





# Fall armyworm update

Wednesday 4<sup>th</sup> April, 2025

# **Key points**

**Current status:** FAW populations continue to be found across New Zealand, primarily impacting lateplanted maize and some sweetcorn crops.

**Maize crops**: Most silage crops have been harvested or are nearing harvest completion. Late-planted maize crops are experiencing increased FAW activity, with some significantly impacted. Unharvested grain crops do not appear to be severely impacted by FAW. Growers with later planted, greener crops should be vigilant and conduct regular scouting to manage pest presence effectively.

**Sweetcorn**: Sweetcorn crops across the country remain at risk from FAW, as larvae can enter cobs through silks or directly through the sides. Regular inspections and prompt management actions continue to be necessary.

**Crop monitoring**: Continued vigilance and regular scouting are crucial. Recent trap monitoring indicates declining moth flights in the far north, although ongoing observations in many regions indicate FAW activity despite a decrease in maize availability. Pupae found in monitored crops confirm short-term forecasts from SFFF modelling.

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

**Natural controls**: Widespread and encouraging observations of beneficial parasitoids, particularly *Cotesia ruficrus*, suggest natural controls may be effectively managing small FAW populations. Some growers believe these beneficial insects are significantly reducing FAW numbers.

**Other maize pests**: *Helicoverpa armigera* (corn earworm) and *Mythimna separata* (cosmopolitan armyworm) are present across the country. 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.

## Regional overview for 2024/25 season

### Northland

Most crops are harvested, although later planted crops continue to be impacted. Moths are still being caught. Please report any observations of FAW in the absence of maize.

### Auckland and Waikato

FAW populations remain low, with no significant threat to maize crops. Sweetcorn growers should continue regular scouting.

#### **Bay of Plenty and Gisborne**

FAW populations are present, but at low levels. Silage and grain crops are nearing harvest and are unlikely to be negatively affected. Sweetcorn growers must remain vigilant and consult local agronomists if needed.

## South Island (Tasman, Marlborough, Westland)

While corn earworm (*Helicoverpa armigera*) is the predominant pest, with high infestation levels observed in some crops, FAW remain persistent in these regions. Populations from continually monitored paddocks are at late instar or early pupal stages. Sweetcorn growers in these regions should continue to scout crops as often as possible.

**Right** FAW pupa found at the base of the maize plant. Recent damage in cobs and foliage, but no larvae present, saw FAR researcher Owen Gibson manning the spade and assisting with FAW sample collection in Westland. These particular samples are to help support SCION-led research project. Pupa can normally be found in the top 5 cm of soil, their development is temperaturerelated, and it can take over 2 weeks until adult moths emerge.



#### 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 <u>https://www.far.org.nz/resources/far-focus-13-biodiversity</u>.



**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.

#### Minimise insecticide use

Overuse of chemicals can disrupt beneficial insects such as parasitoid wasps *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.

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<sup>™</sup> is on label for use against FAW. This product is also effective on other pest species.

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

# Supporting the FAW SFFF project

On 27 March 2025, New Zealand and Australian researchers and industry experts convened to discuss ongoing challenges and collaborative research efforts on FAW management. Participants highlighted successes in biocontrol, particularly the effectiveness of *Cotesia spp* in New Zealand and the previous rediscovery of *Telanomus remus* parasitoids in Australia. Host plants were discussed and it was agreed that C4 grasses were likely the main hosts, and also likely overwintering hosts in NZ. Issues raised included concerns over the impacts of broad-spectrum insecticides on beneficial insects and ongoing research into atmospheric modelling for understanding FAW migration patterns between Australia and New Zealand. Experts emphasised the need for improved IPM strategies and selective insecticide use to protect beneficial parasitoid populations.

## 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 <u>ashley.mills@far.org.nz</u>.

## **Useful links**

FAW identification, guides and relevant fact sheets: <u>https://www.far.org.nz/resources/fallarmyworm-identification-and-background</u>

