

Rosy apple aphid

What is Rosy apple aphid?

The Rosy apple aphid (RAA, *Dysaphis plantaginea*) is considered the most destructive aphid species that attacks apples, with infestation resulting in major damage to leaves, roots and fruit.

What does it look like?

RAAs are small, soft-bodied insects with piercing-sucking mouthparts and two cornicles, which resemble tailpipes, projecting from the back of the abdomen. Adults grow up to 2.5 mm in length and can be winged or wingless. Winged adults are a brownish-green to black colour, while wingless adults are rosy brown or purple and covered in a greyish-white wax coating.

The RAA has five nymphal stages which range in size from 0.5 to 2 mm long. Colouring of the nymphs is age dependent, ranging from dark-green through to rosy-purple. The eggs are small (0.5 mm in length) and change from greenish-yellow when they are first laid, through to shiny black before hatching.

What can it be confused with?

RAA can be confused with Apple green aphids and Apple grain aphid. The eggs are indistinguishable, however RAA egg-laying females can be differentiated by a prominent central tubercle (outgrowth) on the front of their head.



Whitney Cranshaw, Colorado State University, Bugwood.org

A colony of Rosy apple aphids on the underside of a leaf



Zapote

'Tailpipe' structures (cornicles) on the rear of the abdomen can be clearly seen on the Rosy apple aphid



Jack Kelly Clark, UC Statewide IPM Program

Leaf curling and distortion caused by aphid infestation



What should I look for?

RAAs can be detected through direct observation of the aphids themselves, particularly under high infestation levels. However, RAA presence would most likely be detected by the plant symptoms produced by aphid feeding. Leaf symptoms include curling, abnormal colouring and premature leaf drop. Twigs can become distorted and natural fruit drop is impeded, resulting in the fruit remaining attached in large numbers. Fruit may also be small in size and have a 'bumpy' surface.

Vast quantities of honeydew are also produced through aphid feeding and sooty moulds may develop on leaves or fruits.

How does it spread?

RAA can fly short distances, but the most common means of long distances movement is with infested seedlings. Eggs can also be spread on bark and adults/nymphs may travel on leaf material.

Where is it now?

RAA is widespread throughout the apple growing regions of North America.

How can I protect my orchard from Rosy apple aphid?

Source plant material only from clean, accredited suppliers, and preferably material that is certified. Check your orchard frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common pome fruit pests so you can tell if you see something different.

If you see anything unusual, call the Exotic Plant Pest Hotline

**EXOTIC PLANT PEST HOTLINE
1800 084 881**



Small, mature eggs of the Rosy apple aphid

Jack Kelly Clark, UC Statewide IPM Program



Adult winged form of the Rosy apple aphid (left) and a nymph (right)

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Both fruit and leaves can be distorted by aphid infestations

Jack Kelly Clark, UC Statewide IPM Program