

Department of Primary Industries and Regional Development

Industry update #7 – fall armyworm

11 February 2021

Situation update

The pest fall armyworm (*Spodoptera frugiperda*) has been detected near Gingin as part of a surveillance program run by the Department of Primary Industries and Regional Development (DPIRD).

Fall armyworm larvae were recently detected feeding in a horticultural crop in Gingin.

This is the most southerly detection of larvae to date in Western Australia since the pest was first confirmed in northern parts of Australia earlier this year.

Horticulture and turf grass growers are encouraged to check for larvae in their crops and monitor for unusual levels of damage. Growers can also set up a pheromone trap on their property to monitor for the moths, which serves as an early warning for the presence of larvae.

The detection of larvae in Gingin will also be relevant to grain and fodder growers in the region following seeding and emergence.

The DPIRD surveillance traps in Gingin, and others further south, will continue to be monitored as part of the agency's ongoing surveillance program.

Suspected fall armyworm should be reported to DPIRD to assist with surveillance and potential management options.

Report suspected fall armyworm damage to DPIRD's Pest and Disease Information Service (PaDIS) by calling +61 (0)8 9368 3080 or email <u>padis@dpird.wa.gov.au</u>, or use the <u>MyPestGuide Reporter app</u>.

WA activity

DPIRD has deployed more than 50 pheromone (lure) traps throughout northern Western Australia, including Kununurra, Broome, the Pilbara, Carnarvon, and Geraldton. These complement traps in Kununurra, which have operated since October 2019.

The DPIRD Grainbelt trapping program of approximately 70 traps has ceased, with crops harvested. Select sites remain and will be monitored over summer.

Traps have also been placed in horticultural regions in southern WA.

This surveillance trapping network assists in providing early warning advice to industry about the presence of fall armyworm, as the pest migrates further south.

The detection of fall armyworm larvae in Gingin follows an earlier detection of a moth in Gingin in November 2020. It is the first record of establishment south of Carnarvon.

DPIRD continues to liaise with the Australian Government, state and territory governments and industry groups, which are collaborating to assist in preparing for and minimising the impact of fall armyworm as it becomes more broadly established.

Pesticide resistance genes in WA's fall armyworm population

Pesticide resistance genes have been detected in Western Australia's fall armyworm population.

Samples of fall armyworm larvae from Kununurra and Broome were sent by DPIRD to the Insecticide Resistance Unit at New South Wales Department of Primary Industries (NSW



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DPI) for analysis. Larvae were tested for the presence of genes that are linked to resistance to Group 1 insecticides. Genes that may confer resistance to the Group 1 insecticides were found in all of the small sample of larvae tested.

Further testing is necessary to determine the distribution of the genes in other locations across Western Australia, and validate and expand on the preliminary research results by testing for resistance genes to other pesticides.

It is likely that fall armyworm entered Australia carrying the genes and that the traits will spread as fall armyworm migrates throughout the State. There is also the possibility that new resistance genes will develop in Australia.

Continual monitoring for resistance mutations and careful evaluation of pesticide efficacy over time will be important in the ongoing management of this pest.

Growers are encouraged to judiciously select any pesticides to be used, and ensure insecticides are rotated to reduce selection pressure.

Chemical permits

The Australian Pesticide and Veterinary Medicine Authority (APVMA) has issued a number of permits for the use of certain chemicals for the control of fall armyworm.

More information is available from the APVMA Online Portal at <u>https://portal.apvma.gov.au/permits</u>. Search for 'fall armyworm'.

The permits should be read in conjunction with the relevant product label for information on withholding periods and other critical comments.

Biosecurity and reporting

Horticultural, turf grass, irrigated crop and pasture growers are encouraged to regularly monitor their crops for the presence of fall armyworm larvae over the summer and autumn period.

Fall armyworm appears similar to other caterpillar pests. Care should be taken to carefully identify the insects in crops.

Useful photos are available on DPIRD's <u>Fall armyworm factsheet</u> and <u>Fall armyworm larval</u> <u>identification guide</u>.

Growers and agronomists are encouraged to report suspect caterpillars or unexpected symptoms in the field to DPIRD via the Pest and Disease Information Service (PaDIS) or via the $\underline{MyPestGuide^{TM}Reporter app}$.

Further information and enquiries

More information is available on the DPIRD website at <u>agric.wa.gov.au</u>. Search for 'fall armyworm in Western Australia'.

General enquiries or suspect reports can be made to PaDIS by calling +61 (0)8 9368 3080 or email <u>padis@dpird.wa.gov.au</u>.

WA industry enquiries can be directed to:

- Horticulture Helen Spafford, Senior Research Scientist +61 (0)8 9166 4074
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