
WESTERN AUSTRALIAN WILDFLOWERS.

THE STURT PEA.

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

The Sturt Pea (*Chianthus speciosus*) is a species well known throughout the world. Few flowers can surpass it for boldness of colour and contrast. Lying on the red parched soil of the arid interior of our continent, its vivid scarlet and black, surmounting the leaves in flaming crests, create an impression not easily effaced. It is the more wonderful in that it often occurs in an environment of grey mulga, grey-brown spinifex and red soil, with which it makes a most harmonious contrast.

Its true home is the arid interior of Australia which receives an annual rainfall of less than ten inches. In this area it prefers the red sandy soils of depressions. These soils are light and receive flood waters, this being apparently an important factor in germination. In Western Australia the range of the species extends from the Ninety Mile Beach down to Lake Lefroy, which lies to the south of Kalgoorlie.

The plant is one of the most easily recognized of our native flowers. The vivid colour of the flower with its black callosity at the base of the closely reflexed standard, together with the long and pointed keel which continues in the opposite direction to the standard, is a distinctive feature. In habit, however, the plant is very diverse. The typical form is that which is found throughout the Gascoyne, Murchison, and Goldfields districts—a prostrate creeping plant which may embrace a radius of ten to twelve feet. The stems lie close to the soil, with leaves in a horizontal plane. The flowers hang vertically from a stiff upright peduncle which support an umbel-like raceme in which all but one of the flowers appear to rise from the same point, the solitary flower being on a much longer stalk. The flowers hang symmetrically around this peduncle, forming a cluster of charming and unique form, with erect standards and vertically pendent keels. The common form in the Roebourne and Marble Bar (Pilbara) districts is said to be a shrub of two to three feet in height with horizontal branches which do not lie upon the soil. It is of quite stiff growth, and its slightly smaller flowers have a brownish blotch in place of the shining black of the southern form.

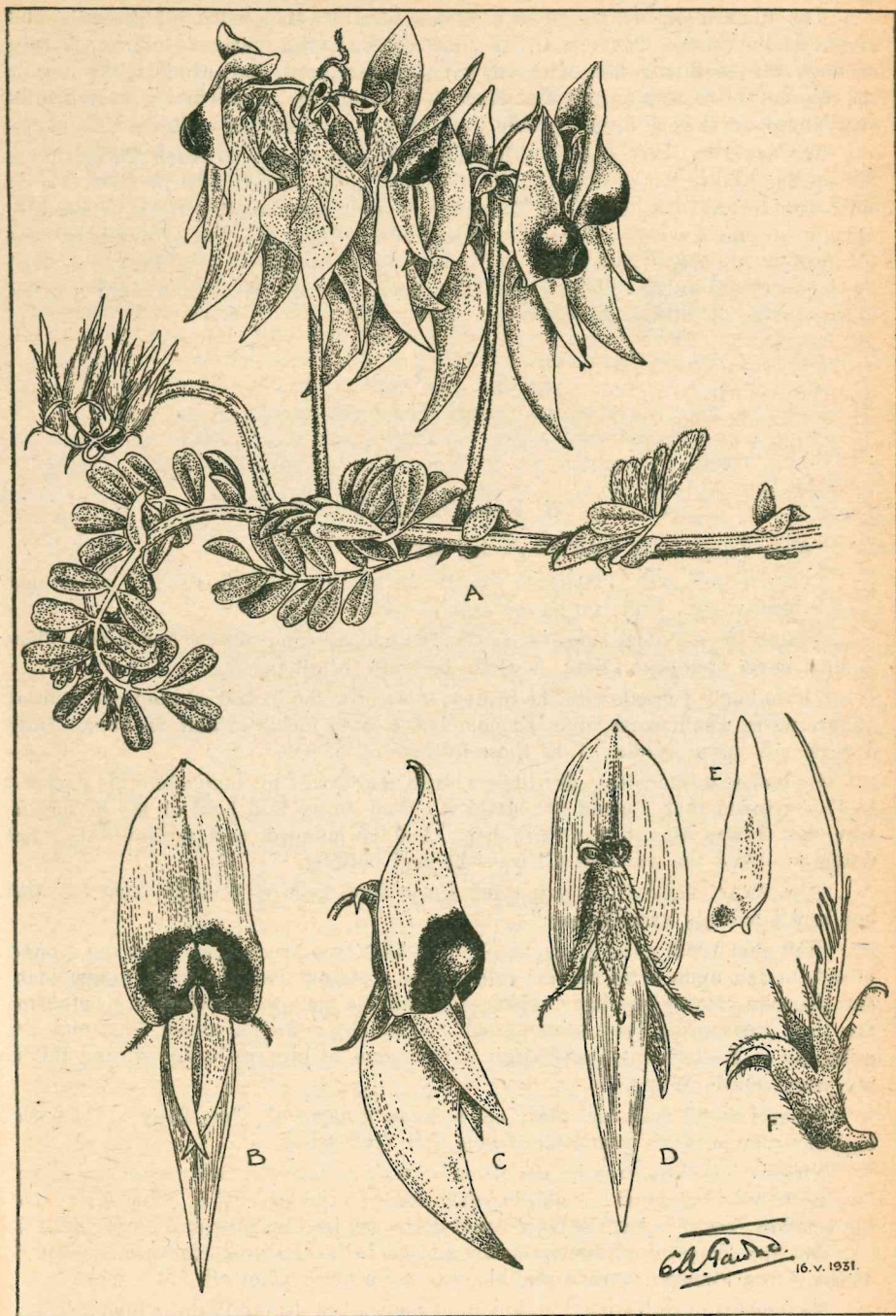
The leaf of the Sturt Pea is pinnate, consisting of a rachis and leaflets. These leaflets are grey-green in colour and closely hairy. They are more green above than below, also much less hairy. In number they vary from 15 to 21. In outline they are roughly elliptical—oblong or obovate. At the base of the whole leaf there are two broad stipules which are very prominent, embracing the stem. The stems are thick and usually soft with reddish angles or raised lines. From the axils of the leaves arise the erect peduncles, usually three to four inches in length, with broad or lanceolate bracts at the bases of the pedicels (individual flower stalks). The pedicels, with the exception of one, arise all about the same point. They are about half an inch long and recurved. The uppermost flower is borne on a prolongation of the axis or peduncle which protrudes above the cluster, and has a pedicel similar to the others with a bract at its base. At the summit of each pedicel, almost on the calyx, are two long and fine bracteoles. The calyx is 5-toothed and hairy, with long lanceolate pointed lobes.

The flowers assume a perpendicular position with the standard erect, the remainder of the floral organs being pendulous. To obtain this position the standard is closely reflexed upon its base. It is sharply pointed, with a large black shining callosity or bulge at the apparent base, this being two-lobed. It is this black "knob" which is such a feature of the Sturt Pea, but in the case of some North-Western specimens it is brown in colour, and not nearly so conspicuous. The wings are sickle-shaped and hang alongside the keel, but are only slightly longer than half its length. The keel is curved and very sharply pointed. It will be noticed that it closely encloses the style and stamens, and thus, especially in cultivated plants, pollination is not often effected, so that many plants do not mature seeds.

The pod is narrow-oblong in shape, and 2 to 2½ inches in length, very hard and tough and silky hairy outside. The seeds are small and numerous.

Occasionally white-flowered forms of the Sturt Pea are met with in nature. These, however, retain the black blotch.

The seeds of the Sturt Pea are of the type known as "hard seeds." It is advisable to boil these for from four to ten seconds immediately before planting. This hardness of seed is an adaptation by which the plants ensure perpetuation: the seeds lie on the sun-baked soil perhaps for years before sufficient moisture is obtained to ensure germination.



THE STURT PEA, *Cyanthus speciosus*.

(A) Habit; (B), (C), (D) Views of flower; (E) Wing petal; (F) Calyx, stamens, and pistil.

The illustration will give you some idea of the habit of growth and detail of the flower. Unfortunately I did not have the material sufficiently long to make all the illustrations desired, but they give some indication of the details of the flower. The uppermost stamen is free, all the others being united, and the long ovary has a stalk. Inside the ovary are numerous ovules.

The Sturt Pea was amongst the first of the specimens to reach Europe from Australia, having been collected by Dampier near Shark Bay in 1699. It is unfortunate that the name of Dampier is not associated with it, especially since it is often known as *Clianthus Dampieri*, but this name has of necessity been changed to *speciosus* (beautiful) on the grounds of priority. *Clianthus* is derived from two Greek words—*kleos*, glory; and *anthos*, flower. Hence the plant is often spoken of as the "Glory flower."
