

# **REPORT FROM PLANT PROTECTION REGULATORY SERVICES** **DIVISION OF THE MINISTRY OF FOOD AND AGRICULTURE**

## **Pockets of outbreaks in 2017**

As at April 2017, we have had reports of incidence of infestations and destruction of about 1,370.20 ha of maize fields in thirty two (32) districts in Ashanti, Central, Northern, Western, Eastern and Brong Ahafo regions (Table 1), which is an ominous sign for the country. This new incidence, especially pockets of infestations in the Western regions indicates the establishment of the FAW in all agro-ecological zones in the country. This situation will worsen as the insect becomes established and most farmers are now sowing their major season maize.

**Table 1: Regions affected by FAW in 2017( Find attached Table 1)**

## **Interventions**

The spread of transboundary plant pest e.g. fall armyworm has been on the increase in recent times as a result of climate change, trade, globalization, as well as reduced resilience in production systems due to decades of agricultural intensification.

In light of this PPRSD has placed a lot of emphasis on the need to develop a holistic approach to a fall army worm surveillance, prevention and mitigation plan.

The current interventions include:

- **Sensitization and awareness creation**

PPRSD is carrying out public sensitization of the farmers and general public through the mass media (e.g. radio), production and distribution of photosheets and factsheets on the pest, farmers fora etc.

- **Monitoring – Visual Survey (Scouting)**

Farmers are regularly advised to monitor their fields and look for key signs and symptoms of the presence of the pest for early detection and effective control.

- 20 consecutive plants from 5 random plants in the fields
- Less than or equal to 5% of the plants have egg masses: treat
- Less than or equal to 25% of the plants show damage, larvae present: treat
- 5% seedlings infested: treat
- 20% whorls (in 1<sup>st</sup> 30 days) infested: treat

- **Surveillance**

The outbreak of fall army worm require the establishment of a pest surveillance system that will guide to respond to the erratic and surprise nature of outbreak

USAID ADVANCE Project has built the capacity of Plant Protection and Regulatory Services Regional Officers and Agric. Extension Agents in Upper West, Upper East, Brong Ahafo and Ashanti regions on fall army worm surveillance for early detection and provides information on when intervention is required. Phermone traps were provided for surveillance in selected districts in Brong Ahafo and Ashanti regions. Additional pheromone traps would be supplied to other regions for surveillance. This data will be used for forecasting outbreak which will provide early warning and the emergency response required.

- **Cultural Practices**

Farmers are made aware of many cultural practices including: Intercrop maize with bean, remove weeds, remove/ destroy crop residues, rotate with non-host plants, deep ploughing to expose and bury the larvae and pupae, handpicking egg masses and larvae and applying sawdust, and or sand in the whorl ( with ash).

- **Synthetic Pesticides**

Most farmers manage the pest on their fields with insecticide. They are however advised to spray the fields with the following Environmental Protection Agency approved insecticides;

- Emamectin benzoate
- Lambda cyhalothrin + acetamiprid

- *Bacillus thuringiensis*
- Imidacloprid + Emamectin benzoate

Additionally, farmers are advised to alternate insecticides of different active ingredients after 2-3 applications to avoid resistance build up. Farmers are sensitized to apply insecticides the early developmental stages of the larvae by directing the nozzle into the funnel leaves or whorl of the plant for effective control.

- **FAW Response Team**

Forming Fall army response team in the regions to coordinate the management of the pest in the event of outbreaks.

- **Institutional Collaboration**

PPRSD in collaboration with Agriculture and Bioscience International (CABI) organized a stakeholder workshop from 20-21 April, 2017 to develop FAW response plan. Participants included representatives from Research institutions, Ministries, Civil Society, Development Partners, Information Serviced and Private Sector (including grower associations) as well as participants from international organizations.

The workshop provided the opportunity for key stakeholders to share experiences and information on what has already been done to respond to the FAW.

Participants develop short, medium and longer term action plans for forming committees and collaborations, awareness creation, surveillance, control, management and research.

- **Cabinet Memorandum**

The Ministry had submitted cabinet memo for support to implement the following strategies

- Sensitization and awareness creation
- Mass education on radio stations
- TV talk show
- Develop and print factsheets and photo sheets

- Organize farmer for a in the ten regions
- Surveillance: Community and national level
- Management
- Procure strategic stock of pesticides

## **Way Forward**

- Train PPRSD and Department of Agriculture staff on management of the pest
- Establish a national surveillance system for the detection of the prevalence of fall army worm and other pests of concern
- Mass rearing and release of wasp parasitic wasp (100,000/ha). Egg parasitoid *Trichogramma pretiosum*
- Establish a strategic stock of pesticides and equipment for control of outbreaks
- Comprehensive assessment of registered insecticides that can effectively manage the fall army worm
- Research into the biology, scouting and management of the pest
- Logistical supports to fund the implementation of the action plan develop at the stakeholder workshop.