



Government
of South Australia

WEED IDENTIFICATION NOTES

ANIMAL AND PLANT CONTROL COMMISSION

SALVATION JANE



Salvation Jane plant



Closeup of flowers



Salvation Jane seedlings

SALVATION JANE



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Salvation Jane, *Echium plantagineum*, became a significant weed in Australia after being introduced from the Mediterranean as a garden ornamental. Once it is established, control of Salvation Jane is complicated by stock management and other pasture species present. Therefore, it is important to keep Salvation Jane off clean properties or to recognise and destroy new infestations before they become established.

Distribution

Eyre Peninsula	- isolated roadside and paddock infestations
Northern pastoral	- very common in the Flinders Ranges and along roadsides elsewhere
Northern ag districts / Yorke Peninsula	- widespread
Murray Mallee	- widespread
South East	- widespread in north, scattered in south
Central region	- widespread

Impacts

Salvation Jane is highly competitive due to the large amount of seed produced and the large, flat rosette that smothers emerging seedlings. Even though the weed is eaten by stock during its early stages of growth, its presence reduces the quality and quantity of useful fodder. Soil fertility may be reduced if salvation Jane is replacing nitrogen fixing plants. It may cause soil erosion when rosettes smother perennial grasses and then die off leaving bare patches susceptible to wind and water erosion in summer.

Horses and pigs are susceptible to the alkaloids in salvation Jane and lose condition and appetite and die after a period of weeks feeding on the weed. The stiff bristles on salvation Jane cause irritation to the udders of dairy cows. It is also a source of hayfever and allergies in humans.

Salvation Jane also has some benefits, as a pollen source for beekeeping and a fodder plant for sheep and cattle in drought conditions.

Recognition

An erect annual plant (sometimes living into a second year), usually reaching about 60cm high and covered in short bristly hairs. Leaves produced in autumn and winter are large, oblong in shape with a short stalk and have distinct lateral veins; they grow flat on the ground from a solid taproot to form a rosette.

Leaves on the erect stems are stalkless, smaller and narrower. Flowers are attached along one side of the stem branches, with a blue to purple trumpet shaped corolla and four protruding stamens. The green calyx remains after the corolla falls, enclosing 4 seeds; these are brown-grey, up to 3mm long, 3 sided and wrinkled.

Biology

Plants can grow at any time of the year but most commonly seeds germinate after autumn rains and form a rosette over winter. Stems are produced in late winter and flowering starts in spring and continues for several months. Plants normally die in summer. Some seeds remain dormant in the soil for many years and cultivation appears to stimulate germination. Mowing or grazing the flowering plants encourages new shoots that will flower out of season.

Salvation Jane is a prolific seeder which is the only method of dispersal. The most important method of spread is in contaminated hay, fodder and grain, and is most noticeable in times of drought. Water is a common method of spread, especially in hilly areas. Seeds eaten by animals pass through the digestive tracts and are spread in the droppings. The rough seed coat also allows the seeds to be transported by animals.

Further Information:

Morley, T. & Stapleton, P. (1999) *The Paterson's Curse Management Handbook*. Dept of Natural Resources and Environment, Victoria.

Parsons, W.T. & Cuthbertson, E.G. (2000). *Noxious Weeds of Australia*. 2nd edn. Inkata Press.

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For more advice on recognising and controlling salvation Jane, contact your local Animal and Plant Control Board :



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