

What is Fall Armyworm and how does it grow?

Fall Armyworm is a pest that feeds on

80 types

of plants, but prefers maize. It can be a significant threat to crop productivity.

It invaded South Asia in 2018.



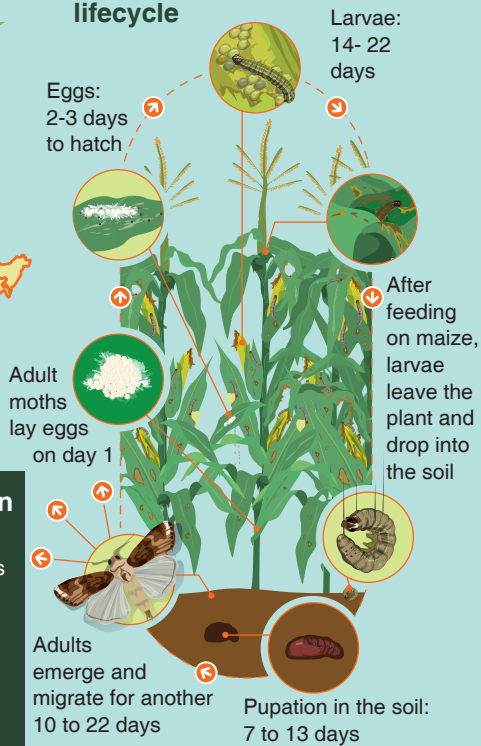
Scientists expect this pest will continue spread and cause damage.

Control in rabi season

Understanding how Fall Armyworm grows and attacks crops will help you to control this troublesome pest.



Fall Armyworm lifecycle



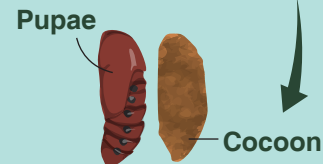
Fall Armyworm Life Cycle

Fall Armyworm generations last between around 33 to 63 days depending on the temperature

1 Adult female Fall Armyworm moths lay between 100 to 2,000 eggs.

2 After hatching from eggs, Fall Armyworm larvae will feed on maize for between 14 to 22 days. It eats leaves, stems, or on older plants, may tunnel directly into the maize cob.

6 Adult moths can be blown by the wind and can migrate hundreds of kilometers before they lay eggs and die.



3 When larvae are full grown, Fall Armyworm drops off the maize plant and digs into the soil to pupate for between one and two weeks.

5 The adult moth lives as an adult for 10 or more days, and is blown by the wind as it migrates to new fields. It lays eggs for 3-4 days while it is an adult.

4 Fall Armyworm will complete pupation and have a faster life cycle in warmer climates.

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How can you control Fall Armyworm at different stages of growth?

Look for egg masses. They are usually on the bottom of leaves. Crush them when you see them.



Fall Armyworm is most successfully controlled when it

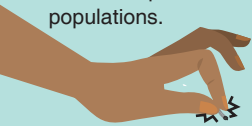


less than **10 days old**



so scout your field early and often.

If you regularly inspect your fields, larvae can be picked off plants and crushed with your hands. This will not completely control the pest, but will help to reduce populations.

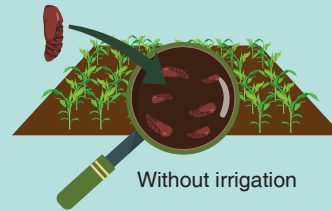


Intercropping can help confuse Fall Armyworm and reduce infestation.

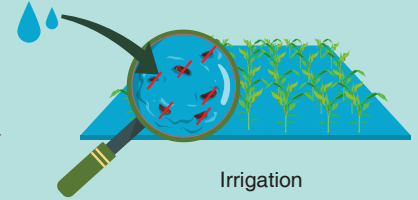


Intercropping

If you have irrigation, you can flood your field with a few centimeters of water when Fall Armyworm is pupating in the soil. Pupae will drown and die. Irrigation works best when all farmers in an area flood at a similar time. This reduces populations over a large area where maize is grown, and helps many farmers benefit by reducing area-wide pest levels.

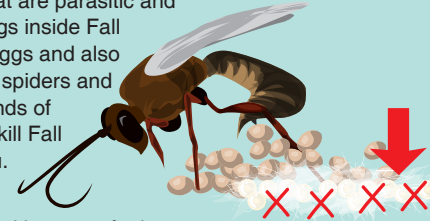


Without irrigation



Irrigation

Conserve spiders and other insects that are parasitic and lay their eggs inside Fall Armyworm eggs and also larvae. These spiders and insects are friends of farmers and will kill Fall Armyworm for you.



Insecticides should only be applied by a certified pest control specialist after you have consulted with an extension agent. Use insecticides only after all other pest management techniques have been attempted and failed. Remember, insecticides will also kill beneficial insects like spiders and parasitic wasps, so use them only as a last resort.

If you use insecticides, be sure to spray egg masses or larvae.



They may be hiding under leaves or in the maize whorl.

The Cereal Systems Initiative for South Asia (CSISA) was established in 2009. The project is led by the International Maize and Wheat Improvement Center (CIMMYT) and implemented jointly with the International Food Policy Research Institute (IFPRI) and the International Rice Research Institute (IRRI). The content and opinions in this infographic do not necessarily reflect the views of the Bill and Melinda Gates Foundation, USAID, or the United States Government, and shall not be used for advertising or product endorsement purposes. Correct citation: Krupnik, T.J. and Dhungana, H. 2019. What is Fall Armyworm and How Does it Grow? International Maize and Wheat Improvement Center, Dhaka, Bangladesh