

Crops and pasture mites

Australia's major mite pests are the redlegged earth mite (RLEM), blue oat mite (BOM), balaustium mite and bryobia mite. In addition, brown wheat mite and two-spotted mite are also considered important pests however these are sporadic. Yields of many host plants can be dramatically reduced by mite damage

All of these mites look similar and can co-exist in the same area. Monitoring is critical to accurately identify the pests and control their population. The most commonly used techniques to monitor mites are visual assessments, suction sampling, pitfall traps and germinating seed baits. It is important to inspect crops, weedy areas and pastures adjoining fence lines from autumn to spring for the mites and feeding damage.

KEY MESSAGES

Monitoring is essential for early detection of crop mites

Early control of summer and autumn weeds within and around paddocks can help to control mite populations

Some mites are highly tolerant of pesticides, so correct identification is necessary to apply the right control method



Source: Redlegged earth mite, Blue oat mite, respectively. Images: Cesar



Source: Balaustium mite, Bryobia mite, respectively. Images: Cesar

Table 1 Typically active period of mites in crops and pastures in Australia

Mite species	Jan	Feb	Mar	Apr	Mar	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
RLEM													
BOM													
Balaustium mite													
Bryobia mite													
Two-spotted mite													
Brown wheat mite													

■ Active periods

Table 2 Guide to identify mites that could affect your crop and/or pasture based on their features, behaviours and hosts

Crop and pasture mites	Distinctive features	Host	Behaviour and habits	Symptoms	Treatment
RLEM	Globular shaped; velvet black body	All crops and pastures; legume seedlings, canola, lupins and cereals are most susceptible	Feeds on leaf surfaces in large groups unlike other species	Silvering or white discolouration of leaves	Use Timerite® spray date in Spring. Heavy grazing in spring period will reduce carry over population in autumn
BOM	Orange/red marking on back	Wide range of agriculturally important plants: legume seedlings, canola, lupin and cereals are most susceptible	Feeds on leaf surfaces singularly or in very small groups	Silvering or white discolouration of leaves	High tolerance to range of pesticides, high rates are usually required for control Pesticides should be applied within three weeks of the first appearance of mites
Balaustium mite	Pad like structure on forelegs Body covered with stout hairs	Pasture legumes, lucerne, grasses, canola, lupin, and some broadleaf weeds	Typically attacks leaf edges and leaf tips of plants	Irregular white spotting or bleaching of the leaves	No pesticides registered for Balaustium mites Early control of summer and autumn weeds help to control populations
Bryobia mite	Oval shaped, flattened dorsal body that is dark grey. Long front legs up to 1.5 times its body length	Clovers, grasses, lucerne, vetch, canola, lupins and wheat	Prefers clovers and medics over grasses	Distinctive trails of whitish grey spots on leaves On grasses damage is similar to RLEM and BOM	High tolerance to pesticides, high rates are usually required for control Early control of summer and autumn weeds help to control populations
Two spotted mite	Darker green spots on either side of the body	Wide range of hosts and has become a serious pest on many fruits, vegetables, trees, shrubs, herbs, herbaceous perennials and ornamental plants and many broadleaf weeds	Often found clustered in groups on the underside of leaves Fine webbing is visible on the lower leaf surface	Bronzing speckled appearance on the upper surface of the leaf	High tolerance to pesticides, integrated pest management is required
Brown wheat mite	Their front legs are distinctly longer than the other three pairs of legs	Common pest of wheat, barley, cotton however it can also infest other non-cultivated grasses	Feed on the tips of the leaves	Stippling of the leaves Heavily infested fields present a scorched withered	Tend to be a problem in dry conditions Heavy winter rain reduces their population Control may not be cost-effective in drought affected crops

FOR FURTHER INFORMATION

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