Early detection of armyworm using a community-based approach

Recognize the problem
Locally known in the Akan Language as “Sankobi”, the armyworm is a voracious pest that attacks all types of grasses and early stages of important cereal crops such as maize, wheat, sorghum, millet and rice. The armyworm larvae are black with yellow/green stripes along the body and are capable of infesting thousands of square kilometres, defoliating and destroying large amounts of crops in just a few days, causing considerable economic losses to individual farmers and communities.

Background
Like all moths, the armyworm has four stages in its lifecycle; egg, larva, pupa and adult. Each stage takes about a week to complete. The adult armyworm (moth) can migrate great distances on wind currents. Outbreaks of the caterpillars or larvae can appear very suddenly and at a very high density, so farmers are unprepared to manage them. For armyworm control to be effective, it must be carried out in the first few days after the larvae emerge from the eggs. On-the-spot early warnings within the community give farmers time to prepare to manage the pest. Based on moth catches in pheromone traps, studies in Africa categorised armyworm risk areas as follows: low risk (0-25 moths/trap), medium risk (25-50 moths/trap) and high risk (50-100 moths/trap).

Management
Monitoring, forecasting and prompt reporting of armyworm outbreaks are essential for effective control before the outbreaks occur. This can be done using the Community-Based Approach:

- At the community level, identify and train a farmer forecaster who operates an armyworm moth pheromone trap, collects data on rainfall daily and makes community level weekly forecasts using local channels and networks such as Department of Agriculture and appropriate authorities to rapidly disseminate the information, warn and advise farmers.
- If more than 25 moths are captured and more than 5mm of rain is recorded, suitable plants for egg laying are present, a positive forecast is announced, the farmers are then advised to monitor more frequently to look for young armyworm larvae.
- In high risk areas (more than 50 moth catches) farmers are advised to scout for larvae and their damage and monitor field more frequently.

Scientific name(s) > Spodoptera exempta

The recommendations in this factsheet are relevant to: Ghana

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