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COTTON BUSH  (*Asclepias fruticosa* L.)

Garden plant now a noxious weed

By G. R. W. MEADLY, Officer in Charge, Weed Control and Seed Certification

THE cotton bush is native to South Africa but is now naturalised in most tropical and sub-tropical countries of the world. Its spread is, in no small measure, due to being grown frequently as a garden subject.

The main appeal of the plant is the novel shape of the fruit which has the appearance of a bird, in fact the names swan plant and duck plant have often been applied. Children float the bladdery fruits on bowls of water.

Cotton bush was probably introduced to Australia as an ornamental species and has become naturalised to a limited extent in all the mainland States. It has been recorded from a number of localities in Western Australia, mainly along gullies in the Darling Range.

This plant provides another example of confusion that can arise from common names, particularly as it is sometimes referred to as wild cotton bush, implying that it is a native species. The Australian cotton bush is a collective name for a number of species of *Kochia*. These belong to the salt bush family and occur mainly under dry inland conditions. Another native plant, cotton fireweed (*Erechtites quadridentata*), a member of the composite or daisy family, is of significance mainly within 50 miles of the South coast, including the Esperance plain. None of the plants mentioned belongs to the same family as the cotton of commerce.

**Description**

The name cotton bush is derived from the mass of cotton-like hairs attached to the seeds, a considerable number of which are formed within each fruit.

Cotton bush is an erect, slender shrub 4 to 8 feet high. The leaves are narrow lance-shaped, 2 to 4 inches long, bright green and shining above and tapering into a point. The white flowers are formed in loose, drooping umbels each comprising three to 10 flowers. The calyx lobes are small and narrow and the corolla lobes finely fringed. Within the corolla is the corona which consists of five pouch-like organs which terminate in two incurved claw-like teeth. The fruits are ovoid, tapering at one end, almost membranous, inflated and covered with soft hairs. The dark seeds have terminal tufts of silky hairs which expand when the ripe seeds are liberated from the fruit, thus aiding wind distribution.

A related species *A. rotundifolia*, has been recorded in South Australia, in fact is more prevalent than *A. fruticosa* in that State. It differs mainly in having a broad, leathery leaf up to two inches long.

A further species, *A. eurassavica*, is grown in gardens, particularly in the northern parts of Western Australia. It has broad leaves and orange-red flowers.

**Significance**

Cotton bush cannot be classed as an aggressive weed. It occurs mainly on roadsides, waste land and pastures that have not been well managed. The plant favours moist soils, being most prevalent along the banks of streams, but does spread to higher land. The most concentrated infestations occur along the Ferguson Valley near Dardanup and east of Burekup.

Early in its history in Western Australia cotton bush was viewed with some concern because it harboured black scale. This aspect now is of little significance. When plants are growing densely, grazing can be reduced substantially. Species of
COTTON BUSH
(Asclepias fruticosa L.)
E.—Flower from above. F.—Fruit. G.—Seed
Cotton Bush

(*Asclepias fruticosa* L.)

Cotton bush has escaped from gardens and spread to some extent, mainly along the banks of streams in the Darling Range. It is toxic to stock but unpalatable and seldom eaten.
Asclepias are known to be toxic and ill effects to stock due to eating cotton bush have been suspected on a number of occasions. Feeding tests have proved positive but it is unpalatable and, under normal circumstances, is not eaten in sufficient quantity to cause trouble.

Although the kapok-like appearance of the hairs attached to the seeds has prompted them to be tried as a substitute for that material, the result is far from satisfactory. The fibre is brittle with little resilience and no commercial usage has been found.

Cotton bush has been declared noxious in Queensland and recently was placed on the primary noxious weed list in Western Australia by the Agriculture Protection Board.

Control

Cotton bush spreads slowly and does not have the “explosive” characteristic of some weeds. It can be destroyed mechanically by grubbing, ploughing or the use of a blade on a tractor when larger shrubs are involved. When the soil is moist the roots are lifted quite readily and suckering is avoided.

Close slashing during the winter period has proved very effective and little regrowth has occurred. A free germination of seedlings can be expected in such situations, however, and the resulting plants should be slashed before seeds have formed.

2,4,5-T applied to the foliage and stems has also given good results, the recommended concentration being 3 pints of 80 per cent. active ingredient in 100 gallons of water.