FLORA

UNLOCKING THE DARK SECRETS OF THE WESTERN AUSTRALIAN UNDERGROUND ORCHID

Kingsley Dixon

DEEP beneath the broom bush shrublands of Western Australia is one of the world's more extraordinary plants. A fully subterranean orchid! Known since the 1920s when the waxy white and maroon flowers were uncovered by ploughing near Corrigin, the orchid (*Rhizanthella gardneri*) has eluded all but the the most avid of observers. Without green leaves, no surface growth and with flowers buried up to 5cm underground it takes some effort, usually on all fours, to uncover the exquisite flowering head of this remarkable plant.

From the time of the first discovery of the orchid, scientists pondered how this plant could possibly survive without light and growing in such demanding conditions. Kings Park and University of Western Australia scientists started work on the plant in 1980 to try and unravel how the plant grows, what pollinates an underground flower and how to germinate the species for ensuring its long term conservation. Kings Park has successfully germinated seed and is now growing a number of plants in association with the plant partner that the orchid needs to ensure a supply of carbohydrate and other nutrients. Not surprisingly the orchid appears to only grow on the root system of the broom honeymyrtle (*Melaleuca uncinata*) one of the most common shrubs in the wheatbelt. Flowering is expected in May 2004 if all the plants continue to grow at their present rate.

If you have the broom honeymyrtle on a remnant site on your farm it might be worth having a look for the orchid next May-June when it flowers. Just gently scrape away the top layer of leaf litter and a few mms of soil and if there is an orchid you will see the distinctive glistening, waxy white flowers. Sounds easy? Well it is important to remember that on average it takes about 8 person-hours to locate an underground orchid in a new location! If you locate an orchid you must not further disturb it as they are specially protected by Law. Contact me at Kings Park and take a photograph. We would be happy to hear of any new finds.

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