



Government
of South Australia

WEED IDENTIFICATION NOTES

ANIMAL AND PLANT CONTROL COMMISSION

SKELETON WEED



Mature skeleton weed plants



Skeleton weed rosette



Ripe seed heads

SKELETON WEED



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Skeleton weed, *Chondrilla juncea*, is a deep-rooted perennial weed native to south-western Asia and the Mediterranean area. Because it is not easily controlled by herbicides, especially in broadleaf crops, it is important to keep skeleton weed off clean properties or to recognise and destroy new infestations before they become established.

Distribution

Eyre Peninsula	- widespread with dense infestations, spreading
Northern pastoral	- common in cropping areas, inhibited by grazing in the pastoral zone
Northern ag districts / Yorke Peninsula	- scattered
Murray Mallee	- widespread
South East	- widespread in north, small infestations in south
Central region	- occasional occurrences of the narrow leaf biotype

Impacts

Skeleton weed competes strongly with crops and pastures, taking water and nitrogen from the soil before the crop establishes in autumn. It can also block up harvest machinery and cause moisture level problems in grain storage silos. Dense infestations can compete with cereal crops so strongly that the crops do not reach maturity. Reduced production and high costs of control greatly reduce the value of infested land.

Recognition

A perennial herb appearing as a rosette of dark green, toothed leaves flat on the ground in spring. In summer and autumn it produces erect, branched, leafless stems to 1 metre high with widely spaced flower heads. Each flower head is about 1 cm wide with numerous strap-shaped yellow florets. The seeds are 4-5 mm long with an umbrella-like arrangement of bristles on a stalk at one end allowing dispersal by wind. The stems ooze a thick milky latex when broken. It reproduces by suckers from a deep, thin taproot and is also a prolific seeder.

Three biotypes are found in Australia - narrow leaf, intermediate and broad leaf. These biotypes always breed true because skeleton weed produces seed without pollination, but the appearance of each biotype can vary with local environment. Branches of narrow leaf spread horizontally, while intermediate and broad leaf are more upright. Narrow leaf was the first biotype recognised in Australia but has been reduced in abundance by biocontrol agents that are not effective against the other biotypes.

Biology

Skeleton weed is the classic example of a deep-rooted perennial, growing in summer by tapping water reserves deep in the soil. Its requirements for optimum growth are high summer temperatures, some summer rainfall, a distinct Autumn break with lower temperatures, deep, light-textured soil for taproot penetration, moderate calcium and phosphorous levels in the soil and minimum shading and competition from other plants. Skeleton weed seed is mostly spread by wind, but can also be carried on produce, vehicles, clothing or livestock. Cultivation can spread an infestation across a paddock by moving root fragments.

Seeds germinate after the break of the season and form a distinctive rosette. Stems grow from the centre of the rosette during spring with flowers forming in summer. Each flower is only open for one day and seed is produced continually over several months. Above-ground growth dies off in autumn and new rosettes form from the taproot and also lateral roots. Even small root fragments can regenerate a new plant.

Further Information:

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 skeleton weed, contact your local Animal and Plant Control Board:



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