

WESTERN AUSTRALIAN TREES.

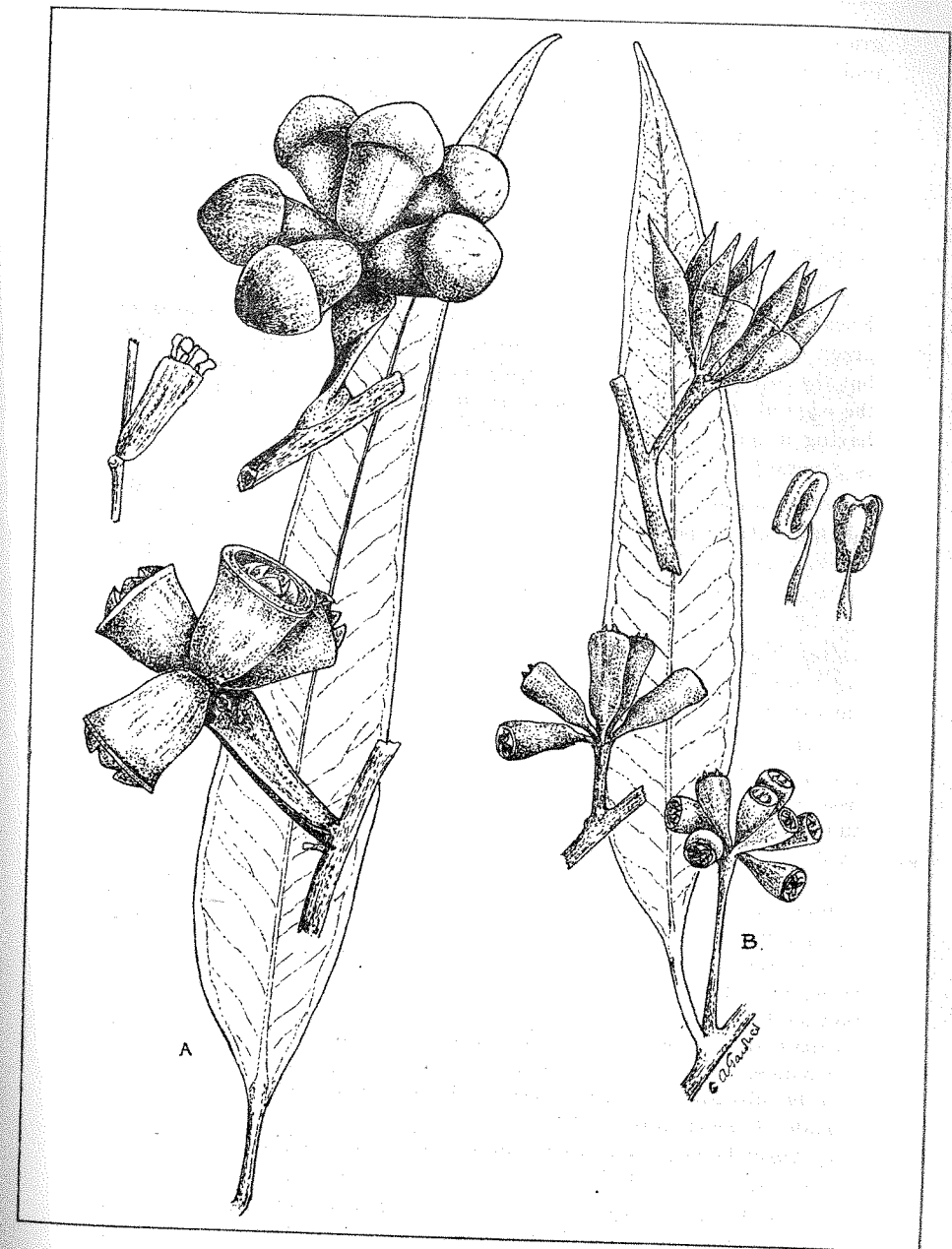
No. 4.—The Wandoo.

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Last month we discussed the Tuart, one of our important timber trees. This month I have included a sketch of certain organs of the Tuart so that you may be able to recognize the trees when you are collecting specimens. We shall now briefly discuss the Wandoo tree. Wandoo is the native name of the White Gum. When you have become acquainted with this tree you should always speak of it as "Wandoo," because the name "White Gum" is applied in a loose manner to over half-a-dozen species, including the Tuart—a very different tree.

The Wandoo tree must be familiar to many of you, for it covers a very extensive tract of country, extending from the Midland and South-Western Railways as far east as Southern Cross and Lake Grace. It does not extend very far to the north, the trees seen at Mogumber and Buntine probably being the outposts of the distribution of the species. The Wandoo may grow to a height of one hundred feet; although in many parts, and particularly in the eastern districts, it seldom exceeds thirty feet in height. The trunk is short in comparison with the height of the tree, being rarely more than half the height. The bark is smooth, or rather mottled, and the colour is yellowish-white, orange-yellow or grey white. Usually, there are patches of a purple-grey bark to be seen on various parts of the trunk. The outer bark sheds annually, but not evenly, and these purple or grey patches are the older portions of the bark. This bark is rather thick (up to half an inch), and is always a rich yellow when broken across. When the tree is full grown the bark is easily removed from the wood in the winter and spring by means of blows from the head of an axe. The bark varies considerably in texture, according to the age of the tree. In the Great Southern districts particularly, the trees may have a rough, flaky bark until they are ten or twenty years old, after which the bark becomes smooth. Very old trees become gnarled; and, since the trunks are not smooth, the bark does not come away very easily. In such trees there may be seen many small patches of flaky bark over the smooth patches. These trees are consequently often called "Spotted Gums," but they are really Wandoo trees.

The timber is pale and yellow-ochre to light brown in colour. It is very strong and durable, and is much used in articles which have to stand great strain, such as timber for bridge-building, for the under-structures of railway wagons, for the bases and sides of trucks and for ship-building. A remarkable quality of Wandoo is that bolts which are inserted through planks of this timber do not rust; they have been found, when extracted, to be quite clean and bright after having been in the timber for twenty years. So important is this timber, that cutting from Government lands is permitted only under permit from the Government. Wandoo is also largely used for sleepers and for fencing; the logs when split being proof against the ravages of termites (white ants).



(A) Tuart (*Eucalyptus gomphocephala*).

(B) Wandoo (*Eucalyptus redunca*, var. *elata*).

The Wandoo grows in open park-like formation, whereas the Jarrah or Karri forests are dense. The soil in which it thrives may be sandy or gravelly on the surface, but there is always a subsoil of clay. In the Jarrah country the Wandoo usually occurs near the

granite rocks, forming little colonies there. It usually carries a low undergrowth of shrubs, or grass or other herbs—often everlastings.

Wandoo is most common on the eastern side of the Darling Range, and along the Great Southern Railway. Away to the east, in the wheat belt, the Wandoo often becomes a small slender tree with a yellow bark growing on gravelly ridges, known as "Wodjil country." It is so unlike the typical Wandoo in appearance, that it may easily be mistaken for another species.

The leaves of the Wandoo are alternate, like those of most Eucalyptus trees and Mallees. In colour they are of a dull or greyish green on both surfaces—never glossy. The veins are not conspicuous, but the intramarginal vein can easily be picked out, some distance from the edge of the leaf. The flowers are in umbels, often many-flowered—having as many as twelve and rarely fewer than five. The peduncle is generally slender and slightly flattened.

The flowers have very short pedicels, which taper imperceptibly into the calyx-tubes. These calyx tubes are almost cylindrical in shape or obconical (i.e., reversed-conical, the apex of the cone being next to the stalk). The operculum is narrow-conical, usually sharply pointed, and of a paler yellow than the calyx tube. The flowers are yellow-white. The fruit is obconical or almost cylindrical, but always tapering towards the base, sometimes pear-shaped, with a prominent rim; the capsule is sunk, with short valves usually included in the fruit.

The Wandoo is akin to the Mallee. The Mallee form is often known as Red Mallee, and grows, as a rule, in thicker formation. The trees can usually be recognised by their stout trunk, whitish bark, and the peculiar formation at the base of the trunk, which is often swollen at the ground-level to form a pedestal or wide base. The Mallee is closely related to the Powder-barked Wandoo, a tree of the Darling Range, found near Chidlow, and extending eastward to York and Bannister, and southward to Pingelly and Williams. The Powder-barked Wandoo may always be distinguished by the formation on the trunk of a tale-like powder. In the winter the rains may wash this powder from the western side of the tree, but it will usually be found on the eastern side of the trunk. This powder is easily rubbed off with the hands. There are also important botanical characteristics which will be discussed when we deal with this tree. The fruits of the Wandoo somewhat resemble those of the York Gum, but the two trees need never be confused if we bear in mind that the York Gum always has a rough bark and glossy leaves.

The Wandoo flowers in the summer months, and the flowers are much sought after by bees. It is, therefore a valuable tree to the bee-keeper, for it provides nectar and pollen at a time of the year when other flowers are scarce.

The accompanying plate shows you (a) the Tuart, and (b) the Wandoo. If you will examine these drawings closely, they will explain the terms which have been used in this discussion. Keep these drawings; the mental picture formed from them will enable you to distinguish the trees better than any written description.