ISSN: 2591-7897

# Fall armyworm- Prevention, Monitoring and Cultural control.

#### Hiren Bhavsar

Agricultural and Environmental Sciences, Tennessee State University, USA

Accepted December 28, 2020

Journal of Agricultural science and Botany is a peer reviewed, open access journal that aims to project the latest research discoveries and innovations in the field of agricultural science and botany.

The fall armyworm Spodoptera frugiperda, (Lepidoptera: Noctuidae) is a transitory bug of maize crop in Asia and different nations. It is generally feed on leaves at larval stage. At the point when populace turns out to be high then its feeds additionally on ears of maize plants. This irritation can be constrained by different sorts of pesticides all around the world however now obstruction has come in bug against bug sprays. So we can likewise control this bug by other control procedures including physical, natural, mechanical control rather than substance control strategy. By this can save our environment and nature from risky impacts of synthetic substances.

# Life History

Their life cycle total in 21-40 days. Savage conduct happens in larval stages in which bigger hatchlings feed on more modest if there should be an occurrence of food lack. There are 8 no. of ages every year. They are solid flier and relocate immeasurably starting with one zone then onto the next. They mate through delivering sex pheromones and make confliction among guys. They additionally feed on nectar of blossoms around evening time.

## **Damage and its Symptoms**

Child's hatchlings feed on leaf gregariously and leaf becomes dry, at that point hatchlings move to other leaf for taking care of. At develop stages they feed on leaves harshly and just midrib and veins will be remaining in the field without leaves. Past investigates have been demonstrated that they are known as boss deflator. If there should arise an occurrence of cotton, at blooming and boll development stage they feed on inner substance. They make sporadic openings on the leaves. Leaves of maize plant eaten and whorl might be a mass of openings, worn out edges and larval frass. Youthful hatchlings evaporate the leaf lamina. Extreme taking care of by hatchlings can execute developing purposes of yield plant. Hatchlings can likewise assault on cob.

#### Prevention

We ought to try not to plant in as of now pervaded territories. We should keep our field and environmental factors weed free and clean to forestall creepy crawly irritations and illnesses. We should eliminate crop buildup and substitute hosts of creepy crawly bothers. We ought not move plagued maize plants starting with one field then onto the next field since this action cause invasion. We ought to embrace Intercropping with vegetables, different roots, tuber harvests and cucurbits and so

forth We ought to likewise embrace crop pivot to battle against bug of harvest.

## **Monitoring**

We should screen the field every day for moth examination utilizing traps even prior to planting. We should search for light green to dim earthy colored hatchlings with 3 dainty yellowish white stripes down the back and unmistakable white transformed "Y" on the dull. We should search for prolonged openings on the leaves and inside whorls of youthful plants. We should search for blotches of little (Window Pane) to huge worn out and stretched openings in the leaves arising structure whorl with yellowish earthy colored frass.

### **Cultural control**

We ought to maintain a strategic distance from late of slow time of year planting to dodge populace develop. We should eliminate crop buildup and every single substitute host. Plant should be at right dividing and utilization of ideal manures for crop. We ought not move swarmed maize material starting with one field then onto the next to forestall pervasion. We should put a half small bunch of sand/sawdust or soil in the assaulted plants to execute the hatchlings. We ought to apply a spot of 50 gm ground hot pepper + 2 kg debris into plant pipe at knee high.

Organic control There are different parasitoids that can be utilized to control this vermin including; Trichogramma pretiosum, T. atopovirilia egg parasitoids (100000 for each ha) and Telenomus remus (2500-3000). Fly and wasp parasitoids focus on the fall armyworm including; Archytas marmoratus, Cotesia marginiventris and Chelonus texanus. Hunters, parasitoids and parasites Caterpillars of fall armyworm are straightforwardly gone after by numerous spineless creatures and vertebrates like fowls, rodents, creepy crawlies, earwigs, bugs, isodontia application and savage wasp. Hereditary control we can handle bug bother particularly lepidopterans through Bacillus thuringiensis (Bt) assortments.

## \*Correspondence to:

Hiren Bhavsar

Agricultural and Environmental Sciences

Tennessee State University

**USA** 

E-mail: hbhavsar@tnstate.edu