

Skeleton weed infested with gall midge (Cystiphora schmidti)

Using biocontrol to combat skeleton weed in Western Australia

The battle against skeleton weed in Australia's grain belt took a significant turn in the 1970s with the introduction of 4 highly host-specific biocontrol agents into eastern Australia. The following 2 agents are now available in Western Australia.

Gall midge (Cystiphora schmidti)

A small insect that forms galls inside the plant, causing tissue necrosis, leaf loss, stem and tip dieback, and reduction in seed production and viability.

Rust fungus (Puccinia chondrillina)

A plant pathogen that infects leaves and stems, causing desiccation, stunting and reduction of seed production and viability. It is extremely host-specific, so much so that it will only attack one of the 3 skeleton weed biotypes.



Skeleton weed infected with rust (*Puccinia chondrillina*)

Biotypes of skeleton weed

There are 3 biotypes of skeleton weed in WA; each responds differently to the biocontrol agents available. The most common biotypes found in WA are the narrow-leaved and the broad-leaved forms.

Biological control methods

The biocontrol method you choose will depend on the type of skeleton weed you have on your property. Refer to the table below and speak to your Local Action Group representatives or Biosecurity Officer from the department for support.

		Biotypes		
		Narrow-leaved	Intermediate	Broad-leaved
Biocontrol types	Skeleton weed gall midge	Susceptible to skeleton weed gall midge.	Susceptible to skeleton weed gall midge.	Susceptible to skeleton weed gall midge.
	Rust fungus	Susceptible to multiple strains of rust fungus.	Only susceptible to one strain of rust fungus.	Not susceptible to rust fungus.
Ξ	Gall-forming eriophyid mite (Aceria chondrillae)	Susceptible to this mite.	Will survive on intermediate plants but not effective.	Not susceptible to this mite.

The gall-forming eriophyid mite has not yet been released in WA.

Further information

Find out more go to: dpird.wa.gov.au/skeletonweed or scan the QR code.





The Grain, Seeds and Hay Industry Funding Scheme, funded by WA grain grower contributions, raises funds to address priority biosecurity threats specific to the WA grains, seeds and hay industries.

Important disclaimer

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