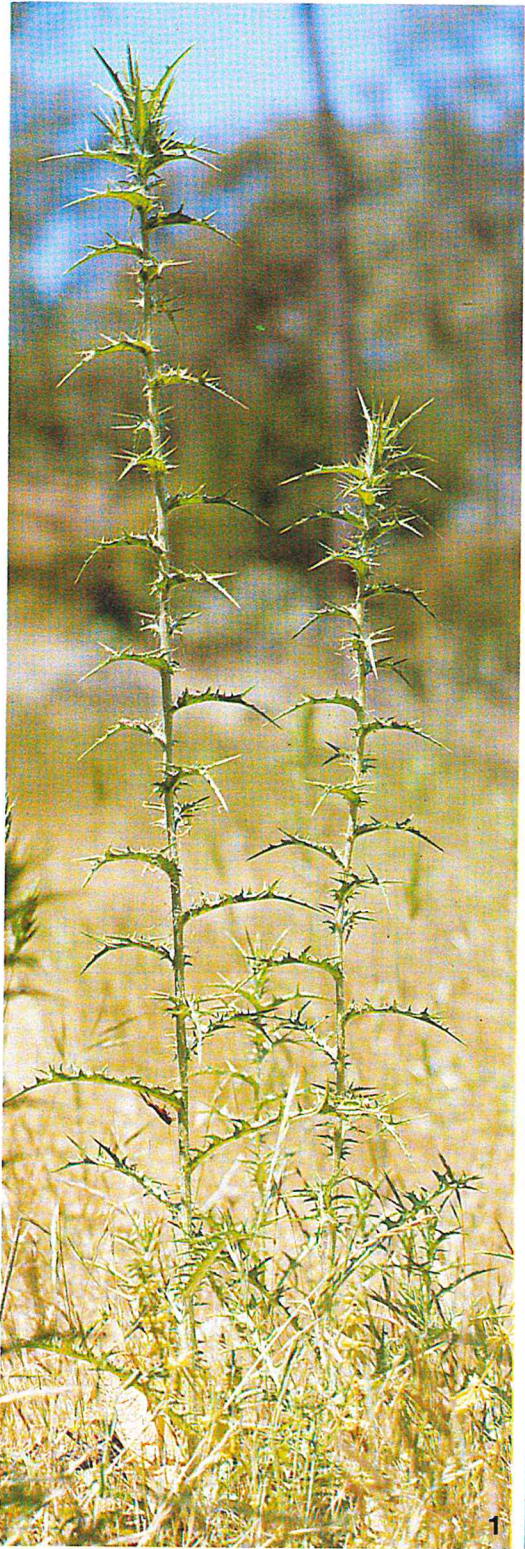


96

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SAFFRON THISTLE



1. Mature plant. 2. Flower. 3. Seedling. 4. Seed.

SAFFRON THISTLE

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S(*Carthamus lanatus*) is an important weed in most states of Australia and New Zealand. It was introduced to Western Australia from the Mediterranean region last century and is now widespread in parts of the wheat-belt, goldfields and pastoral areas.

Significance:

It is a declared plant (noxious weed) throughout Western Australia. It competes with crops and useful pasture plants for light, nutrients and moisture. Its stiff, spiny leaves discourage grazing and may injure the mouths and eyes of livestock. Hay and chaff containing saffron thistle may have a similar effect. Dried Saffron thistle parts may cause contamination and down grading of wool. Wheat contaminated with saffron thistle seed is liable to a dockage imposed by the Australian Wheat Board.

Description:

Saffron thistle forms a flat rosette up to 15cm in diameter following germination in winter. The leaves are dark green with a broad final lobe and narrower irregular lobes along the sides. Each lobe ends in a short spine. In late spring a stem develops up to 1.5m high. When this happens the

rosette leaves die off. The stem is erect with whitish-green ribs, it is usually branched about half way up. Mature plants are stiff and spiny.

There are at least two forms of Saffron thistle in Western Australia, a narrow leaf and a broad leaf rosette form.

The narrow leaf form appears to germinate more readily than the broad.

There are also distinct differences in the shape of the seed and rate of stem elongation.

In summer, single yellow flowers form at the end of each stem or branch. Lance-like spines surround each flower. The seeds are large, about 6mm long, grey-brown with prominent ribs and a smooth seed coat.

Ecology:

Saffron thistle is an annual plant reproducing only from seed. Most seeds have a pappus (parachute) consisting of stiff bristles but they are too heavy to be carried far by wind.

The bristles may aid spread by becoming attached to wool, hair or sacks but saffron thistle seeds are most commonly spread as a contaminant in seed, grain or with hay or chaff.

The seed may remain dormant in soil for up to eight years but most seeds

germinate within two or three years.

The onset of germination is markedly influenced by summer temperatures and length of time the seed is exposed to these temperatures. Generally Saffron thistle dormancy is lower in seed from the northern agricultural areas (Geraldton) compared to seed from the southern infestations (Salmon Gums). Seeds buried more than 5 cm deep seldom germinate unless brought to the surface by cultivation. They are usually eaten by termites.

A programme stretching over several years is required to control saffron thistle because of seed dormancy.

This may involve spraying it in pastures for little or no economic return that year.

Urgent action is needed to eradicate new or isolated patches of Saffron thistle and to prevent it spreading to new areas.

For advice on Saffron thistle recognition and control, contact the Agriculture Protection Board, Jarrah Road, South Perth. Telephone (09) 367 0111 or any country office of the APB or Department of Agriculture.