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## WESTERN AUSTRALIAN WILDFLOWERS.

No. XXXVI.: Crowea.

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

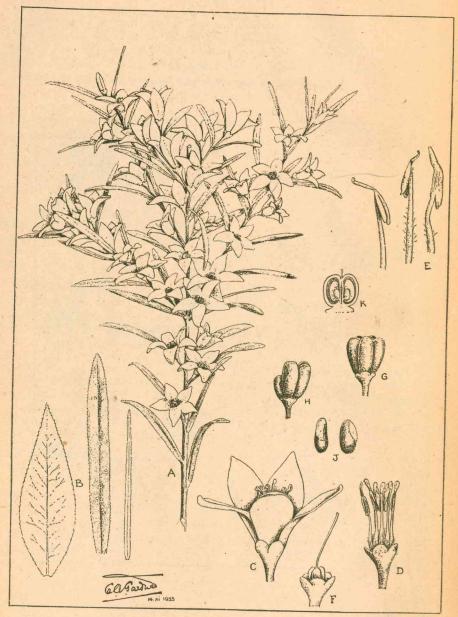
The species of Crowea belongs to the Boronia family (Rutaceae), a family which is noted locally for many handsome plants including the Scented Boronia. The plants attain a height of from five to seven feet, but in swampy areas are often less than 18 inches in height. The pale pink or white blossoms fade to a faint purple. Their wax-like texture, elegant arrangement along the leafy branches, and the delicate odour of orange blossom make the Crowea a much prized plant. It is familiar to the people of the lower South-West and of the City. So far no attempt has yet been made to cultivate this popular plant, but there is little doubt that when once this is done there is a future for Crowea as a pot and garden plant.

Crowea grows usually in black sandy loamy country, usually in the Karri forest, or in swampy areas near Albany. Two species are generally recognized, one with finely toothed, usually narow leaves (Crowea angustifolia), and the other with coarse toothed, usually wide leaves (C. dentata). We find, however, that there is every gradation between the two leaf types, and much variability even upon one individual plant. In shady places larger leaves are developed, but in more open spaces the leaves are narrower. It would appear, therefore, that the two plants are best grouped under the name Crowea angustifolia. The leaves are alternately arranged on the stems, and vary in length from about half an inch to over three inches, while in breadth they range from about one-eighth to three-quarters of an inch. They have no leaf-stalk, and are quite devoid of hairs.

The conspicuous flowers are arranged in the leaf axils, forming graceful leafy spikes along the branchlets. Although typically there is only one flower to each leaf-axil, it is not uncommon to find plants in which clusters of three predominate. The pedicels are straight and short, and thickened under the calyx. The calyx is shortly and broadly five-lobed, and almost inconspicuous. The five petals overlap in the bud, but expand horizontally in the opened flower. In colour they are typically pink or white, and their shape varies from elliptical-lanceolate to ovateelliptical. The stamens are usually eight in number, but sometimes ten. They are shorter than the petals, and each consists of a hairy filament bearing a two-celled anther tipped with a long flattened hairy appendage extending beyond the anther. Within the stamens is a fleshy concave disc on which is situated the ovary consisting of five carpels. These carpels, corresponding to ovary cells, are quite superior and free from each other except that they are united in the centre of the upper half into a long slender style with a minute globular stigma. The five carpels each contain two ovules, lying side by side, but in fruit only rarely are the five carpels developed, the usual number being three or two, and each ripens one fertile seed. The carpels open by two valves, and are rounded and blunt at the summit.

Two other species of Crowea grow in New South Wales and Victoria, one of which has red flowers. The genus is restricted to Southern Australia.

Like many other plants of the family Rutaceae, Crowea possesses leaves rich in oil. The fine oil dots can be readily seen by holding a leaf against a strong light. The aromatic odour of this oil is easily noted in summer, and at any time of the year if the leaves be crushed.



CROWEA.

A, Lower portion of branch showing lateral branchlets. B, Three forms of leaves. C, Flower. D, Calyx and stamens. E, Separate stamens. F, Calyx and pistil. G and H, Fruiting carpels. J, Seeds. K, Section through ovary. All except A variously enlarged. A about three-quarters natural size.

Frankland River, W.A., Sept., 1933.