Agriculture and Food

GOVERNMENT OF WESTERN AUSTRALIA

PestFax

Apr 2018

Australian plague locusts are being found in low numbers

- Moora
- Kondinin
- Kulin

Wayne Birch (Landmark) reports low levels of Australian plague locusts (APL) in the Moora area. The APL are at the second to third instar stage.

Ben Whisson (ConsultAg) has noticed APL activity in paddocks between Kulin and Kondinin, especially in paddocks that still have melons and other green weeds present.

DPIRD biosecurity officers are carrying out autumn surveys for APL. Preliminary surveys suggest that activity is isolated to paddocks which have been green over the February to March period.

Growers who are seeding pasture in paddocks where APL are present may need to monitor germinating pasture or put in controls prior to sowing.

APL activity can be reported to the PestFax team via the PestFax Reporter app.

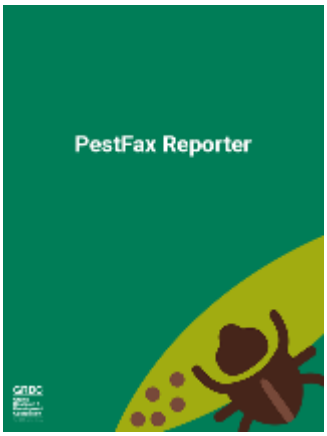
For insecticide information visit the department's Australian plague locust control: registered insecticides.

More APL information can be found at the department's Diagnosing locusts and grasshoppers in crops and

Australian plague locust: overview pages.

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

PestFax Reporter app – an easy tool to identify and report crop and pasture pests and diseases



The PestFax Reporter app has been designed so users can quickly and easily identify or report any pests, diseases, weeds and other damage, such as frost and mice activity directly from the paddock.

The more reports that are received the more forewarned growers and consultants are of emerging pest issues in their areas. Reports submitted are displayed on the PestFax map and regularly referred to in the weekly PestFax newsletter during the growing season.

Reporting both the presence and absence of common disease or pests multiple times is encouraged so that a more detailed picture of the distribution and severity of a problem can be built up.

Where do I find the app?

It is a free app that is available for download from iTunes or Google Play.

How do I make a report?

Easy drop down selection lists help you to enter your information. You only need to enter the crop type and the problem and send the report. Any extra information about the situation that you can add, such as variety, growth stage of the crop and severity of the problem, will be appreciated.

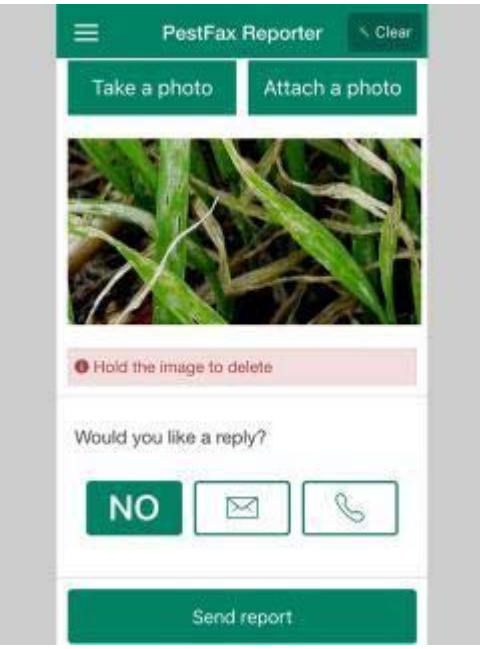
What if I do not know what the insect or disease is?

Fill out as many drop-down fields as you can and in the 'Comments' section say that you require identification or add any extra information.

Users can upload a maximum of three photos. This is an easy process where you can take a photo during the report or attach a photo taken earlier. If you are not happy with the photo, press on the image to delete it and

take it again. It is helpful if users can fill out any other information about the paddock scenario to assist DPIRD experts.

In the 'Would you like a reply?' section select the email icon or phone icon to request an email or telephone reply/diagnosis from a DPIRD expert.



How long does it take to fill out a report?

When used to the app reports can take as little as 20 seconds. If reporting the same insect or disease multiple times past reports can be updated with new information and submitted, saving even more time.

Do I need mobile coverage to submit reports?

No, users do not need mobile coverage. Fill out your report, click 'Send' and your phone will send it automatically when you return to an area with coverage.

Why should I bother reporting common insects and diseases?

Every report received is displayed on the PestFax map and helps build a comprehensive picture of cropping issues during the season. This helps growers, industry and the department to react quickly and with appropriate information to manage crop constraints.

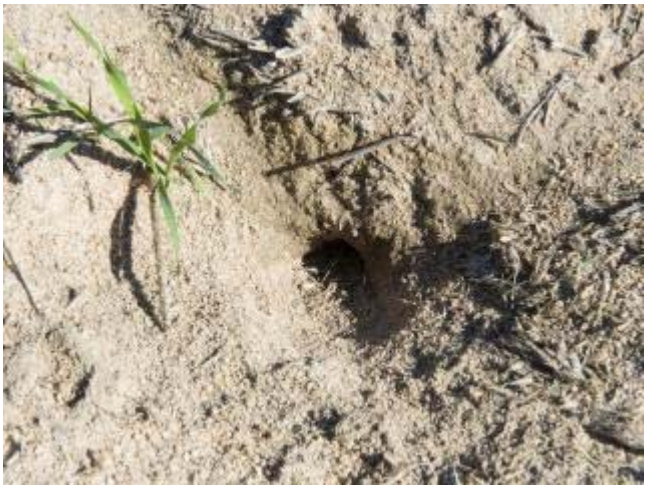
For instructions on using the app and more information visit the department's PestFax reporter page.

For more information contact Art Diggle, Senior Research Officer, South Perth on +61 (0)8 9368 3563.

Monitor and manage mice now to avoid seedling damage

- Cuballing / Narrogin
- Jerramungup
- Gairdner
- Lake King
- Ravensthorpe

- Esperance



Biosecurity officer Mike Clark (DPIRD) reports that there is considerable mouse activity in his horse stable in the Cuballing shire. There is also mouse activity in the Narrogin town site. This indicates that there could be mice activity in surrounding paddocks in the Cuballing and Narrogin shire.

Brent Pritchard (Farmanco) reports that mice are active in Gairdner and Jerramungup, but currently not at numbers that warrant baiting. The situation is being monitored.

Manager Brendan Nicholas (DPIRD) has received reports of considerable mice activity around Ravensthorpe and Esperance. Baiting is being carried out around these areas. There has also been mice activity at Lake King but numbers are not sufficient enough to bait.

Regular monitoring for mouse holes and management are needed to prevent damage of seedling crops. Five active holes per $100m^2$ (100m by 1m transect) can be equivalent to 1000 mice per hectare, although this number will vary with soil type.

Mice are always present in crops in low numbers, but can increase rapidly under favourable conditions, including:

- early autumn rains that produce early seed-set of winter weeds
- late spring or early summer rains that damage mature crops and produce a flush of summer weeds
- favourable burrowing conditions, such as cracking or light soils
- heavy crop residues.

Mice will dig up and eat seed after it is sown or eat the germinating seedling.

Controlling mouse numbers (baiting) in autumn reduces the number available to cause a spring population explosion.

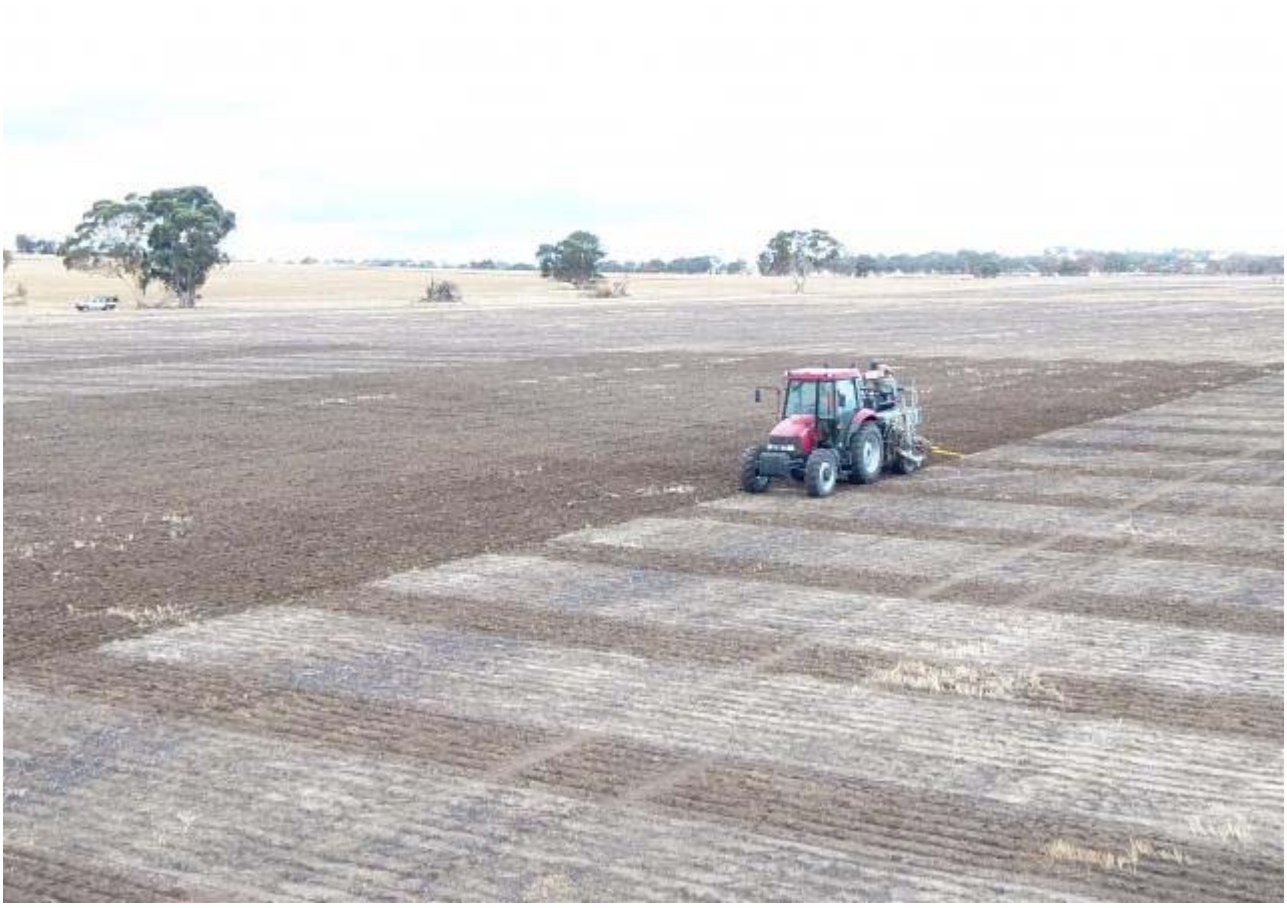
In addition to the PestFax map there is a Mouse Alert app where mouse activity can be reported and viewed.

It was recently announced that the GRDC is injecting more than $4.1 million into mouse control research, development and extension (RD&E) initiatives in response to the increasing prevalence of mice in many key grain-growing regions of Australia. For more information refer to GRDC's Mice in the sights of major new research thrust.

For more information on mice and their management visit;

- DPIRD's Diagnosing mouse damage in crops
- GRDC's Mouse control fact sheet
- GRDC's Mouse control webinar and mouse activity continues to be of concern across many grain growing regions of Australia.

Sowing wheat early? Sow longer season varieties to minimise frost risk



First time of sowing going in at the DPIRD and GRDC frost trial site at Dale, WA

It is important to have a comprehensive frost management strategy as part of annual farm planning in frost prone areas. Variety choice and subsequent time of sowing will form one part of your pre-season strategy

Timing is everything when it comes to managing frost risk. Time of sowing will determine your variety's flowering time and in turn how many times you may be affected by frost.

Early sowing the correct variety can lengthen the growing season and deliver increased yields. However, when sowing early it is critical to choose a variety with the right flowering behaviour to minimise your frost exposure and maximise your yield potential. All wheat varieties are susceptible to frost. To minimise the impact of frost;

- Select varieties adapted to your region.
- Match the appropriate sowing time to ensure the optimum flowering period.

Frost damage is accumulative and so managing frost risk is not about avoidance but about maximising

production. When sowing early, it is critical to choose a longer season wheat variety that will flower later to minimise exposure to frost.

Through the GRDC National Frost Initiative (Project DAW00234) research officer Dr Ben Biddulph (DPIRD) compared a range of varieties across a range of sowing times for their response to frost during 2014–17. A key finding was that winter wheats had a flowering advantage when sown in early April. For example, in the central region, Wylah consistently flowered during the optimal window, the last two weeks of September, from a range of early April sowing dates across several seasons.

Early sowing a variety with the right flowering behaviour delivers higher yields due to the plants increased ability to establish deeper root systems, improved water extraction and greater biomass accumulation while minimising frost risk.

Winter types can be sown in early April to deliver a yield benefit but this does not apply to long-season or mid-long-season spring types (for example, Magenta, Yitpi, Cutlass), which show a drop in yield due to frost damage when sown early April in frost prone parts of the landscape. These long and mid-long spring types return increased yield from late April sowing to middle of May but the benefit is lost with very early sowing (early to mid April). In frost prone parts of the landscape, Scepter and Mace are best suited to Mid to late May sowing.

A comprehensive frost management strategy should include variety choice and subsequent time of sowing.

For more information on minimising frost risk refer to the department's Managing frost risk page and Frost frequently asked questions brochure.

For more information contact Dr Ben Biddulph, Research Officer, South Perth on +61 (0)8 9368 3431 or Kelly Ryan, Development Officer, South Perth on +61 (0)8 9368 3480.

All Page Links

[1] https://www.agric.wa.gov.au/sites/gateway/files/Australian%20plague%20locust%20Chortoicetes%20terminifera_0.png
[2] https://www.agric.wa.gov.au/apps/pestfax-western-australia
[3] https://www.agric.wa.gov.au/insecticides/australian-plague-locust-control-registered-insecticides
[4] https://www.agric.wa.gov.au/mycrop/diagnosing-locusts-and-grasshoppers-crops
[5] https://www.agric.wa.gov.au/invasive-species/australian-plague-locust-overview
[6] mailto:svetlana.micic@dpird.wa.gov.au
[7] https://www.agric.wa.gov.au/sites/gateway/files/cropped%20Pestfax-reporter-splash.png
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[11] https://www.agric.wa.gov.au/sites/gateway/files/cropped%20PestFax%20Reporter%20app%20selection%20screen%20April%202018_1.png
[12] https://www.agric.wa.gov.au/sites/gateway/files/PestFax%20Reporter%20app%20photo%20upload%20screen.jpg
[13] mailto:art.diggle@dpird.wa.gov.au
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[15] http://www.feralscan.org.au/mousealert/
[16] https://grdc.com.au/news-and-media/news-and-media-releases/national/2018/03/mice-in-the-sights-of-major-new-research-thrust

[17] https://www.agric.wa.gov.au/mycrop/diagnosing-mouse-damage-crops
[18] https://grdc.com.au/resources-and-publications/all-publications/factsheets/2012/09/mouse-control-western-region
[19] https://grdc.com.au/news-and-media/webinars/mouse-control-webinar
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