



TAAT Fall Armyworm Compact

Highlights

- **Capacity to recognize Fall armyworm (FAW), assess its incidence and damage was built in some National Agricultural Research and Extension Systems (NARES) through Training of Trainers (ToT) programs as well as on-field training. Some key information/training materials were produced and disseminated among NARES.**
- **Technologies validated on-station and found to be deployable as IPM toolkits included eight conventional chemical insecticides, a commercial formulation of Bt, two commercial formulations of neem and AgriX365 (a plant-based commercial product consisting mainly of vegetable oils).**
- **To date, over 1 million smallholder farmers have planted maize seed treated with the systemic insecticide Fortenza™ Duo in Zambia and Zimbabwe.**
- **Key information and training materials that were produced and disseminated among NARES include included a Fall Armyworm Technical Handbook (for Researchers & Extension Workers), Efficacy Evaluation Protocols for the Registration of FAW Plant Protection Products on Maize, FAW factsheet and posters.**

What is the problem?

Fall Armyworm is a newly-introduced exotic insect pest that feeds on a wide range of cultivated and non-cultivated plants. Its preference for cereal crops, notably maize, has major implications on household and national food security in sub-Saharan Africa. Prior to the advent of FAW, smallholder farmers rarely invested in chemical control of insect pests on maize. However, the advent of FAW changed all that as total crop loss can result if the pest is not managed. Damage is exacerbated by the fact that FAW does not have a resting stage unlike stemborers which were previously the key pest group that farmers had to content with on maize and sorghum. The need to sustainably manage FAW necessitated the intervention of the FAW Compact so that proven IPM-based management technologies are upscaled and deployed to smallholder farmers, in addition to imparting the necessary knowledge to NARES and farmers through training and provision of information materials.

Compact description

The Fall Armyworm Compact seeks to establish, upscale and deploy IPM-based Fall armyworm technologies in order to

enhance the livelihoods of smallholder farming communities in sub-Saharan Africa. Key implementing partners of the FAW Compact include the NARES (the principal implementers), agro-input suppliers (seed and agrochemical companies) and commodity compacts.

What are the TAAT FAW Objectives?

- To create an enabling environment for accessing, scaling up and deploying FAW Integrated Pest Management (IPM)-based technologies
- To disseminate FAW monitoring, scouting and surveillance tools at the community and farmer levels
- To build the capacity of NARES and other implementing partners in FAW identification, management and data collection
- To validate performance of promising and novel FAW management technologies
- To upscale and deploy validated management technologies and make follow-ups to assess performance under farmer conditions
- To conduct promotional and visibility campaigns to enhance uptake of proven technologies



Chenille legionnaire

What are the TAAT FAW Technologies?

- Seed treatment chemical Fortenza™ Duo
- Five conventional chemical treatments (spray formulations)
- Commercial formulation of Bt
- Two commercial formulations of neem
- AgriX365 (a plant-based commercial product consisting mainly of vegetable oils)

What have we achieved so far?

A total of 75 partners were mobilized to implement country activities in collaboration with the FAW Compact. Training of NARES partners and other stakeholders, mainly from Zambia and Zimbabwe, was conducted through Training of Trainers programs as well as on-field training. To date, 268 NARES personnel in Zambia, Zimbabwe and Malawi have undergone

training in Training of Trainers programs. In turn, the trained NARES personnel had trained a cumulative 830,000 farmers in Zambia and Zimbabwe by end of 2nd Quarter of 2020. To date 14 technologies (8 conventional chemicals, 2 commercial neem formulations, 2 cultural control technologies and 2 mechanical control technologies) have been validated and demonstrated on-station. Deployments of the seed treatment chemical Fortenza™ Duo were conducted in Zambia and Zimbabwe while trials have just been concluded in Kenya. The product has recently been given full registration in Zimbabwe. Follow-ups to assess on-farm performance of the seed treatment technology were also conducted in Zambia and Zimbabwe. On a cumulative basis, over 1 million smallholder farmers have planted Fortenza™ Duo-treated maize seed in the two countries. Besides technology demos, other promotional and visibility campaigns conducted in the last two years included presentations at the 2nd Annual Congress on Plant Science & Biosecurity in London, presentation in Burkina Faso at the Conférence Régionale sur la Chenille Légionnaire d'automne au Sahel et en Afrique de l'Ouest, as well as several seminar presentations. Some key information/training materials were also produced and shared with NARES and other partners. These included a Fall Armyworm Technical Handbook (for Researchers & Extension Workers), Efficacy Evaluation Protocols for the Registration of FAW Plant Protection Products on Maize, FAW factsheet and posters.

Were there any key challenges or lessons learned?

The major challenge was the outbreak of COVID-19 at a time when deployment of validated technologies was just about to commence in all project countries. This resulted in loss of momentum.

Five key lessons were learnt during the first two years:

1. In each country, it is important to align FAW Compact activities with the country's National Strategic Agricultural Development Plan. This will not only increase visibility and enable targets to be reached quickly but also removes expectations of funding from TAAT by the national program.
2. It is important for the FAW Compact to work with national programs in the efficacy evaluation of new technologies.
3. The FAW Compact should prompt national programs to assess new technologies being deployed in their countries. This will help to hasten the pace at which novel FAW management technologies are registered and approved for deployment.
4. Due to rapid strides in ICT, it is important to customize FAW information and training materials for dissemination via mobile apps and social media.

Compact contact

Peter Chinwada, PhD, *Fall Armyworm Compact Leader*

International Institute of Tropical Agriculture (IITA, www.iita.org), Southern Africa Hub, Plot 1458B, Ngwerere Road, Lusaka
Tel: +260 211 840365 | Fax: +260 1 707026 | Mobile no: +260 970 636 436 | Skype: peter.chinwada66 | Email: p.chinwada@cgiar.org



For more information, please contact:

TAAT Programme Management Unit, IITA HQ, Ibadan – Nigeria | TAAT Clearinghouse, IITA Benin, Cotonou – Benin



TAAT-Africa@cgiar.org



+229 60855188