



Fall Armyworm Control in Action Newsletter

July 2022 - Issue #10

Highlights



Africa mid-year meetings of Global Action for FAW Control

Significant reductions in pesticide use in China, as well as reduced crop losses from fall armyworm (FAW) due to forecasting and early warning systems, were some success stories reported during two mid-year meetings on implementation of the Global Action on Fall Armyworm Control (GA) that drew a total of almost 100 stakeholders. The **Africa regional meeting** on 7 June 2022 and the meeting of the **Asia-Near East North Africa (NENA) region** on 8 June 2022, also heard that botanical and microbial biopesticides are proving to be efficacious against FAW in many countries, including Egypt and Palestine. Implementation plans for the second half of 2022 include strengthening farmer training, regional information exchanges and more field demonstrations to support farmers' activities and decision-making in FAW management. While the GA is on the right track in validating and disseminating IPM tactics, there is still work to be done in terms of impact assessments. Protocols and mobile tools are to be finished by end of July, with training for research teams on using these tools planned for August 2022.

During a **successful visit to Egypt**, Mr Xia Jingyuan, Director of Plant Production and Protection (NSP), met with the Minister of Agriculture and Land Reclamation and toured three labs producing biological control options for pests including fall armyworm (FAW). Mr Xia visited the Giza biopesticide production unit producing fungal, bacterial, viral, and nematode biopesticides as well as

Shandaweel-Suhag biological control lab where parasitoids of FAW were mass produced. He later met with farmers in maize fields where the parasitoids have been released. Mr Xia also visited a successful FAW farmer field schools (FFS) programme in Egypt's Dandara, Qena and met with local maize farmers, who highlighted how FFS has enhanced their skills for sustainable FAW management approaches.

Implementation

An Africa regional conference related to fall armyworm control through integrated pest management (IPM) techniques is being organized by World Agroforestry Center (ICRAF) in collaboration with other partners on 21-23 September 2022. For registration and submission of abstracts (due 1 August 2022) see the conference website.¹

Communications and Partnerships

In collaboration with **Brazil-Africa Institute (IBRAF) through South-South Cooperation**, an online French-language course was launched in June 2022 on sustainable management of FAW. Some 100 young professionals from French-speaking African countries are currently participating in an ongoing virtual training that was expected to conclude in July 2022.

A package of biological control against FAW was demonstrated in a new video from Syria. *Trichogramma pretiosum*, an egg parasitoid, can be mass released to control the FAW egg populations. Bacterial insecticide *Bacillus thuringiensis* is sprayed four to five days after a *Trichogramma pretiosum* parasitoid release to attack any surviving FAW larvae. The third component in the package is a mass release of a larval parasitoid *Habrobracon hebetor* that further disrupts the life cycle of the pest.

¹ <https://www.cifor-icraf.org/event/>

New Developments

A physiologically based model constructed to assess the risk of FAW establishment and seasonal migration in Europe has shown that the Mediterranean coastal areas of southern Europe were particularly suitable for FAW to establish. The model also predicted that southern and central Europe, up to the 48th parallel North, might be exposed to the risk of transient populations after FAW establishment.²

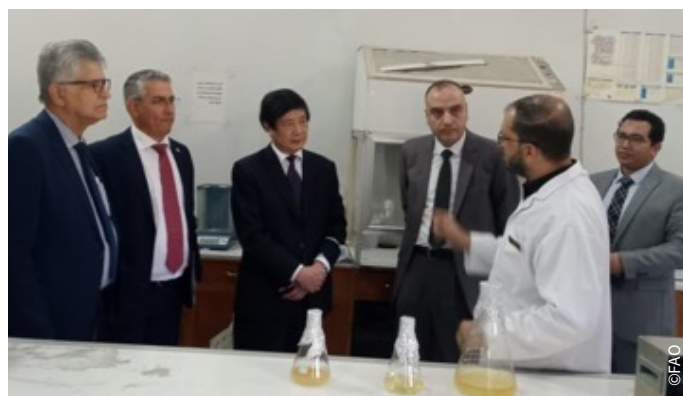
A defoliation study was conducted by a team of researchers from northern and Central America to assess the damage-yield relationship of FAW on maize. The authors reported that, during the vegetative stages (V1-V4), the amount of defoliation (up to 66 percent) did not reduce maize yield potential when compared with non-defoliated plants, regardless of the timing of defoliation. Furthermore, the study showed that fertilized defoliated plants significantly resulted in higher yield compared to non-fertilized plants. Thus, the authors concluded, in the face of a certain level of defoliation, smallholder farmers would benefit from investing in fertilizer.³

² <https://doi.org/10.1007/s10340-022-01517-0>

³ <https://doi.org/10.3958/059.047.0209>



Visit to the Biological Control and Natural Enemies Laboratory in Suhag, Egypt



The FAO delegation in a visit to the Biopesticide Production Unit- Giza, Egypt

Field stories

An online training of trainers on use of the FAMEWS mobile app was organized for focal points from the **Solomon Islands and surrounding countries** on 3 and 6 June 2022. The training was conducted under a Technical Cooperation Programme (TCP) on prevention, detection, and management of a FAW infestation in the Solomon Islands and neighbouring Pacific Islands. It was designed to strengthen national capacities in FAW monitoring and early warning since the FAW pest has not yet been reported in Samoa, even though some its neighbours have already reported the presence of FAW.

A workshop held 4-5 July 2022 in **Nairobi** helped 20 participants to better understand the African armyworm, *Spodoptera exempta Walker (Lepidoptera: Noctuidae)*, a transboundary insect pest in eastern Africa. So far, five out of the nine eastern African countries have been affected by this outbreak, including Ethiopia, Kenya, Somalia, South Sudan, and Uganda. Moreover, other countries in southern and West Africa have also been affected. FAO Sub-regional Office for Eastern Africa (SFE) organized the workshop to



Training in Nairobi on African armyworm in Eastern Africa

reactivate the Early Warning and Management System for African armyworm in eastern Africa by reviewing the current outbreak in SFE countries and developing action points to mitigate the further impact of African armyworm. Participants came from the five affected countries as well as Burundi, Eritrea, and Rwanda.



Some rights reserved.
This work is available under a
CC BY-NC-SA 3.0 IGO licence

Contact information:

Plant Production and Protection - Natural Resources and Sustainable Production
Email: Fall-Armyworm@fao.org
<http://www.fao.org/fall-armyworm/global-action/en/>
<https://www.ippc.int/en/the-global-action-for-fall-armyworm-control/>
Food and Agriculture Organization of the United Nations
Rome, Italy