

history, and in our age the work of the orchid is very often wasted, for the plant very rarely uses the seeds which it produces; it relies mainly for continuance on the strength and energy stored and preserved in its roots, just as do the perennials which we regrow in our gardens year by year from root divisions.

Incidentally, in the illustration of how insects are destroyed in the heart of the orchid, we may glimpse perhaps how the carnivorous habit developed in some other plants, how it originated. But of that, more another day.

WESTERN AUSTRALIAN WILDFLOWERS.

No. X.—THE BLACK KANGAROO PAW.

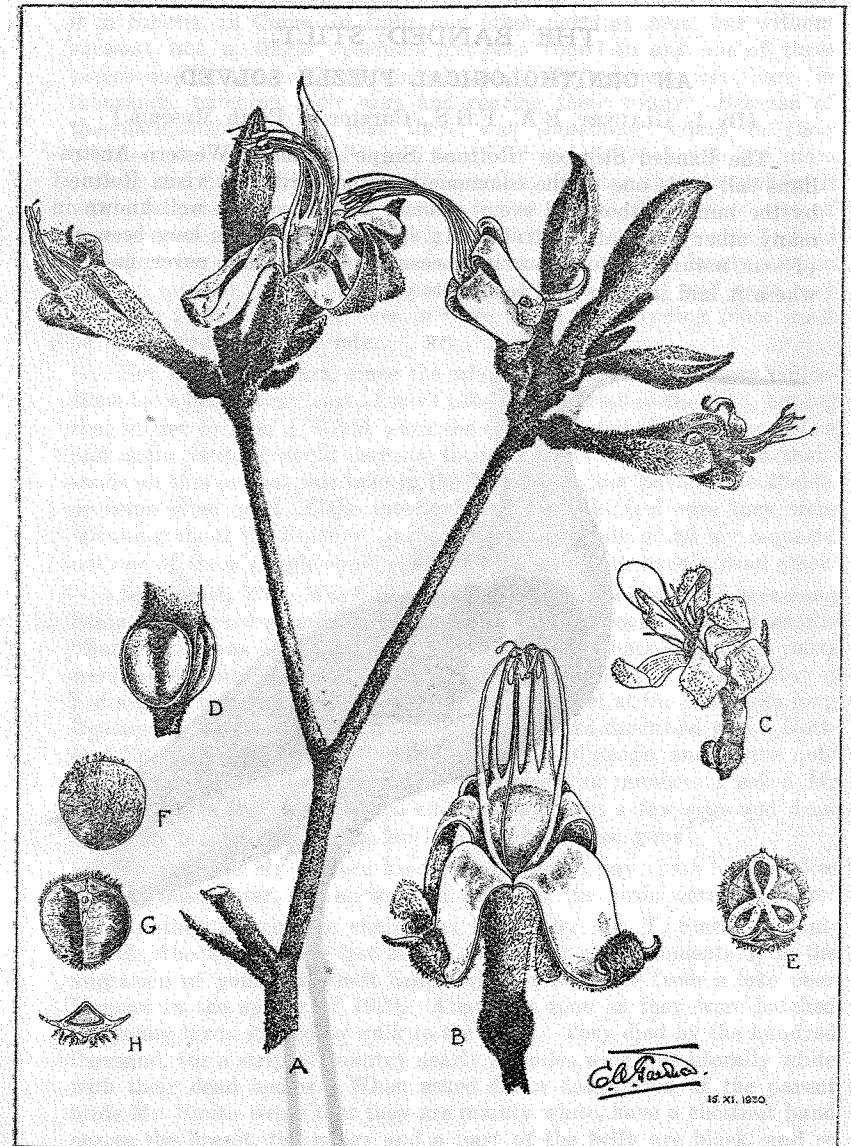
(By C. A. GARDNER, Government Botanist.)

The summer flowers of South-Western Australia are comparatively few in number, but this deficiency is more than compensated for by the richness of the colouring of many. Prominent amongst the flowers of the Midlands districts at this time of the year are the Crimson Featherflower (*Verticordia grandis*), the grey Lamb's Tails, the intense orange of the Christmas Tree, and the gold and the black of two Kangaroo Paws which are not uncommon in the Mogumber district.

The Black Kangaroo Paw (*Macropidia fuliginosa*), belongs to a distinct genus which has all of the characteristics of the common Kangaroo Paws except that the seeds, instead of being contained in a seed-vessel which opens in slits at the top, are only three in number, and fall away from the base of the withered flower, carrying with them adherent pieces of the flower itself. In other respects it resembles the branched Kangaroo Paws except in colour, and in the greater division of the flower into segments which are much reflexed on to the tube when the flower is fully opened.

The flowers of this remarkable plant are not black as the common name would imply. They are a pale yellowish-green or green with yellow hairs outside intermixed with black hairs. The black hairs may fall away when the flower opens, and at a late flowering stage there may be little or no evidence of black in the flower. The leaves are sword-shaped and stiff, much like those of the Red and Green Kangaroo Paw, but a brighter green, and similarly two-ranked (as in *Gladiolus*). From these basal leaves arises the scape or main flowering stem which is densely covered with sooty black hairs throughout its length. This stem is widely branched, with short flowering spikes at the summits. The bud is often almost black with feathery hairs, but these become more sparse at the time of flowering except in the basal portion of the flower where they are thick and sooty. The flower is pale green inside and devoid of hairs inside the tube, but the insides of the lobes are yellow-hairy or green.

The Black Kangaroo Paw is seen occasionally around Mogumber and thence north to Hill River, but is much more scarce than it was some years ago. It occurs both on gravelly hillsides and sandy flats, one particularly fine patch occurring east of Gillingarra State School. This unique plant should not be ruthlessly destroyed. It is particularly difficult to raise from seeds, and unless the plants are protected there is some danger of their ultimate extinction.



Macropidia fuliginosa (Hook.) Druce. Gillingarra, W.A.
Icon. origin. No. 89. Gunther & Metz., Camera lucida outlines.
A and C, 1/1; B 1-7; D, F, G, H, $\times 4$; E, $\times 3$.

The accompanying plate gives the details of the flower. Only portion of a flowering stem is shown, but this shows the shape of the buds, opening flower, opened flower and withering flower, as well as details of the fruit and seed.

I am indebted to Mr C. Hamilton, of the Gillingarra State School, for excellent material which rendered the drawing of the illustration possible.