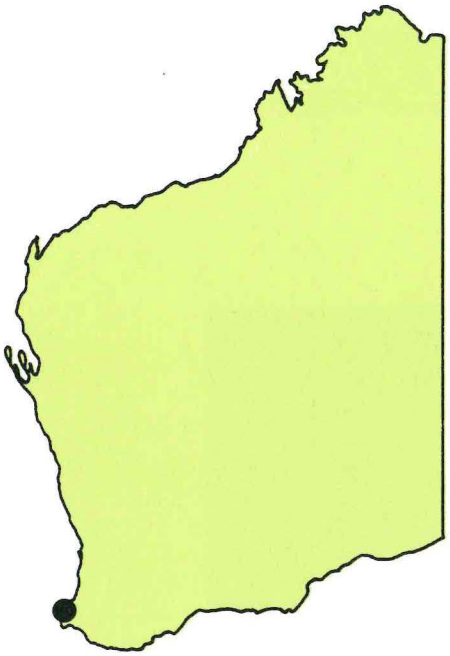
DESCRIPTION

An erect shrub up to 7 m tall, the young branches hairy. Mature leaves shortly stalked, up to about 8 cm long and 0.5 cm wide, with a distinct midrib, mostly in whorls of three (i.e. 3 leaves borne at each level up the stem). Flowers green, becoming yellow with age, stalkless, with a sheath of bracts at the base. Floral tube about 2.5 cm long, covered with short soft hairs, faintly lined, curved. Style about 3.5 cm long. Fruit about 2 cm long including its beak.

It is the only *Lambertia* with green flowers and the only one to occur in the Whicher Range area.

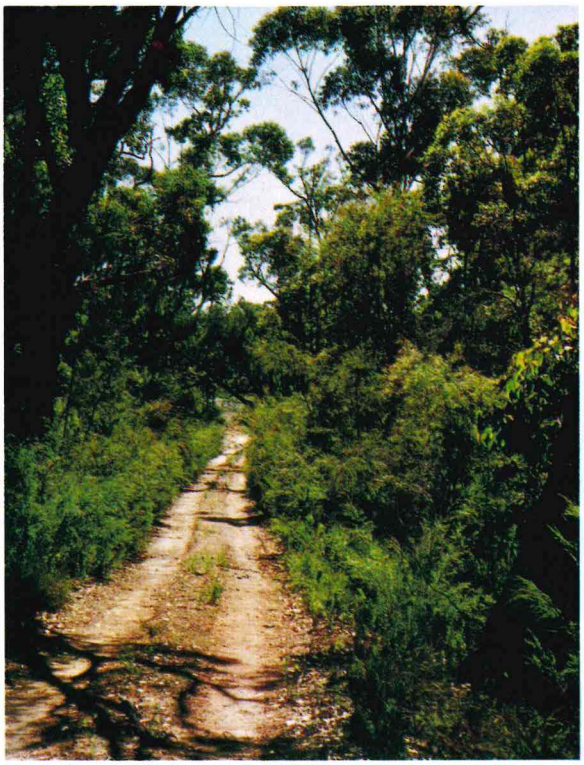


A four metre tall plant of Green Honeysuckle. (photo: S. D. Hopper)



DISTRIBUTION AND HABITAT

The species is restricted to the Donnybrook Sunkland — Whicher Range area, south of Busselton and has a geographical range of 30 km. The average annual rainfall is about 1100 mm. *L. rariflora* grows in heavy clay soil on ephemeral creek banks or in low swampy ground. It is associated with forests or woodlands of Jarrah (*Eucalyptus marginata*), and forms a dense understorey generally mixed with *Agonis linearifolia* and a *Hakea* species.



Green Honeysuckle's natural habitat in a Jarrah and Bullich forest bordering a creek in the Whicher Range south of Busselton. (photo: S. D. Hopper)

REPRODUCTIVE BIOLOGY

The flowering period is January-March and the flowers appear to be well adapted for bird pollination. A few ants and introduced honey bees have been observed feeding on the nectar but these are unlikely to be effective pollinators.

The species reproduces well from seed although its solitary fruits each contain only one or two seeds. In 1980, mortalities were observed among seedlings which had germinated in relatively dry exposed areas.

The Donnybrook Sunkland contains infestations of dieback caused by *Phytophthora cinnamomi,* a disease that tends to spread rapidly along water courses. In 1980 there was no evidence that mature plants of the Green Honeysuckle were suffering any setback from this disease although it seemed probable that at least some populations would have come into contact with dieback.

Fruit of Green Honeysuckle. (photo: S. D. Hopper)

CONSERVATION

Lambertia rariflora is not known to be in cultivation although it is an attractive shrub that would be suitable for native gardens. It grows along the upper reaches of the river system providing the Margaret River town water supply and on two other drainage systems. It could be a valuable plant to use for stablising degraded areas along such watercourses, especially if it proves to be resistant to dieback disease.

In February 1980, eight populations totalling 813 mature plants were located. Since then the largest population has been inadvertantly reduced in size as a result of roadworks. Only one population, containing a mere 26 plants, occurs in a Forests Department Management Priority Area reserved for the conservation of flora and fauna. The other populations occur in State Forests, three in areas set aside for pine plantations and four in areas for hardwood production. These populations have survived so far because the present policy of forests management is to leave the native vegetation along drainage lines. However, most of the *Lambertia* plants occur adjacent to forest areas that are being cleared and planted with pines. What effect these activities will have on the environment is uncertain.

IUCN Red Data Book Category: RARE
Australian Plants at Risk Code: 2VC

FURTHER READING

Rye, B. L. & Hopper, S. D. (1981). A guide to the gazetted rare flora of Western Australia. Dept. Fish. Wild. West. Aust. Rept. No. 42.

11927/12/81—8M—L/3123

Prepared by Barbara L. Rye, partly based on an unpublished report by D. Halford.
for Department of Fisheries and Wildlife
108 Adelaide Terrace
Perth 6000 Western Australia

1982