

Chemical control

- The application of an insecticide must be the last option for control of FAW
- If the infestation is high, spray the whole field targeting the whorl (funnel) of the plant
- If high levels of damage are in isolated areas of a field, spot spray with mild insecticides



- FAW are active at night hence spray in the late afternoon or early in the evening

Agrochemicals for control of the Fall Armyworm (FAW)

Spodoptera frugiperda

Active Ingredient	Chemical group	Brand Name	Application Rate
Emamectin Benzoate	Avemectin	Control 5WDG	30g/15lt water
???		Ataka Super EC	75ml/15lit water
Emamectin Benzoate + Acetamiprid	Avemectin + Organophosphate	Ema Star 112EC	20ml/15lt water
Chlorpyrifos + Deltamethrin	Organophosphate + Pyrethroid	Pyrinex Quick 256EC	70ml/15lt water
Acetamiprid + Indoxacarb	Organophosphate + Oxadiazine	Viper 46EC	40ml/15lt water
Lambda-cyhalothrin + Acetamiprid	Pyrethroid + Organophosphate	Super top	30ml/15lt water
		K-Optimal EC	50ml/15lt water
Imidacloprid + Betacyfluthrin	Organophosphate +	Thunder 145 OD O-TEQ	50ml/15lt water
Acetamiprid + Cypermethrin	Organophosphate + Pyrethroid	Chemaprid	100ml/15lt water

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Recharge

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Resistance management:

It is advisable to alternate application of insecticides from different groups

ZAMBIA AGRICULTURE RESEARCH INSTITUTE
MT. MAKULU RESEARCH STATION
PRIVATE BAG 7
CHILANGA, LUSAKA
ZAMBIA
TEL/FAX: 260-211-278130 OR 260-211-278141
Email: zaridirector@zari.gov.zm
Website: www.zari.gov.zm



Ministry of Agriculture

MANAGEMENT OF THE FALL ARMYWORM

Spodoptera frugiperda



SAFE PURCHASE OF PESTICIDES

Always purchase pesticides from registered pesticide suppliers only.

Buy the correct product.

Purchase enough for the season, avoid surplus at the End of the season.

Do not buy damaged or leaking packs.



**Zambia Agriculture Research Institute
Plant Protection and Quarantine Division**

What is FAW

The Fall army worm is a moth (caterpillar) of more than 80 plant species though it prefers cereals like maize. This is a new pest in Zambia and was first reported in November, 2016.



Management Scouting (include sketches)

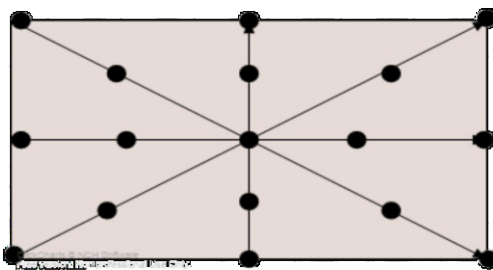
Inspect field crops for signs and symptoms of the pest on a weekly basis or two weeks interval when the crop is at vegetative stage.

The frequency may be increased if the eggs, larvae and damage are noticed until maturity

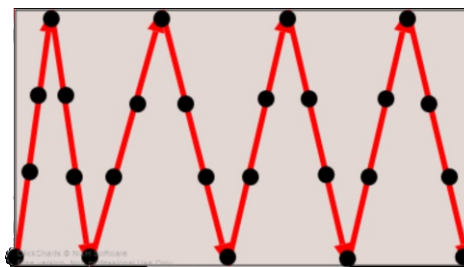


A ZIG ZAG or X scouting pattern can be followed along the walk way from which a sample set of 20 plants are examined in the field.

Assessment is made to each plant to determine the damaged plants, number and size of larvae (length) and egg batches in each sample set



Multi-sectoral scouting pattern



Zig Zag scouting pattern

Where to look for the pest

Check in the whorl (funnel) or underside of the leaf. Holes on leaves are an indicator

Check the tassels and/or ears of maize, wheat or rice

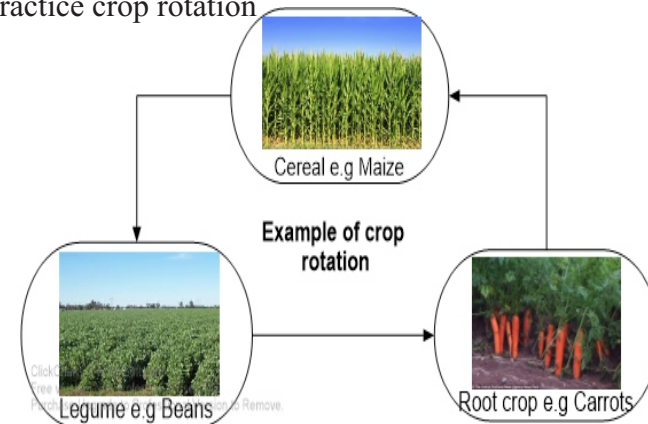
The population's buildup of adult FAW may be monitored by use of pheromone traps.



Biological/botanical control

Cultural

Practice crop rotation



Keep the field and the surrounding free of weeds
Uproot the dead hearts plants as they may harbor larvae
Hand pick larvae and eggs and squash them under low infestations

Weed/aerate soils to expose pupa to predators and sun burn

Avoid planting near the infested old crop, infested crop stubbles, cuttings and other residues after harvest on infested fields

These should be buried (20cm or deeper) or incorporated into the soil in order to kill unhatched eggs, larvae and pupa.

The crop residue can also be fed to livestock
Under the principles of conservation farming, burning is not allowed, however, in severe cases, the infested crop residue may be burnt

Plant early in the season while pest populations are low to escape high infestations that come late into the season