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Lucerne flea hatching

Recent soaking rains have created ideal conditions for hatching of **Lucerne flea** (*Sminthurus viridus*) from their over-summering eggs. Crops susceptible to lucerne flea attack include lucerne, clover, canola, pulses, and cereals, particularly in paddocks with heavier clay loam soils or following clover pastures. Lucerne flea feed from the underside of foliage leaving transparent "windows", and severe damage can kill young seedlings.

Crops should be inspected frequently at and immediately following emergence. Lucerne flea has a patchy distribution within crops, often occurring in 'hotspots', therefore sampling should occur over a wide enough area to be representative. As a guide, inspect 0.5m of crop row, looking for characteristic damage to leaves, repeated at five to ten sites across the paddock.

The standard recommendation is to apply a foliar spray soon after emergence if damaging numbers are present. The best time to treat lucerne flea is 3-4 weeks after the commencement of hatching to allow further egg hatch but before they reach the adult stage and lay eggs. Spot spraying for lucerne flea is often effective. Organophosphates are often effective for lucerne flea control; synthetic pyrethroids are ineffective. Cruiser[®] Opti insecticide seed treatment is registered for suppression of lucerne flea. More information: [Lucerne flea - Vic DEPI](#).

Other springtails: We identified another springtail species from a paddock in the Lower North. Many other springtail species may be found on plants or the soil surface at this time of the year, sometimes in high populations. They should not cause concern as the vast majority of springtails feed on fungi associated with soil or decaying organic matter, not on live plants, and are beneficial. Lucerne fleas are the only serious springtail pest of Australian crops.

Green peach aphid

Chris Davey (YP Ag) reported **Green peach aphid** (*Myzus persicae*) present on volunteer canola near **Port Broughton**. Volunteer canola will be sprayed soon and control is not necessary. This aphid can sometimes move into canola crops from broadleaf weeds and volunteers in autumn and infest the underside of plant leaves. The main risk from green peach aphid is early transmission of plant viruses such as Beet Western Yellows Virus; direct yield loss is relatively rare, although several unusual instances of severe feeding impact were recorded in areas of South Australia ([PestFacts Issue 7, 2013](#)) and Western Australia

([PestFax 2013](#)) last season. In higher risk situations, such as high rainfall regions or in wet autumns that proliferate weed growth, the use of seed treatments to delay aphid infestation can help minimise virus spread.

We would like to hear of green peach aphid reports in canola this season. Insecticide resistance is a key issue for this pest; several growers on Eyre Peninsula experienced control failures last season. As part of a GRDC-funded resistance screening project led by Cesar, SARDI are looking for GPA populations to collect for resistance testing this season. Please contact Helen DeGraaf on (08) 8303 9543 or helen.degraaf@sa.gov.au.

Green peach aphids attack a range of broadleaf crops including canola, lupins, pulses and weeds. Adults are 3 mm long, pale yellow-green, green, orange, or pink in colour, oval-shaped, and winged adults have a dark patch on the abdomen. More information: [Aphids and viruses - GRDC](#) (pdf) and [Aphid management in canola crops - DAFWA](#).

Redlegged earth mite hatching predictions

The redlegged earth mite (RLEM) hatching model being developed by Dr Garry McDonald (Cesar and University of Melbourne) has been updated for **Murray Bridge** and **Mallala** according to the latest Bureau of Meteorology rainfall data. Some earlier hatching may be seen, but peak hatching is predicted from mid-May in those localities. To help validate this model, we would appreciate hearing when RLEM is first active in your area! More information: [PestFacts Issue 1, 2014](#) (pdf).

Diamondback moth

Brad Foster (Bawdens Rural) reported high numbers of diamondback moth (DBM) larvae on volunteer canola between **Ungarra** and **Yallunda Flat** on Eyre Peninsula, consistent with a widespread low DBM population observed on weeds in the region over early autumn (see PestFacts 1). Kym Perry (University of Adelaide, SARDI Entomology) is presently working with a number of agronomists across South Australia and western Victoria to monitor when DBM first colonise canola fields this season. If you would like to be involved or have sighted the pest in crops, please contact Kym on (08) 8303 9370.

Black field cricket

Brad Foster (Bawdens Rural) reported more [Black field cricket](#) (*Teleogryllus commodus*) activity in a paddock near **Tumby Bay** on Eyre Peninsula when field picking rocks. Crickets should be declining with the onset of cooler winter temperatures. More information: [PestFacts Issue 1, 2014](#) (pdf).

New resources in 2014

- **'IPM guidelines for grains' website**

A new national 'IPM Guidelines for Grains' website, developed by Kate Charleston, Melina Miles and Hugh Brier (the team at DAFF QLD, Entomology) in collaboration with grains entomologists around Australia, provides a comprehensive collection of tools and strategies to manage pests in grain cropping systems across Australia. **The website can be found at www.ipmguidelinesforgrains.com.au.**

The website contains information about the main pests of grains crops in Australia, the major grain crops and a range of supporting information to guide users in making better decisions

about pest management. It features an extensive range of IPM information, external links to additional information, and a series of images to help users identify individual pest and beneficial species. Rather than being prescriptive, the IPM guidelines use a problem-solving approach, drawing on the available pest management tools within a specific crop at various stages of crop development, including relevant regional differences. As always, any feedback is welcome.

- **‘Best bet’ insect management guides and risk tables**

A series of new **‘best bet’ insect management strategies** and **insect risk profiles** have been developed and are available on the web at <http://ipmworkshops.com.au/resources/best-bet-ipm-strategies/>. These IPM strategies have been developed to highlight the crop stages with increased risk of pest pressure, and summarise the range of activities available to mitigate the risk of damage.

These valuable new resources were jointly developed by grains entomology researchers from cesar, Qld DAFF and SARDI as part of a series of GRDC-funded insect management workshops recently rolled out across eastern Australia (Qld, NSW, Victoria and SA): ‘Decision making for insect management in grain crops’. They are presented in easy-to-use tables and downloadable as pdf files.

Other resources

- ❖ **Insect diagnostics:** SARDI Entomology offers an insect diagnostic service for PestFacts subscribers. Please send at least two intact specimens in a non-crushable container along with host food, collection details, description of crop damage and contact details, to: NIPI diagnostics SARDI Entomology Unit GPO Box 397, Adelaide SA 5001.
 - ❖ **PestFacts map** is a new interactive service available on the SARDI website at www.sardi.sa.gov.au/pestfacts-map. The map allows users to search and view all historical pest reports across South Australia and Western Victoria. Search by crop, pest or beneficial invertebrate, and time period of interest. The map will be updated with each issue to include new reports.
 - ❖ **A new snail and slug blog** focused on management of snails and slugs is available [here](#).
 - ❖ **Best Bet IPM Strategies** provide easy-to-use advice on decision making for insect management in grain crops and are available [here](#).
- [Previous issues of PestFacts](#) ● ● [PestFacts map](#) ● [Images of insects and damage](#) ● [I SPY manual](#) ● [Crop mites: back pocket guide](#) ● [Crop weevils: back pocket guide](#) ●

PestFacts is a FREE service providing updates throughout the growing season on an “as-needed” basis of the latest information on invertebrate pests in broad acre crops in South Australia and western Victoria. It is supported by GRDC’s National Invertebrate Pest Initiative (NIPI). All information is sent by email to subscribers. Please email a coordinator to be placed on the circulation list. Your support and feedback are essential to the success of PestFacts.

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