

WESTERN AUSTRALIAN WILDFLOWERS.

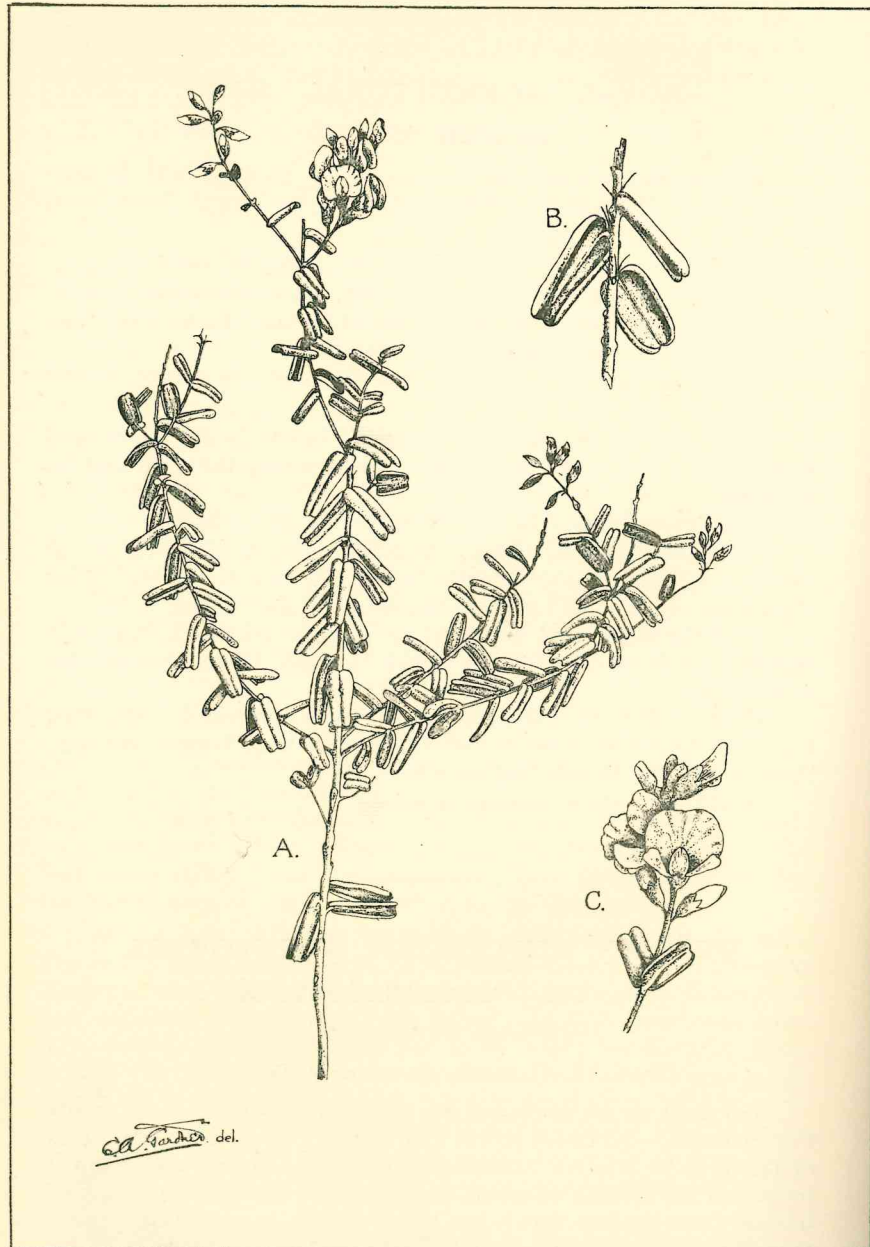
No. XVI: "BROTHER-BROTHER"

(*Oxylobium tetragonophyllum*).

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

The plant we are discussing this month belongs to the large family Papilionaceae,—the family of the Pea flowers. There are many plants of this type in Western Australia, including the Hovea, and Templetonia, and the recently discussed Sturt Pea; but this plant is mainly of interest from the fact that it has been found to be poisonous. Every year stock in the district around Ravensthorpe are poisoned by this plant.

The Brother-Brother is a small bushy shrub which looks much like the Box Poison, except that the leaves are more oblong in outline, much thicker, and concave underneath. You will notice that they are opposite one another along the branches, and that each leaf has at its base a pair of fine hair-like points, known as stipules. Opposite leaves and fine stipules are usually found on poisonous plants. But they do not



Brother-brother. (*Oxylobium tetragonophyllum*.)

denote that the plant is poisonous, since numerous Papilionaceous plants have this characteristic feature. They serve only as an indication that the plant might belong to the genera which contain poisonous species.

The flowers are orange and red in colour, the standard and wings being orange, and the keel red. The drawing shows you something of the form of the corolla and calyx. You will notice that the standard is broad, and much larger than the remainder of the petals; and that the keel is small and obtuse. The ovary contains four ovules, and the pod is 3- or 4-seeded. Notice also from the drawing that the flowers are in racemes, and that the hairy calyx has three lower small lobes, and two upper lobes which are united and much longer.

THE MEDITERRANEAN FRUIT FLY.

(By B. A. O'CONNOR, B.Sc. in Agric., Dept. of Agriculture.)

The Mediterranean Fruit Fly, *ceratitis capitata*, is the most serious insect pest of stone fruit in this State. The annual loss to orchardists from the ravages of this pest runs into thousands of pounds. New South Wales excepted, the other States of the Commonwealth are not troubled by this destructive insect.

The original home of the fly is believed to be West Africa, where it breeds in native fruits. It spread to the Mediterranean countries of Europe, and from there was carried to our State in shipments of oranges. It was first found at Guildford in 1897; but the gravity of the outbreak was not then fully realized, and consequently no effective measures were taken to stamp it out. During the thirty odd years which have elapsed since that date the fly has spread, and it can now be found throughout the greater part of the State.

The adult fly is rather a handsome creature. It is about the same size as a house-fly, though somewhat more thickset. The general body colouration is yellow, with a black pattern on the thorax, and two purple bands across the abdomen. The wings are semi-transparent, with three yellowish-brown splotches, and a cluster of fine black lines near the base. When at rest, it carries its wings in a characteristic position: they are not folded on the back, but are half spread out. The male differs slightly from the female in having two small clubbed appendages arising from the top of its head.

The female fly lays her eggs just under the skin of the ripening fruit. She has a long ovipositor, with which she pierces the skin; and into the opening thus made she passes a drop of liquid, which has the effect of drying up the fruit cells near by. A cavity is thus formed in which the eggs are laid. They are white and crescent-shaped, and are usually laid in batches of from six to fourteen. A single female may lay as many as three hundred eggs. In summer maggots hatch out of the eggs in from two to four days, while in winter they take from ten to twenty days.