

Physical and visual diagnosis: Identification of Fall Armyworm

Spot the Pest, Stop the Damage

This technology is a standardized field-recognition guide whose goal is to avoid confusion with look-alike pests by using clear visual markers (the inverted "Y" on the head, sawdust-like frass deep in the whorl) and simple verification steps; a grassroots early-warning workflow that lets extension agents confirm new Fall armyworm sightings quickly; and a misdiagnosis-prevention measure that requires side-by-side checks with maize stem borers, cutworms, and other armyworms before any advice or spraying, thereby reducing unnecessary pesticide use.



FAO; CABI
Claire Palmer

Commodities

Sustainable Development Goals



Categories

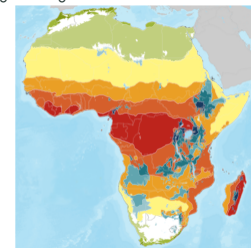
Production, Practices, Pest Identification

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Farmers, Advisory and Extension Services

This technology is **pre-validated**.

9-9



Scaling readiness: idea maturity

9/9; level of use 9/9

Inclusion assessment

Climate impact

7

Problem

- **Surveillance data is poor:** Reports from the field are often inaccurate because extension agents lack standardized knowledge on key FAW markers (like the inverted "Y" mark).
- **Response is delayed:** Without grassroots identification capacity, local officers cannot rapidly confirm and report new sightings, crippling the national rapid response system.
- **Pesticide misuse is rampant:** Lack of accurate ID leads to farmers applying unnecessary chemicals to harmless or non-FAW look-alike insects.

Solution

- Standardizing national surveillance by providing all extension agents with uniform FAW identification criteria and accessible field materials.
- Enabling faster, more accurate reporting from the grassroots, ensuring national authorities can pinpoint and respond to early outbreaks quickly.
- Reducing unnecessary pesticide application by ensuring field teams correctly distinguish FAW from harmless look-alikes, supporting chemical stewardship goals.

Key points to design your project

For a government planning to integrate FAW identification capacity nationwide, the strategy must center on official policy, massive capacity building, and institutionalizing the early warning process using the standardized knowledge base.

- **Policy Endorsement and Standardization:** The Ministry of Agriculture must formally endorse the **FAW Field Handbook** and its detailed identification protocols (such as recognizing the inverted "Y" mark on the caterpillar's head and the four-spot square on its tail end) as the national standard for FAW surveillance. This policy backing ensures all stakeholders work from the same playbook, minimizing misidentification.
- **National Capacity Building Cascade:** Allocate budget to launch mass, standardized training for all extension officers on FAW identification and scouting procedures. Invest in the large-scale production of localized, pictorial ID posters and leaflets (derived from the open-access Handbook content) for distribution to every farming community, ensuring accessibility regardless of literacy levels.
- **Link ID to Early Warning System:** Institutionalize the identification process by establishing clear, easy-to-use reporting channels (like extension networks or the FAMEWS mobile app) where farmers and scouts can quickly report and verify suspected FAW sightings. This locally generated, standardized identification data must feed into a central system to function as the country's early warning mechanism, enabling rapid response coordination to emerging hotspots.
- **Ensure Sustainability:** Integrate FAW identification training into existing institutional structures, such as farmer field schools and school agriculture curricula. Plan for regular refresher trainings and updates, as continuous education prevents the spread of misinformation and ensures farmers are aware of any changes in pest patterns or look-alike species.



Open source / open access



Physical and visual diagnosis

<https://taat.africa/vlx>

Last updated on 14 November 2025, printed on 14 November 2025

Enquiries e-catalogs@taat.africa