

COCHINEAL

Biocontrol for opuntia species

Cochineal insects (*Dactylopius spp.*) are biological controls for opuntia, a declared plant species under the *Landscape South Australia Act 2019*.



What are opuntia cacti?

Opuntia cacti are highly invasive, forming dense infestations that displace desirable vegetation and limit access for stock, vehicles and humans. Their spines can injure livestock, attaching to their flesh or eyes. Large patches also harbour pest animals, such as rabbits which gain safe refuge under the spiny plant.

How does cochineal biocontrol work?

Species of the cochineal mealy bug (*Dactylopius spp.*) are used as natural control agents to decrease the density and abundance of the cactus population. Each cochineal species is specific to a species of opuntia and ineffective unless the correct biotype is used. Cochineal is suited to large or remote locations and is easily spread.

Active in the warm months and dormant over winter, cochineal insects are soft-bodied, oval

shaped and deep red in colour. On warm days with a gentle breeze, cochineal 'crawl' to the edge of cactus pads producing long wax filaments that catch in the wind carrying the insects to new plants. Wingless adult females are hidden beneath a white, waxy and wool-like covering. These coverings are protected feeding sites where females use beak-like mouthparts to feed on the opuntia juices, which deteriorates the plant's health.

Large, prolonged cochineal infestations can lead to the death of the host plants.

How do I disperse it?

Cochineal insects can be collected by removing infected cactus pads and translocating to the same opuntia species.

Cochineal-infested pads are secured to the new host plant with skewers. It's important to ensure infected pads are protected and out of direct sunlight, shielding the cochineal from extreme weather conditions.



For large opuntia infestations, cochineal should be released on the upwind side of release sites, to help the wind spread the insects. Releases should be made in spring and summer to build populations in the warmer months.

Primary Industries and Regions, South Australia.

Where can I source it?

Landholders can contact the Northern and Yorke Landscape Board and register their properties for a cochineal release. A Landscape Officer will contact registered landholders to confirm the opuntia species and organise a cochineal release at the appropriate time.

Note: *Opuntia* spp., except *opuntia ficus-indica*, are declared plants and are prohibited from movement on public roads. Landholders are only permitted to move opuntia material on the same land parcel as collected.

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More information

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