

The fall armyworm (FAW) is a common pest of corn in the Philippines. In rice, FAW was first reported infesting seedlings in Cagayan in May 2021, where it later spread to other provinces, infesting a total of 13 municipalities in the region. Since then, FAW infestation has been recurring in the said areas. In June 2022, however, it also started damaging direct-seeded rice at seedling stage in San Jose City, Nueva Ecija and is now found in seedbeds in Maligaya, Science City of Muñoz, Nueva Ecija.

How to identify

- ✓ Larvae vary from light green to brownish or blackish, with a black head and white dorsal and lateral lines along the body and have a distinct 4 black dots arranged in a square (a) at the last segment of the abdomen.
- ✓ Mature larvae are about 1 inch long and have distinctive inverted "Y" (b) on the head.
- ✓ Larvae feed for two to three weeks, developing through six instar. Mature larvae pupate in soil or decomposing plant material or in between rice leaves at the base of the plant (c).
- ✓ Adult moths (d1 & d2) are characterized with gray and brown sculptured front wings and whitish hind wings.

Damage on rice plant

✓ Larval feeding can result to severe damage on the leaves of rice plants, or it can be pruned to the ground most especially at seedling stage, that can result in severe crop loss.



Characteristics

- ✓ FAW is polyphagous. FAW has a preference for corn, but can also damage other major cultivated crops, including rice, sorghum, sugarcane, cabbage, soybean, onion, cotton, pasture grasses, tomato, and potato, as well as some weed species.
- ✓ FAW spreads rapidly across large geographic areas. Adult moths are highly migratory and can migrate over 500 km before egg laying. Also, capable of migrating long distances from 1,500−2,000 km in a short period on prevailing winds, so introduction of FAW is also possible via natural migration.
- ✓ FAW can persist throughout the year. FAW breeds throughout the year wherever host plants are available, including off-season and irrigated crops, when climatic conditions are favourable.
- ✓ FAW can spread multiple ways. The increasing transportation and international trade are likely to facilitate the further spread of the fall armyworm.
- ✓ FAW occurs in two strains or as sympatric species: 'rice strain' (R strain) that is thought to preferentially feed on rice and various pasture grasses and 'corn strain' (C strain) that preferred to feed on maize (corn), cotton and sorghum. However, both strains damage rice.

Management options

- ✓ Monitor the seedbed or the field (for direct-seeded) regularly starting at 7 DAS onwards to know at once if infestation occurs. Look in early morning or evening hours for young larvae and larvae with the inverted "Y" and four dark spots forming a square (on the second to last body segment).
- ✓ Flocks of bird can indicate FAW infestation since birds love worms, so make sure to monitor your field if it is frequented by birds.
- ✓ If FAW infestation is observed, flood the field. This will make the larvae go up the plant and make them easier to see and destroy.
- ✓ Use of biological control agents. Collect dead larvae (killed by virus, fungi, or bacteria), crush them, and then spray strained diluted liquid to infested plants.
- ✓ Apply insecticide only as last resort. Seek advise from crop protection experts near your area.
- ✓ Practice synchronous planting after a fallow period to reduce infestation.
- ✓ Remove weeds nearby, especially during fallow periods, to limit FAW oviposition and feeding.

Report immediately to the nearest Municipal Agriculture Office, RCPC, or DA-PhilRice if FAW on rice is observed. In partnership with:



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