

EXPLANATION OF PLATE

A—Branchlet with leaves and flowers and buds; B—Fruit; C—The fruit in vertical section  
 Piawaning, January, 1961, Gardner.



# TREES

## of Western Australia

By C. A. GARDNER

### No. 99—THE MOTTLECAH

*Eucalyptus macrocarpa* Hook.

**T**HIS species, a shrub between six and 15 feet in height, is the largest-flowered of all the species of *Eucalyptus*. The name is intended to indicate this fact, but unfortunately the Greek work makros means "long" and actually the fruit "karpos" is remarkably short in comparison to its diameter, being in fact the broadest fruit within the genus.

I have in my possession a fruit which is  $3\frac{1}{4}$  in. in diameter, but fruits have been recorded as being about  $3\frac{1}{2}$  in. across. *Eucalyptus megacarpa*, the "Bullich" which is named from its large fruit is indeed small by comparison (see No. 37 in this series.)

The range of *E. macrocarpa* extends in a relatively narrow zone of open sandheath from Mingenew, via the Hill River, Piawaning, Meenaar, Tammin and Bruce Rock to Kulin, where it usually occurs in small patches.

Ornamentally it is not as attractive as *E. rhodantha*, which has smaller leaves and flowers, and it is unfortunately subject to the ravages of a leaf-eating insect, which much affects its appearance. In cultivation and given immunity from the attacks of this pest, it develops into a very attractive shrub with its blue-grey large spreading leaves, and its large flowers with red, pink, or sometimes yellowish-white filaments. (*E. rhodantha* is No. 90 in this series.)

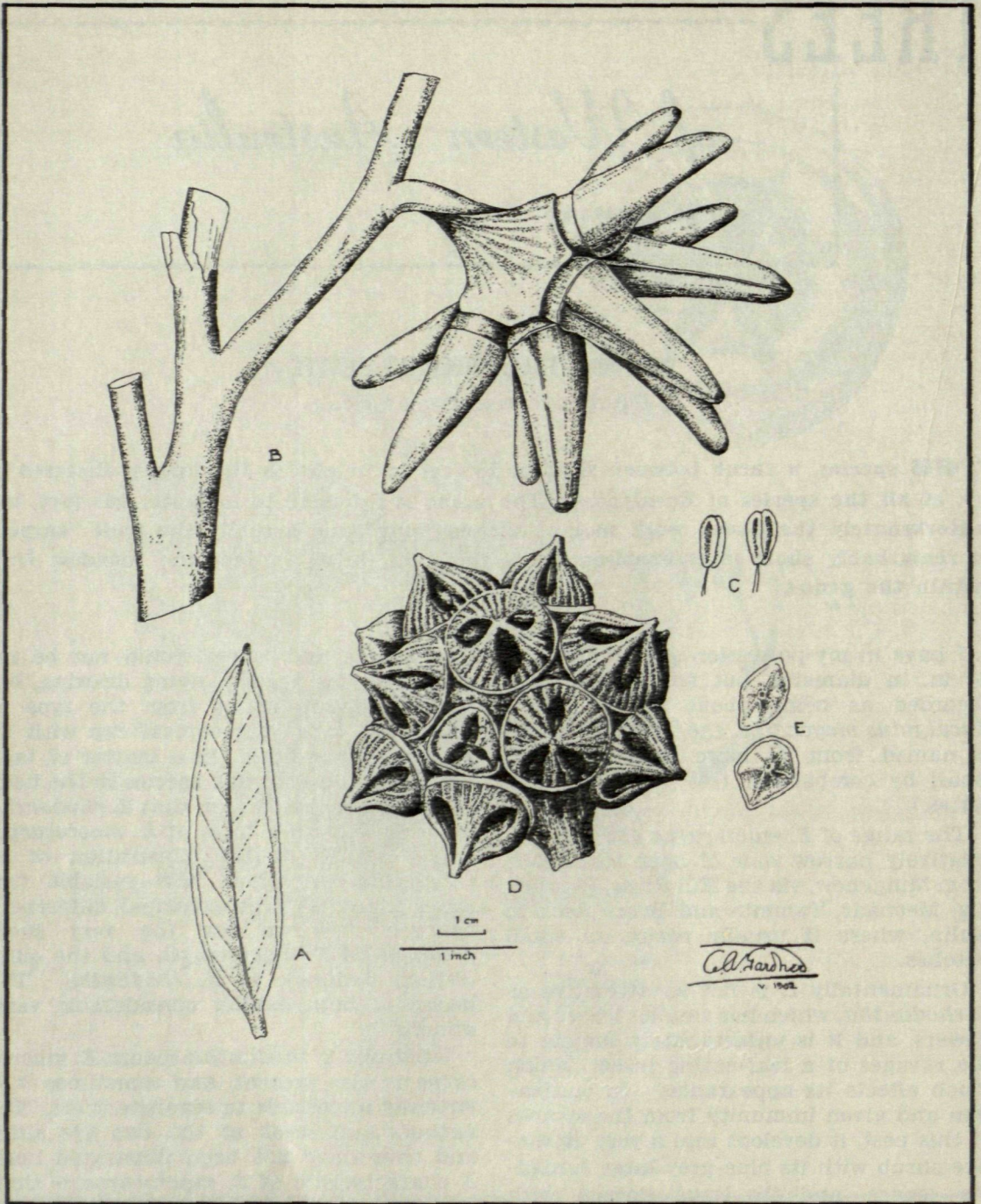
It undergoes considerable variation in the shape of its operculum or bud-cap, which unfortunately, owing to the size of

the flowers and leaves, could not be included on the accompanying drawing, but this operculum varies from the type as illustrated to a long conical cap with an acute tapering apex. As a matter of fact, the more I observe this species in the field, the more convinced I am that *E. rhodantha* is no more than a form of *E. macrocarpa*, and a glance at the illustration of *E. rhodantha* will show how variable this latter plant is. The principal differences between the two are the very short peduncle of *E. macrocarpa*, and the quite distinct peduncle of *E. rhodantha*. The leaves of both exhibit considerable variation.

Wherever *E. rhodantha* occurs, *E. macrocarpa* is also present, and sometimes it is virtually impossible to separate them. The anthers and seeds of the two are alike, and thus have not been illustrated here. A characteristic of *E. macrocarpa* is that, especially in the larger fruits, the valves at maturity split the cushion-like part of the disc, a characteristic I have not observed in any other species.

The species blossoms almost throughout the year, but the main period of flowering is from June to October.





EXPLANATION OF PLATE

A—Leaf; B—Branch with inflorescence in bud; C—Anthers; D—Head of fruits; E—seeds  
 South coast near Pallinup River



## No. 100—THE BALD ISLAND MARLOCK

*Eucalyptus Lehmannii* Preiss ex Schau.

**T**HE Bald Island marlock is a mallee or small bushy tree which attains a height of about 30 feet, although usually it is smaller. As a mallee it ranges from four to 18 feet, growing on granitic, lateritic or quartzite hills between King George Sound and Cape Arid. It is rarely found on the plains except in the vicinity of the Stirling Range and the Phillips and Hamersley Rivers.

The original specimens were collected by Ludwig Preiss on the hill at Cape Riche in November, 1840, and named by him *Eucalyptus Lehmannii*, after J. C. Lehmann, editor of the *Plantae Preissianae*. It was described and published under the name *Symphyomyrtus Lehmannii* by Schauer, who included under this name, as a synonym, *Eucalyptus Lehmannii* L. Preiss. Bentham, in 1867, published it as *Eucalyptus Lehmannii* Preiss.

The form illustrated is the large-flowered and fruited form found on Bald Island. The tree form has a smooth greenish bark, tending to become rough in the lower parts with age, and widely spreading branches. It is usually densely foliaged, the leaves being usually small, rarely exceeding three or four inches in length, and are a deep green in colour.

The most characteristic feature of the species is the massing of the flower-buds, flowers and fruits into a concrete head, the hypanthium usually almost-immersed in the receptacular portion of the very broad peduncle. The individual flowers are closely sessile. The operculum is horn-shaped and smooth or finely striate, sometimes conspicuously one-ribbed, and varies

in colour from a pale yellow to a purple-red. The filaments are green and erect while within the bud-cap, later green or yellowish-green, and angular. The fruiting heads are normally up to three inches in diameter, but both flowers and fruits show remarkable variation in size.

The Bald Island marlock is most closely related to the Yate (*E. cornuta*), differing essentially in the hypanthiums fused into a solid mass in bud and in fruit. All that remains free is the actual rim of the hypanthium in the fruiting stage. Some forms, particularly those growing on the quartzite hills of the Phillips River district and the mountains of the Stirling Range usually have much smaller flowers with comparatively longer and more slender opercula than the form illustrated in the accompanying drawing.

Like the Mottlecah (No. 99) this species is well known in cultivation. The tree is ideal for street planting, and for wind-breaks. As a street tree it has advantages over most species in that it is shady, and its low stature makes lopping unnecessary. It possesses a broad, dense crown, thus providing both shade and resistance to wind.

It flowers during winter and spring.

### OVINE VIBRIOSIS DOES NOT CAUSE PERMANENT INFERTILITY

Sheep which have recovered from ovine vibriosis appear to become immune to this disease, and their fertility is not affected in later years.

This means that farmers need not fear further losses or reduced fertility in flocks which have been affected by vibrionic abortion. Vibriosis in cattle can cause a continuing lower level of infertility in a herd after the first outbreak, but this fortunately does not occur in sheep.