DOCKS

1. Clustered dock
2. Infestation of fiddle dock and clustered dock.
3. Swamp dock.
4. Fiddle dock.
5. Broadleafed dock.
6. Wiry dock.
7. Seed head of curled dock.
8. Group of curled dock.

(continued overleaf)

DOCKS

Docks constitute a major weed problem in many of the high rainfall districts of Western Australia. Five species of dock: Fiddle, Broadleafed, Curled, Clustered and Swamp Dock *(Rumex pulcher, R. obtusifolius, R. crispus, R. conglomeratus and R. brownii),* are declared plants (noxious weeds) in some shires of Western Australia, where they are only present in small amounts. The aim is to reduce the chance of them becoming more widely established in those areas.

Two other introduced species, wiry dock *(R. dumosus)* from New South Wales and red dock *(R. vesicarius)* from north Africa, have been found in W.A.

Wiry dock is well established as a pasture weed on the south coast and may have the potential to spread to drier areas.

Red dock is confined to the northern and eastern pastoral areas of the state.

Significance

Docks are vigorous perennial plants which, once established, compete with crops, pastures and lawns for light, moisture and plant nutrients. Some animals have suffered stomach ailments and dermatitis after grazing docks heavily, but docks are not usually considered toxic.

Ecology

All species of dock are prolific seeders. Some 40,000 seeds having been counted from one plant of curled dock. Seedlings do not become readily established except when the sward is opened up by heavy grazing, or cutting for hay. Dock seeds may germinate at any time during the growing season, however germination is inhibited while the seed remains enclosed in the fruit capsule.

Docks frequently form hybrids. These are usually vigorous but sterile. However they may spread by vegetative means.

Mature dock plants have a deep root stock which aids survival over summer. This underground stem remains dormant through summer quickly regenerating in the autumn, often without the need for rain. This rapid growth early in the season gives docks a competitive advantage over annual plants which germinate from seed at the same time.

Regeneration from root stock also allows docks to recover from hay cutting or heavy grazing more rapidly than other pasture plants. Hence, serious dock infestations are often found in hay paddocks.

Root fragments may be broken off by cultivation or other machinery and establish new plants elsewhere.

The fruit capsule of some species of dock have hooks which aid their spread attached to wool, hair, clothes and other fabrics. Dock seeds may also be spread as a contaminant in pasture seeds.

SPECIES OF DOCK

Fiddle Dock

Fiddle dock *(Rumex pulcher)* sometimes called red dock is usually the major dock species in permanent pasture paddocks. It is native to the mediterranean region.

Fiddle dock has very branched spreading stems. Near the base of the stem, large, often fiddle-shaped leaves with blunt points are found. The seed capsule is triangular with a variable number of rigid teeth on each edge.

Curled Dock

Curled dock *(Rumex crispus)* is a native of Europe, Asia and Africa. It is found in Western Australia, mainly as a weed of low wet areas and on waste ground. It is also found in pastures in association with fiddle dock.

Curled dock has erect stems with few branches and a deep tap root. It has narrow lance-shaped leaves with wavy and crinkled margins. The fruit capsule is broad-sided with no teeth.

Clustered Dock

Clustered dock *(Rumex conglomeratus)* is widespread in pastures and cultivated land throughout Western Australia and is sometimes the dominant species. It is especially plentiful in summer moist areas. It is a native of Europe and Asia. Clustered dock has narrow oblong triangular seed capsules with no teeth.

Swamp Dock

Swamp dock *(Rumex brownii),* also known as Brown's dock is a native perennial plant. It is found in high rainfall districts under cultivation and in pastures and is sometimes a weed of lawns.

Swamp dock has erect flowering stems with few branches. The flowers occur in separate clumps along the stem. The seed capsule is triangular and red with a hook and three to five teeth on the margin. The hook helps the seed to spread attached to clothing, hair and wool. It is also found as an impurity in lawn seeds.

Long rhizomes (underground stems) form which help the plant to spread over several square metres and makes eradication difficult.

Broadleafed Dock

Broadleafed dock *(Rumex obtusifolius)* is a native of northern Europe. It is common in Tasmania and south-eastern Australia but has recently been found in Western Australia.

Broadleafed dock has stout erect reddish-green stems with several branches and a deep thick, branching tap root. The leaves are large, blunt and heart-shaped with rounded serrations on the edges. There are few leaves on the upper part of the stem. The fruit capsule remains attached to the stem and becomes reddish-brown when ripe. The capsule is triangular with three teeth on each edge.

It is important to prevent the spread of docks to new areas where they might become established but are not yet present.

For advice on dock recognition and control, contact the Agriculture Protection Board, Baron-Hay Court, South Perth, W.A. 6151, telephone (09) 368 3333 or any country office of the Department of Agriculture or the Agriculture Protection Board.

Fruit

A. Fiddle dock
B. Curled dock.
C. Clustered dock.
D. Swamp dock
E. Broadleafed dock
F. Wiry dock
G. Red dock

(Illustrations: Courtesy WA Herbarium)