WESTERN AUSTRALIAN TREES.

No. 11: THE CHRISTMAS TREE.

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Flaring in the jaded landscape, its flamboyant tresses conspicuous from afar, the Christmas Tree at this season of the year is undoubtedly the glory of the bushland. Its splendour, splashed against an azure sky, or thrown against a hazy expanse of smokebush-covered heath, leaves an impression not easily effaced. Few trees can impart such vivid magnificence; few trees possess such heaped masses of densely bunched blooms completely hiding the foliage. Gold is its colour,from the richest yellow to fiery orange,-fiery even as the bush fires which it foretells, and from which it subsequently benefits. The wilful destruction of such a tree is a crime, the more so because it can be raised only with extreme difficulty.

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The Christmas tree is named Nuytsia floribunda. Its specific name refers to the abundance of flowers produced, and the generic name—Nuytsia—perpetuates the name of Pieter Nuyts, a passenger on the Dutch vessel "Gulde Zeepaerd" (Golden Seahorse) which made an examination of our Southern coastline in 1627. Nuyts Land was the name then bestowed on our South-West,—a name which was used until the beginning of the following century.

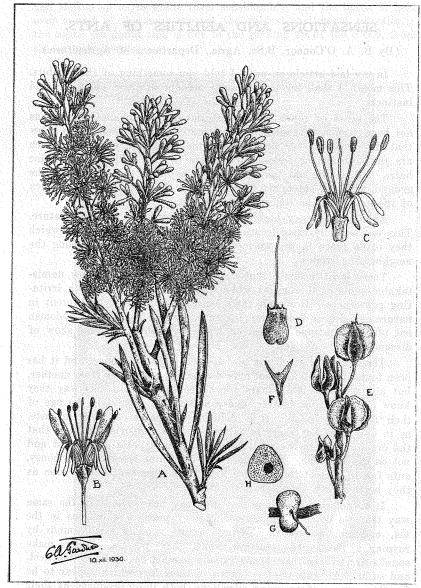
The tree is the sole representative of the genus to which it belongs, and is confined to South-Western Australia. It is a parasite, that is, it cannot live of itself, but must secure attachment to some other plant from which to draw certain food requirements. That these requirements are by no means great we know from the fact that the tree can thrive amongst small plants (including couch grass areas) without doing serious harm to them. That the requirements are essential is borne out by the fact that seedlings will not survive unless this attachment is secured. The attachment is made through a white fleshy ring or collar which is produced on the root of the tree where is comes into contact with the root of a food-plant. This ring completely surrounds the host-root and penetrates it, and may eventually destroy it, in which case the ring dies. Hundreds of such attachments are made with the roots of surrounding plants. Belonging to the Mistletoe family, the tree is thus true to type, but unlike the Mistletoes it has green leaves, and parasitises below the surface of the soil. In this respect it resembles the Sandalwood.

You may have noticed that the Christmas trees usually occur in colonies; seldom is a specimen seen in isolation. This is due to the fact that the trees are connected with each other below the soil surface by means of subterranean shoots. In time these disappear and an independent tree is formed. This tree again sends out radiating root-like shoots which frequently sucker, forming in time fresh trees, and so the process goes on. Rarely do trees arise independently from seed. The wood of the Christmas tree is very soft and of no value as a timber, or even as firewood. It exhibits peculiar growth characteristics. The gummy mucilage exuded, sometimes in large masses, is probably of commercial value.

The range of the Christmas tree extends from the lower Murchison River to beyond Esperance Bay. It is most common in sandy tracts, especially near the coast, and is fairly common in the granite hills of the Darling Range, but eastwards of here it is quite uncommon. Outposts of sometimes quite large colonies are seen as far east as Yorkrakine Hill (North of Tammin), Toolibin and Gnarming. At Esperance it is very abundant, and fine specimens are seen near the coast and on the sand heaths to the north.

Description of Plant:

The Christmas tree grows to a height of 25 feet, with a sturdy black-barked trunk and curiously recurved branches. When not in flower the tree has an untidy and straggling appearance, but when in full bloom the large masses of blossoms may completely obliterate the foliage. The leaves are linear in outline, flat and almost veinless, and somewhat fleshy and easily broken. The flowers are borne in racemes paniculately arranged; each stalk bearing a triad of flowers subtended by two bracteoles and a bract which are small at the time of flowering, but afterwards enlarge around the fruit, holding it in position until ripe. The calyx has irregular teeth, six in number. The petals are six



Nuytsia floribunda (Labill.) R. Br. Explanation of Plate.

A. Inflorescence (reduced). B. Flower with two buds. C. Flower (enlarged). D. Calyx and style. E. Portion of fruiting branch. F. Vertical view of fruit showing wings. G. Haustoriogen of parasitic root. H. Same in transverse section.

in number and valvate in the bud; but after opening they recurve. Each has attached to it a filament of equal length with an ovate two-celled anther. It is principally the showy protruding filaments which give the conspicuous colour to the tree. The fruit is three-winged (much like that of a native hop), brown in colour when ripe, with one seed which has 3 to 5 cotyledons.

Details of the flower are shown in the accompanying plate.