



LESUEUR HAKEA

Hakea megalosperma Meisn. (PROTEACEAE)



The Lesueur Hakea's fruit is perhaps the largest in the genus, rivalled only by the more rounded fruit of *H. platysperma*. Clusters of red flowers are borne at the base of the leaves. (photo: A. S. George)

Among the attractive features of this highly ornamental shrub are its pale green-silvery leaves, its decorative clusters of spidery flowers and its very large woody fruits. The flowers are white or pink initially but become deep red with age, and exude a strong sweet perfume. The flowering period begins in autumn, well before the main flowering season for the native flora. Not surprisingly there is a demand for the Lesueur Hakea as a cultivated plant in native plant gardens.

In about 1850, the colonial botanist James Drummond collected the first specimen of the species from Mt Lesueur in the Gairdner Range. Although this specimen lacked flowers, a Swiss botanist, Carl Meisner, used it to describe the species in 1855, placing it correctly in the genus *Hakea*. The specific name, *megalosperma*, refers to the species' large fruits, which are the longest in the genus but are probably not as heavy as those of the Thick-leaved Hakea (*H. crassifolia*) and the Broad-seeded Hakea (*H. platysperma*).

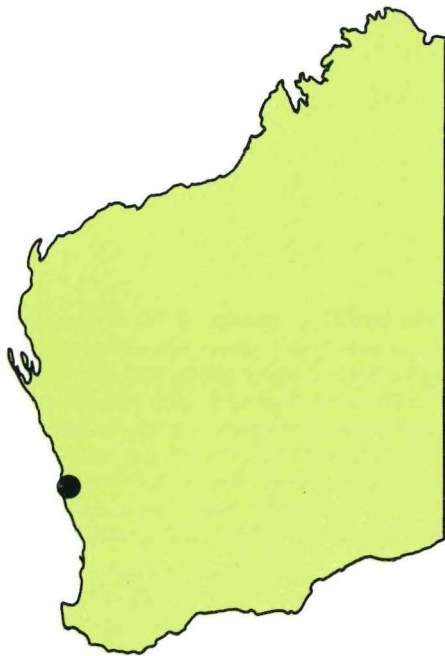
DESCRIPTION

Erect many-stemmed shrub up to 1 m or more tall and 2 m across. Leaves pale green, thick, up to 10 cm long and 4 cm wide, rounded at the end, tapering towards the stem, with faint veins. Clusters of 5-10 flowers borne in the leaf axils on woody stems below the young foliage. Flowers white to pink, becoming red with age, about 0.5 cm long, on a long stalk. Fruits grey-brown, prominently beaked, up to 8 cm long and 4 cm wide.

In the field *Hakea megalosperma* may be confused with *Hakea incrassata*, a species with similar leaves. However, the former can be distinguished from all other hakeas by the size and shape of its fruits. *Hakea incrassata* has much more circular fruits than the Lesueur Hakea and its leaves are more pointed at the end.



An attractive many-stemmed shrub with young white flowers and numerous older red flowers, growing in cultivation at Kings Park. (photo: I. R. Dixon)



DISTRIBUTION AND HABITAT

The geographical range of *Hakea megalosperma* is about 40 km long from Gairdner Range northward towards Eneabba. The plants occur on laterite hills, generally growing in shallow grey sand with lateritic pebbles over laterite conglomerate. They usually dominate a low open heath. The average annual rainfall is about 600 mm.

CONSERVATION STATUS

The Lesueur Hakea was sold by three seed dealers during 1980 but was not sold by any nurseries in Western Australia. It germinates readily from seed, the large seeds producing large robust seedlings. However, the plants may die at a later stage because they are not tolerant of a wide range of conditions.

Five surviving wild populations are known. Three of these, including the two largest populations, contain a total of about 200 plants and occur in a portion of the Gairdner Range that has been proposed as a Nature Reserve. However, current mining claims on the area may prevent the reserve proposal from being adopted. At present the area is comprised of two Crown reserves, one for educational purposes and one for horse breeding.

A further population occurs on a C class reserve for Government requirements. It is apparently on the verge of extinction because it has only one plant and this has set no fruits. The last population, containing about 20-30 plants, is on an uncleared portion of a farming property and is also at risk.

IUCN Red Data book Category: RARE
Australian Plants at Risk Code: 2V

REPRODUCTIVE BIOLOGY

The flowering period is April-June. The flowers produce a strong perfume and, presumably, are pollinated by insects.

Fruit set per plant is very variable. The plants may require cross-pollination for successful seed production because one solitary plant in the wild is reported to have produced no fruits at all.

The large woody fruits retain their seeds for a long time. Each fruit contains one or two flattened seeds completely surrounded by a large papery wing which aids seed dispersal by the wind.

Because it has several stems arising at ground level, the species presumably has a lignotuber and is able to resprout after fires. The plants are probably very long-lived.

FURTHER READING

Erickson, R.; George A. S.; Marchant N. G. & Morcombe M. K.; (1979). "Flowers and Plants of Western Australia" 2nd edn. Reed: Sydney.

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



Habitat of Lesueur Hakea
(photo: A. J. M. Hopkins)

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Prepared by: Barbara L. Rye, with assistance from E. A. Griffin.

for: Department of Fisheries and Wildlife
108 Adelaide Terrace
Perth 6000 Western Australia

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