



agriculture, forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

BRIEFING DOCUMENT

FALLARMY WORM (FAW) UPDATE JANUARY 2020

1. Background

Fall Armyworm (FAW) is a quarantine pest for South Africa, with an internationally documented wide host range. It is a notifiable pest in South Africa and regulated in terms of the Agricultural Pests Act 1983 (Act No. 36) of 1983 and the relevant regulations.

The presence of FAW in South Africa was confirmed on 3 February 2017 with positive morphological and molecular identification of caterpillars and adult moths. The presence of the pest was announced on the International Plant Protection Convention's portal in terms of South Africa's international pest reporting obligations. SADC member countries were also notified and regional control measures were discussed.

The Department of Agriculture, Forestry and Fisheries (DAFF) initiated a Fall Armyworm Steering Committee (FAWSC) which is a technical group investigating the best possible solutions to combat the FAW. The FAWSC membership includes representatives from the North West University (NWU), Agricultural Research Council (ARC), Croplife, Grain SA, South African national Seed Organisation (SANSOR), South African Biological Control Organisation (SABO), Insecticide Resistance Action Committee (IRAC), Provincial Departments of Agriculture and is chaired by DAFF. The stakeholders in the FAW Steering Committee have the following objectives.

- DAFF (monitoring, diagnostic, developed the model for management and control of the pest which was submitted to FAO), awareness, training, pesticide registration, legislation and enforcing)
- Provincial Departments (monitoring, extension support, awareness)
- ARC and Universities (research, diagnostics, training)
- CropLife SA and IRAC (Pesticide companies, registration, resistance monitoring)
- Producer organisations (Grain SA, SANSOR, etc. for monitoring, awareness and training)
- Private companies (monitoring, diagnostics, support)

The FAWSC is responsible for discussing and evaluating, among others, the surveillance programme, awareness programme, scouting methods, diagnostics, management practices, intervention by provincial Departments of Agriculture and relevant stakeholders, damage/loss assessment and future research on FAW and the development of Control Measures in terms of the Agricultural Pests Act.

2. Current Status in RSA

The FAW is a good flier, flying up to 2000km for migrating to new areas. In South Africa the infestation of FAW was noticeable in younger crops where it affected mainly maize, sweetcorn and sorghum crops. Occasionally reported on groundnuts, sunflower and sugarcane. It has been noted that late plantings and exuberated droughts contribute to late migrations which increases the chances of FAW outbreaks. The FAW has been detected in all provinces in quite varied proportions. Provinces such as Gauteng, North West, Free State and Eastern Cape have limited infestation. The main hotspots for FAW has been warmer areas of South Africa i.e. Limpopo, parts of Mpumalanga, KwaZulu-Natal provinces (see the map attached). The high prevalence in these areas can also be attributed to host material being constantly available.

Limpopo: Reported by farmers in all districts as widespread.

Gauteng: Northern and eastern parts and confirmed at, Bon Accord, Pyramid, Bronkhorstspuit and Roodeplaat remain the most affected areas in the province

North West: Has been confirmed in western parts, at Rustenburg, Brits and Swartruggens

Mpumalanga: Both the Highveld and Lowveld affected.

Free State: Reports were mainly from Petrus Steyn.

Northern Cape: Moth catches in Douglas.

KwaZulu Natal: Most reports came from the central and northern regions of the province (i.e. Uthukela, Umkhanyakude and Zululand districts). Most other reports came from uMgungundlovu, Ugu, Uthukela, ILembe, Amajuba districts respectively. The only districts with no report of FAW included uThungulu, eThekwini, Sisonke, uMzinyathi and Harry Gwala districts.

Eastern Cape: Cacadu and Alfred Nzo had the highest infestation followed by Joe Gqabi and Amathole districts, with no reports from other districts.

Western Cape: The larvae infestation was reported on the west coast affecting Clanwilliam and Trawal. Other areas where there has been moth catches include the south coast areas such as George, Eden, Swellendam, Overberg, Oudsthoorn and Riviersonderend.

3. Interventions since 2017

Pesticides registered so far to deal with the pest

There are registered agrochemicals with 19 active ingredients with 19 different mode of actions registered under the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No.36 of 1947) as amended after 2000. Thus far and they are available in the Departmental website. No new chemicals from 2017 to date. Two parasitoids are being looked at by ARC as biological control. Most provincial departments of Agriculture have set aside budget to procure chemicals as part of interventions to manage FAW. There have also been special trainings on handling and use of chemicals to minimise health and environmental impacts. Extension officers have also been sensitised to promote use of cultural methods by farmers.

What is the picture now compared looking back from 2017?

In 2017, not all provinces were covered with infestation for example there were no reports of FAW in Western Cape and Eastern Cape.

In 2018, the infestation level is less than the previous year (2017), since most of the farmers are using and/or spraying registered agrochemicals. There were more chemicals registered during 2017 to control and manage the FAW. Therefore, there are more options to control the pest. There were however new reports on the pest in Eastern Cape.

In 2019, there was low infestation in most areas can be attributed to unfavourable weather conditions such as rain, drought, cold temperature and hail. However given that it was a third season of the pest in the country most farmers were quick to take action. This pest was reported for the first time in Western Cape and the farmers acted promptly in managing it.

Other interventions:

DAFF: Submitted research needs to the Directorate Policy Research for 2018. There are 5 research projects on FAW that are being conducted by ARC. The DAFF continues to conduct surveillance, awareness and coordination of all national, monthly reporting and steering committee meetings. Responsible, together with ARC for the diagnostic identifications particularly in new areas.

All provinces: The DAFF has intensified surveillance and trapping in all provinces

- **Eastern Cape:** weekly awareness conducted. Chemical spraying, (so far 14ha also along the coast were sprayed).
- **Gauteng:** Developed and printed awareness material and distributed to the farmers. Allocated R10 million for traps, lures and chemicals.
- **North West:** traps and pheromones procured and distributed to the farmers. Spraying equipment and protein kit (for diagnostic identification) procured. Continuous on-house Diagnostic training offered to all the farmers in the province
- **Limpopo:** the province spent R2.2 million towards chemicals which were provided to 714 affected farmers.

Other Stakeholders:

ARC: Responsible for diagnostic identification

GrainSA: Awareness campaigns

SANSOR: Responsible for scouting and surveillance and awareness, training

CROPLIFE: Provides field training on trapping.

FAO: Sponsored traps and pheromone lures for monitoring. Provided funding for the training workshops on diagnostic identification and surveillance. From 2019 developed and rolled out a new app. known as the Fall Armyworm Monitoring and Early Warning System (FAMEWS), which is a global reporting platform and to help assist with scouting.

Does the department have the situation under control?

The situation is under control and through regular engagement with different stakeholders from which include the provincial authorities. The implementation of the control measures relating to FAW is in ongoing and compliance with regard to reporting to the DAFF of any occurrence or suspected occurrence is being done in accordance with the Law. Many extension officers in the provinces have been trained and encouraged to engage with farmers on scouting the fields at least twice a week. More awareness been conducted with more promotion material continuously updated.

Implications of FAW on Exports from SA

The EU has published emergency import measures, which means that SA now has to comply with specific phytosanitary measures for the following fruits:

- Capsicum (Peppers and Chillies)
- Momordica (Gourds)
- Solanum aethiopicum (Ethiopian eggplant)
- Solanum macrocarpon (African eggplant)
- Solanum melongena (Eggplant)

and also for maize (*Zea mays*), but only plants, not seeds and grains, or live pollen and plant tissue cultures.

Any likelihood of further outbreaks?

The public must be made aware that the pest might probably spread to lower warmer areas later in the season. Effective control of the FAW can be realised through integrated pest management practice. Once the pest is detected it establishes in the country and can only be managed. It is important that agrochemicals be rotated within cropping seasons to avoid resistance. Farmers need to also familiarise themselves with other cultural methods as it is environmentally friendly and cost effective to do so.