



March of the Armyworms

Part II - Corn

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Picture credits:
Steve Gower (armyworm ID)
Chris DiFonzo (all others)

True armyworm is a common insect pest of corn, as well as wheat, other crops and turf. True armyworms can differ a great deal in color, depending on their size and what they are eating.



Armyworm does NOT overwinter in Michigan. Moths migrate into the state from the south each season, so infestations vary from year-to-year and field-to-field.

True Armyworm ID:

Stripey body, may be dark or light in color
Distinct **DARK BARS** on the **PROLEGS**
Reticulated head capsule (looks like paving stones)

Biology

Moths are attracted to areas of dense grassy vegetation for egg laying. This includes ditch banks, weedy areas in field (right), grass hay and wheat. Thus corn at field margins or near small grain fields may be at greater risk. If herbicides are used in weedy areas after egg hatch, larvae move and concentrate on the corn, potentially causing major damage.



Signs of Infestation

Larvae feed on leaf margins, giving leaves a tattered appearance. In severe cases, all leaf material is eaten, leaving only the leaf midrib. Large cylindrical frass (excrement) pellets in the whorl are another sign that larvae are present. During the day, the larvae themselves hide in the whorl or at the base of the plant.



Left:
Close up of
armyworm leaf
feeding and frass
pellets.

Right:
Field in central
Michigan
completely
defoliated by
armyworms



Because populations vary so much from year to year, and among fields, scouting for armyworm is cost effective to find and target fields over threshold. Larvae often hide on sunny days, and come out to feed in the evening or on cloudy days. Thus scouting involves examining whorls and looking around the base of plants for larvae.

Scouting is also used to catch larvae when they are small. The younger the larva, the easier it is to kill. This means a higher % control, and/or the use of a lower rate of insecticide, saving money. Furthermore, larger larvae eat more and are often responsible for the majority of damage. This accounts for fields that are seemingly defoliated overnight.

Threshold

25% of plants with at least 2 larvae per whorl
or
75% of plants with a single larva per whorl

Tips when treating

- * Direct sprays down into the whorl
- * If larvae are small (under $\frac{3}{4}$ inch) use a mid-range rate
- * If possible, spray later in the day. Larvae will crawl across the freshly treated surface that evening as they climb plants to feed.
- * Options include Ambush, Asana, Baythroid, Capture, Intrepid, Lorsban, Mustang, Pounce, Proaxis, and Warrior, as well as Bt products and Entrust for organic production. Products for organic corn must target small larvae to have decent control.

When not to treat

- If larvae are already large (+1.5 inches), they are ready to pupate and will stop feeding shortly. Spraying probably will not pay at this point.

Other tips on management that does not involve insecticides:

Timely and effective weed control is important to reduce egg-laying in corn.

Armyworms are attacked by a number of biological controls, including birds, insect parasitoids, and pathogens. Note the dead larva next to the live larva in the picture to the right. In many years and fields, biological controls keep armyworms in check for free.

