



PestFax

Jun 2018

A variety of mites are active

Beetles, weevils and other caterpillars are being found in crops

Lucerne flea insecticide resistance testing is available this season

Slugs are active down south

Yellow spot in wheat

New blackleg sporacle forecast available

Agworld platform users are collaborating with PestFax this season

A variety of mites are active

Brown wheat mites

- Kondut



Cameron Smith (Elders) has found high numbers of newly hatched brown wheat mites feeding on a seedling wheat crop at East Kondut. The report was submitted via the department's MyPestGuide Reporter app.

Brown wheat mites usually only cause retardation in cereal seedlings if the seedlings are moisture stressed. In most cases crops outgrow any feeding damage and cooler winter temperatures and more frequent rainfall usually lead to a reduction in brown wheat mite numbers.

Brown wheat mites can be confused with bryobia mites. This highlights the need for correct identification of mites for effective mite control. You can report and confirm the identity of mites by using the [PestFax Reporter app](#).

For more information on this mite visit the department's [Diagnosing brown wheat mite](#) page.

Redlegged earth mites

- Goomalling
- Highbury
- Frankland



Dani Whyte (Planfarm) has started to find redlegged earth mites (RLEM) in crops at Goomalling. The mites were very tiny indicating they had recently hatched from over-summering eggs.

An Agworld user has reported finding RLEM winter eggs and hatchings in a three leaf oat crop near Highbury.

Tim Trezise (Frankland Rural) reports RLEM have started to hatch in the Frankland area. They are currently not causing any crop damage.

Remember RLEM surveys for resistance will again be undertaken in 2018. If you are noticing that RLEM are surviving registered rates of insecticide treatments or are causing damage to germinating crops consider contacting [Alan Lord](#) or [Svetlana Micic](#) to arrange for resistance testing.

For more information on RLEM and insecticide resistance refer to the department's [Diagnosing redlegged earth mite](#) and [Prevent redlegged earth mite resistance](#) pages.

For more insecticide information on managing mites refer to DPIRD's [2018 Autumn/Winter Insecticide Guide](#).

For more insect information contact [Svetlana Micic](#), Research Officer, Albany on +61 (0)8 9892 8591 or [Dustin Severtson](#), Development Officer, Northam on +61 (0)8 9690 2160 or [Alan Lord](#), Technical Officer, South Perth on +61 (0)8 9368 3758.

Beetles, weevils and other caterpillars are being found in crops

Cabbage white butterfly larvae

- Munglinup
- Coomalbidgup



Sam Fetherstonehaugh (Farm and General) reports that cabbage white butterfly larvae has been found in canola crops in the Munglinup and Coomalbidgup areas. The caterpillars are being found in crops which have had a patchy germination. Canola plants are at the 2-8 leaf stage and there were at least two caterpillars present per plant. All the plants checked in the paddocks had caterpillars present and higher numbers were found in crop edges adjacent to pasture. Damage was first thought to be from kangaroos as some plants were chewed to ground level. Crops were sprayed with a synthetic pyrethroid to control the caterpillars. As cooler weather (temperatures below 18°C) occur it is expected that cabbage white caterpillars will not be an issue

Cabbage white butterfly caterpillars are plump, pale green and furry/velvety due to a fine covering of hairs. Faint yellow stripes can be seen along the caterpillars back and sides. When fully grown the caterpillars are 30mm in length before they form their hardened pupal case which hangs on the plant by silken threads. They cause large irregular holes when they chew on leaves.

The large (40-50mm wingspan) adult cream/white butterflies are easily recognised flying during the day just above canola crops.

Where required cabbage white butterfly caterpillars can be controlled with alphacypermethrin (400mL/ha), esfenvalerate 50g/L (400-500mL/ha), gamma-cyhalothrin 150g/L (20mL/ha) or lambda-cyhalothrin 250g/L (24mL/ha). A recommended softer option, as it is specific to caterpillars and will not harm other beneficial invertebrates, is the use of *Bacillus thuringiensis* (Bt) used at 1-4L/ha (see label).

For more information refer to the department's [Diagnosing cabbage white butterfly](#) page.

Desiantha weevil

- Yetna



Nick McKenna (Planfarm) has found desiantha weevils (also known as spotted vegetable weevils) in a seedling Cobra wheat crop at Yetna. The weevils were causing some plant damage (holes in leaves and chunks out of the sides) but the crop appeared to be outgrowing the damage.

Desiantha weevil adults are mottled grey-black in colour with grey flecks on the abdomen and have the typical elongated weevil snout. They grow up to 7mm long and are flightless. Larvae are white, legless grubs with orange-brown heads and grow to 8mm in length.

Desisantha weevil larvae feed on the roots of cereal crops while the adults are more commonly known to cause damage to canola crops. Larvae remain under the soil and digging may reveal the larvae close to plants. The larvae have been known to cause serious and widespread damage to late sown wheat and barley crops in previous years by feeding on the seeds and developing root systems of emerging cereals.

Control of larvae after seeding is not possible but reseeding with a higher rate of seed that has been treated with chlorpyrifos is sometimes worthwhile if there is sufficient crop damage.

For more information refer to the department's [Diagnosing desiantha weevil in cereals](#) page.

Vegetable beetles

- Frankland



Tim Trezise (Frankland Rural) reports that vegetable beetles have been commonly found in canola crops that have been sown after a lupin rotation at Frankland. The beetles have caused patchy damage.

Lab trials conducted by DPIRD entomologist Svetlana Micic have shown that vegetable beetles will cause damage to crops if day temperatures are 20°C and above. As soon as the cold, wet winter conditions prevail ie day temperatures of 15°C and below, damage by the vegetable beetle is expected to cease.

Vegetable beetles are very tolerant of insecticides. Svetlana says that currently registered insecticides for use on false wireworm (includes vegetable beetles) on canola such as chlorpyrifos (500g a.i) at 1.0-1.5L/ha with some labels stating that the application should be incorporated into the top 50mm of soil, have suppressed damage from vegetable beetles, however, many growers and agronomists have reported these rates did not cause vegetable beetle mortality rather beetles were 'subdued' and this allowed the crops to out grow the damage.

More information about vegetable beetles can be found at DPIRD's [Diagnosing vegetable beetle damage](#).

For more insect information contact [Svetlana Micic](#), Research Officer, Albany on +61 (0)8 9892 8591 or [Dustin](#)

Severtson, Development Officer, Northam on +61 (0)8 9690 2160 or Alan Lord, Technical Officer, South Perth on +61 (0)8 9368 3758.

Lucerne flea insecticide resistance testing is available this season

- Northampton
- Greenhills
- Kulin



Yellow-green wingless and globular adults sometimes with dark markings

Lindsay Box (Farmer) reports that lucerne flea are active in germinating Mace wheat at Northampton. The lucerne flea are causing moderate damage to wheat crops sown into heavy soils.

A farmer has had to spray for lucerne flea across many crops on his property at Greenhills.

Dani Whyte (Planfarm) has found significant numbers of lucerne flea damaging canola crops at Kulin.

To view previously reported lucerne flea activity this season refer to the department's [PestFax map](#).

Insecticide resistance testing in 2018

Lucerne flea are currently not known to be resistant to any insecticides but as part of a national GRDC funded project DPIRD are interested in sampling any lucerne flea populations that survive registered rates of insecticide treatments.

So, if you do find surviving lucerne flea after spraying please contact DPIRD officers [Svetlana Micic](#), Albany on 0427 772 051 or [Alan Lord](#), South Perth on 0409 689 468. Arrangements will be made to have the lucerne flea tested for resistance.

This lucerne flea resistance project is being led by the University of Melbourne's Centre for Environmental Stress and Adaptation Research in collaboration with CSIRO and DPIRD.

For insecticide information on managing lucerne flea refer to DPIRD's [2018 autumn/winter insecticide guide](#).

For more lucerne flea information refer to the departments [Diagnosing lucerne flea](#) page and the 2018 PestFax

Issue 8 article [Growers and consultants are urged to check for lucerne flea and mites.](#)

For more insect information contact [Svetlana Micic](#), Research Officer, Albany on +61 (0)8 9892 8591 or [Dustin Severtson](#), Development Officer, Northam on +61 (0)8 9690 2160 or [Alan Lord](#), Technical Officer, South Perth on +61 (0)8 9368 3758.

Slugs are active down south

- Frankland
- Mount Barker



Tim Trezise (Frankland Rural) has found immature black keeled slugs present in very low levels in the Frankland area.

As part of the GRDC funded national project DAS00160, Biology and management of snails and slugs in grain crops, cameras are being used to monitor slug and snail movement in southern WA. The cameras at Mount Barker at the start of this week was showing low numbers of black keeled slugs actively moving from 10pm at night. There is no obvious damage to crops located in close proximity to the cameras. However, collections outside of the crop are finding higher numbers of immature slugs present.

Slug movement trials conducted last year looking found that the higher the humidity the more slug movement there was.

There are two slug species and three snail species that are pests of WA broadacre crops. For more information on how to diagnose snails and slugs refer to DPIRD's [Diagnosing slugs in crops](#) and [Diagnosing snails in crops](#).

Current slug and snail management recommendations

Slug and snail numbers should be monitored to determine whether they exceed DPIRD's [suggested threshold numbers](#) and if they need to be managed.

Baiting now when crops have emerged will have reduced effectiveness as there is a lot of green material that provides an alternative food source for the slugs. Even bait coverage increases the likelihood of slugs or snails encountering the bait and feeding on the bait. Trials suggest 30 baits per square metre give good control.

As slugs are currently present in canola crops, growers need to be proactive now to determine what they will need to do next year. Now is the time to check paddocks that you will seed with canola next year. Soil type

doesn't matter - slugs can survive hot, dry summers in lighter soils if there is enough moisture in the soil profile.

In 2019 check paddocks that had snails and slugs this season before seeding. Budget to apply bait more than once, but be aware that spreaders calibrated for fertiliser spreading may not be spreading the baits as far as you think. If you are patch baiting only where you are expecting slugs make sure you bait sufficient area around the patches to cover movement of slugs from these areas.

For more information on slug and snail control visit;

- DPIRD's [Identification and control of pest slugs and snails for broadacre crops in WA](#)
- DPIRD's [Snail and slug control](#)
- GRDC's [Bash'Em Burn'Em Bait'Em: Integrated snail management in crops and pastures.](#)

For more information contact [Svetlana Micic](#), Research Officer, Albany on +61 (0)8 9892 8591.

Yellow spot in wheat

- Nabawa
- Binnu



Belinda Eastough (Elders) reports finding yellow spot at high levels in a Calingiri wheat crop at Nabawa. The noodle crop was sown on wheat stubble (Scepter in 2017) and is at early tillering stage. The grower will be applying foliar fungicide shortly when spraying out weeds. The crop received flutriafol in-furrow at seeding but this is not registered for yellow spot.

An Agworld user has also reported yellow spot in a wheat crop near Binnu.

Yellow spot can be a problem for crops where early season rains provide suitable conditions for the disease development. The disease survives over summer on infected stubble and with the onset of wet conditions releases spores which infect new seedlings especially when there are frequent periods of wet/moist leaf surfaces.

Yellow spot and septoria diseases have similar looking symptoms and frequently occur together throughout the wheatbelt. Septoria tritici blotch is considered rare in WA. These diseases are particularly a problem in continuous wheat crops in stubble retention farming systems as they are stubble-borne.

They appear in wheat as irregular or oval-shaped spots that initially are small and yellow, but enlarge to form

brown dead centres, with yellow edges. Typically, a badly affected leaf will die back from the tip as lesions merge, reducing the photosynthetic area and causing premature leaf death.

These diseases have the capacity to significantly reduce yield (by up to 30%) and grain quality in medium-high rainfall areas or other areas receiving above average rainfall this growing season.

Spores produced on infected lower canopy leaves provide inoculum for later season disease development, early application of a registered foliar fungicide can reduce sporulation on these leaves.

For wheat after wheat, when there is high disease pressure prior to stem elongation, it may be economic to apply a registered fungicide at or prior to early stem elongation (Z31, first node) particularly in medium to high rainfall areas. A second spray may be required at or after flag leaf emergence if disease is moving up the canopy and the outlook is for good finishing rains.

A list of registered fungicides to use as foliar sprays are available at [Registered foliar fungicides for cereals in Western Australia](#).

For further information on yellow spot refer to;

- DPIRD's [Diagnosing yellow spot in wheat](#) page
- DPIRD's [Managing yellow spot and septoria nodorum blotch in wheat](#) page
- CCDM's The Spotlight May 2017 [X-Men or Batman – which one is yellow spot?](#) newsletter article.

For more information contact [Ciara Beard](#), Plant Pathologist, Geraldton on +61 (0)8 9956 8504, [Geoff Thomas](#), Plant Pathologist, South Perth on +61 (0)8 9368 3262, [Andrea Hills](#), Plant Pathologist, Esperance on +61 (0)8 9083 1144 or [Kithsiri Jayasena](#), Plant Pathologist, Albany on +61 (0)8 9892 8477.

New blackleg sporacle forecast available

DPIRD's [latest blackleg sporacle forecast](#), which is current to 20 June, is predicting that blackleg spores are now releasing in most of the southern and south-eastern districts. This includes Mount Barker, Williams, Narrogin, Darkan, Katanning, Jerramungup, Esperance and Scaddan.

Spores are close to being mature in Munglinup, Salmon Gums, Corrigin, Tammin and Lake King districts. Blackleg risk remains high in these districts.

In most of the northern and central districts the risk of blackleg is predicted to be medium as spores haven't reached adequate maturity in these areas as yet.

Please visit the department's [Canola blackleg spore maturity forecast for Western Australia](#) to find out for the forecast for other districts.

Canola pathologist Ravjit Khangura (DPIRD) says growers need to assess the risk of blackleg spore fall-outs on their canola crops.

Crops that are at the susceptible seedling stage and sown in a medium to high blackleg risk situation may particularly require foliar application if no fungicide has been applied at seeding and/or the risk of blackleg is too high.

Blackleg symptoms can be seen at all growth stages but plants are more vulnerable to severe infection and plant death up to the six leaf stage. Severe early infection can cause plant death at the early seedling and cabbage stage as shown in the picture below.



For further details on assessing the blackleg risk and management options refer to GRDC's [Blackleg Management Guide \(2018 autumn variety ratings\)](#).

The recently released BlacklegCM app can be downloaded onto tablets from the apple store or Google Play and used to support decisions on fungicide management options. Developer of the app Art Diggle (DPIRD) says that the app allows the user to enter information specific to their paddocks and circumstances. For more information refer to the department's [BlacklegCM](#) page.

For more information about blackleg in canola and the blackleg sporacle model contact [Ravjit Khangura](#), Research Officer, South Perth on +61 (0)8 9368 3374 or [Kawsar Salam](#), Research Officer, South Perth on +61 (0)8 9368 3104.

Agworld platform users are collaborating with PestFax this season

PestFax newsletter readers may have noticed that we have published insect and disease reports from Agworld users in this issue and readers can expect to see Agworld mentioned in future PestFax newsletter issues.

Agworld and DPIRD, with the support of the Elders WA Agronomy group, are now trialling a new way of collaborating to allow reports of insect pests, diseases and weeds to flow easily and directly from the Agworld platform to the PestFax service.

DPIRD believe that by increasing the number of pest, weed and disease reports to PestFax, more information can be compiled over time to return valuable insights to the industry.

Agworld records containing pest, weeds or diseases matching a predetermined set of crop/pest/disease combinations are sent as an anonymous report to PestFax. It is important to understand that the data is anonymised to allay and address data privacy concerns.

Agworld has worked with DPIRD and the Elders WA Agronomy group to design and test this data collaboration, and if all goes well, other Agworld users will be invited to take part in future.

This collaboration was made possible through a competitive grant process by DPIRD's eConnected Grainbelt

project, and we hope to have other participating external reporters down the track.

Agworld is an Australian company founded in 2009 and a global leader in collaborative farm management, enabling farmers, advisors and third parties to work together as one on a single platform. Agworld's industry-leading standardised database makes it quick and easy to create accurate, reportable farm data. With over 50 000 farms and more than 28 000 users across 15 countries, Agworld has the experience, capacity and market presence to support the delivery of innovation to farmers, agronomists and those that serve them. For more information visit the [Agworld](#) website.

The PestFax team is excited about this collaboration particularly as this could prompt more reporting of pests and disease occurrences in crops and pastures in the future. We will then be able to display more occurrences on the [PestFax map](#) and extend pest and disease information and management advice to our PestFax newsletter subscribers.

For more information on this collaboration contact [Art Diggle](#), Senior Research Officer, South Perth on +61 (0)8 9368 3563 or [Simon Foley](#), Agworld General Manager on +61 (0)8 6230 2290.

All Page Links

- [1] <https://www.agric.wa.gov.au/sites/gateway/files/Brown%20wheat%20mite%20%20Cameron%20Smith%20Elders%2019June18.jpg>
- [2] <https://www.agric.wa.gov.au/diseases/pestfax-reporter>
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