

Effective Solutions to Manage **FALL ARMY WORM** (*Spodoptera frugiperda*)



Harmony Ecotech Private Limited

(An ISO 9001 : 2015 Certified Company)

Plot No.19, Green Lands Enclave, Jonnabanda. Old Alwal
Secunderabad - 500 010 Telangana, INDIA

Tel: +91-98661 59683 Email: info@harmonyecotech.com

Website: www.harmonyecotech.com

Fall Armyworm (FAW) also known as *Spodoptera frugiperda* causes maximum damage to Maize. The Fall Armyworm caterpillars cause extensive damage to the maize plants. Young caterpillars (1-8 instars) feed on the undersides of leaves resulting in semi transparent patches on the leaves called windows. The leaf whorl is preferred in the young plants whereas leaves around cob sides in older plants are preferred by the larvae. By instars 3-6 they reach the protective region of the whorl and damage it extensively resulting in ragged holes in the leaves. They can eat their way through the protective leaf bracts into the sides of the cobs feeding on the developing kernels (seeds), moving to the tassel and ears adversely affecting quality of the harvest. Early stage infestation causes more damage. Ragged holes on leaves appearing in a zig-zag manner as if they are cut by a pair of scissors, highly damaged whorl with a lot of saw dust coloured floss are typical indications of FAW damage. Thousands of hectares of Maize/Corn have been totally wiped out by this tiny insect. FAW pest attack can result in virtually 70% -80% crop loss. Harmony Ecotech Pvt Ltd offers extremely effective solutions to tackle this menace, as detailed below.

For Monitoring & Mass Trapping of adult / flying moths, use pheromone Lures and Traps. The Pheromone dispenser is in the form of a Rubber Septa or a translucent polymer capsule in which the active ingredients namely Z-7 Dodecenyl acetate, Z-9 Tetradecenyl acetate, Z-11 Hexadecenyl acetate are filled in.

How to Use : Place the Lure/dispenser in the Trap Lure holder and place the traps at a few inches above crop canopy level, at various locations in the farm, for the catch to be effective. As the Active Ingredient is dissipated into the atmosphere, the insects are attracted into the trap. Eventually they get entrapped in the trap and die due to lack of food and exhaustion. It is advised to use 8-10 traps per acre initially. Trap density may be increased upto 50 per acre depending on degree of infestation and extent of control targeted. It is recommended to use funnel sleeve traps or moth traps .

For season long control replace lure 3 times at intervals of 30-40 days starting from the 5th day of sowing.

Light Traps:

Fall Armyworm is a Nocturnal (Night flying) Pest. So it gets attracted by Light Traps. Our Solar Powered UV Light Traps are very effective in attracting & controlling the Fall armyworm. Install 1 light trap per acre which automatically switches on at sunset and switches off after 3-4 hrs, during which period FAW is very active.

For Controlling Larvae: USE CROP CARE TONICS Such as

Bacillus thuringiensis var kurstaki – Mix 2 – 4 grams in one liter of water and spray to reach inner portions of the whorls.

Beauveria bassiana – Mix 5 grams per liter of water and spray thoroughly to the point of drenching.

Extract of Annona squamosa – Mix 2 ml per liter of water and spray extensively reaching all parts of the plant, specially the whorls.

Neem Oil and Azadirachtin 300 and 1500 ppm emulsions: 5 to 10 ml is to be mixed in one liter of water and sprayed into the nooks and corners of the plant. In case of crude neem oil, mix a wetting agent such as ASSURE for better dispersion and coverage.