



## Fall armyworm update

Friday 14 February, 2025

### Key points

**Current status:** FAW populations continue to develop across New Zealand. Northland awaits the third main moth flight of the season, with the key time for scouting and decision-making approaching. Maize grain and sweetcorn growers should be particularly vigilant during this period.

**Silage crops:** As silage harvest nears, most crops in regions outside the north are unlikely to be significantly affected by FAW.

**Sweetcorn and grain risk:** Sweetcorn crops are particularly vulnerable at cob development. Larvae may enter via the silks or through the sides of cobs and cause significant damage, necessitating heightened scouting efforts. Maize grain and sweetcorn growers should remain proactive in monitoring young populations for potential intervention

**Crop monitoring:** Regular field inspections are essential, identifying new populations while they are young and susceptible remains the most effective management approach.

**Identify your pests:** For assistance in identifying FAW larvae and damage, contact FAR, refer to resources on the FAR website, or reach out to an agronomist.

**Natural controls:** Large populations of *Cotesia* parasitoids have been observed in West Coast FAW populations. These beneficial insects are widespread across New Zealand and may play a significant role in reducing future FAW populations.

**Other maize pests:** *Helicoverpa armigera* (corn earworm) and *Mythimna separata* (cosmopolitan armyworm) are also present in small numbers. These species should be correctly identified to avoid unnecessary interventions.

**Communication:** Collaboration and information sharing among growers, agronomists, and industry experts are essential to refining management strategies and improving outcomes

### Monitoring critical as third moth flight approaches

The third main moth flight is anticipated in Northland, marking a critical time for scouting and management decisions. Maize grain and sweetcorn growers must be highly vigilant during this period, as early intervention is crucial for managing newly hatched larvae. Silage crops that are nearing harvest and are less at risk, but scouting remains essential to monitor any emerging populations.

In other regions, FAW populations are present but at generally lower levels than in Northland. These populations are unlikely to impact silage crops significantly, given the crops' advanced growth stages. However, maize grain and sweetcorn growers in these areas should stay alert and monitor for young larvae susceptible to chemical intervention.

On the West Coast and Tasman regions, moth emergence signals the beginning of the second generation. Although most crops are advanced and less vulnerable to damage, growers should continue monitoring.

Large populations of *Cotesia ruficrus* parasitoids have been observed on the West Coast. These natural enemies have the potential to reduce FAW populations significantly and could play a pivotal role in controlling FAW in future seasons.

**Right** While many small insects can be almost impossible to identify in crops, the presence of *Cotesia ruficrus* can be confirmed by clumps of white cocoons on leaves or cobs, normally in areas where FAW are or have been observed. Preserving beneficial insect populations remains a key component of an integrated pest management (IPM) approach.



Where interventions have been timed well, some successful results have been observed. Please refer to the economic thresholds and consult with your advisor for any assistance required.

### Regional overview for 2024/25 season

#### Northland

Northland awaits the third major FAW moth flight. The key time for scouting and intervention will follow soon after. Silage crops are near harvest and should not be affected significantly. However, later planted silage, maize grain and sweetcorn growers should continue monitoring their crops closely, focusing on early instar larvae and moth flights to determine the need for chemical control.

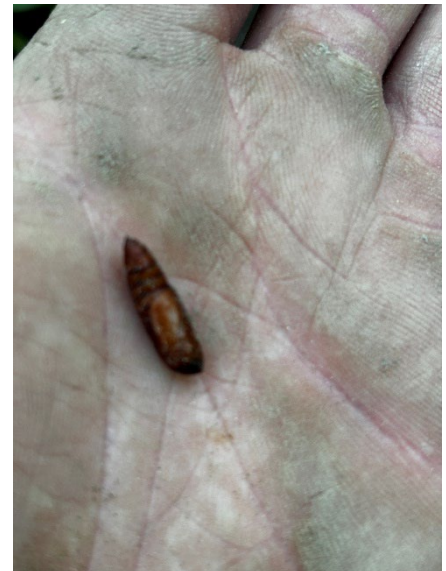
**Right** Advanced FAW damage observed but nothing at home? Try scraping away the soil surface around affected plants; FAW pupa can be found fairly easily up to 5cm below the surface. Identifying all the stages of the insect's lifecycle is useful to plan and predict if and when more targeted crop-scouting effort may be required as moths emerge and begin laying eggs.

#### Auckland and Waikato

Populations in these regions remain low compared to Northland, with silage crops advancing toward harvest. Maize grain and sweetcorn growers should remain vigilant, ensuring any new populations are identified early for targeted control.

#### Bay of Plenty and Gisborne

FAW populations are present, but at low levels. Silage crops nearing harvest and are unlikely to be affected. However, maize grain and sweetcorn growers must continue monitoring for new populations, particularly at early growth stages.



### South Island (Tasman, Canterbury, Marlborough, Westland)

Moths have emerged on the West Coast, with the second generation of larvae underway. While it is unlikely that we will see significant damage in advanced crops nearing harvest, monitoring is still advised. Observations of large *Cotesia ruficrus* populations in these areas suggest that natural enemies may reduce FAW populations effectively in the future.

### Supporting beneficial insects

Preserving natural enemies of FAW is crucial. Encouraging native vegetation around fields can offer refuge for beneficial insects. Resources and guides on enhancing farm biodiversity are available on the FAR website <https://www.far.org.nz/resources/far-focus-13-biodiversity>.

### Minimise insecticide use

Overuse of chemicals can disrupt beneficial insects such as *Cotesia ruficrus* and generalist predators like spiders, which help manage egg and early larval stages of FAW. Consult with advisors on how to balance pest control while protecting beneficials.

**Table 1** Economic thresholds for FAW damage in maize and sweet corn courtesy of AgResearch.

Current recommendations		
	Crop growth stage	Threshold
<b>Maize</b>	Seedling	≥5 % of plants are cut
	Early whorl (knee high)	≥20 % of plants are infested
	Late whorl (shoulder high)	≥40 % of plants are damaged and larvae are present
	Tasselling - early silking	≥20 % of plants are infested
<b>Sweetcorn</b>	Seedling	≥5 % of plants are cut
	Early whorl (knee high)	≥20 % of plants are infested
	Late whorl (shoulder high)	≥40 % of plants are damaged and larvae are present
	Tasselling - early silking	≥5 % of plants are infested

In previous seasons we have seen many cases of FAW surviving the application of insecticides not recommended for FAW control. In maize and sweetcorn, Corteva's Sparta™ is on label for use against FAW. This product is also effective on other pest species.



**Left** Late instar FAW showing the three key identifiers: a distinct 'Y' on the head leading into the dorsal line, four trapezoid patterned dots on the body segments and four pronounced dots in a square pattern at the rear.

Other pests may share a similar identification **but not all three key markings** together.

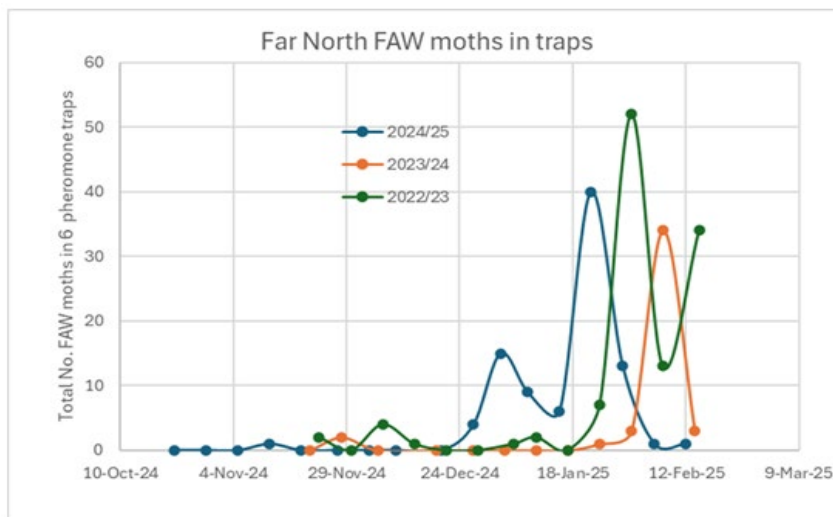
## Supporting the FAW SFFF project

The Sustainable Food and Fibre Futures (SFFF) project remains at the forefront of FAW management in New Zealand. Key achievements include:

**Data integration:** Data from Northland, Tasman, Waikato, and beyond are being analysed to update phenological models, and improve FAW lifecycle predictions and IPM strategies.

**FAW phenological modelling:** Significant progress has been made in developing phenological models for FAW in New Zealand. Observational data is being used to validate models and improve forecasting capabilities. However, temperature variations present challenges in accurate prediction. Grower observations are invaluable in refining the model.

Dr Jenny Dymock has been monitoring six key areas in the Far North; she has plotted observations of trap catches over the last three seasons since FAW arrived. This data (below) shows variations in the timing of the main moth flights. This season we can see the second-generation moths are earlier than in previous seasons, we await the next moth flight. Warmer winter and spring conditions are the likely variable that has resulted in earlier generations.



## What to do if you find FAW

1. **Photograph:** Take clear photos of the head, body, and rear.
2. **Catch:** Samples are crucial for positive identification and DNA testing.
3. **Trap:** If you would like to monitor a trap, or have FAW in your crop please reach out.
4. **Contact:** Contact FAR@far.org.nz or Biosecurity Officer Ash Mills at [ashley.mills@far.org.nz](mailto:ashley.mills@far.org.nz).

## Useful links

FAW identification, guides and relevant fact sheets:

<https://www.far.org.nz/resources/fallarmyworm-identification-and-background>

