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KEY POINTS:

- Corn earworm is a pest of field corn, sweet corn and several other crops throughout much of North America.
- Populations do not usually overwinter in most of the Corn Belt and must re-infest each year.
- Corn earworms are cannibalistic and normally only one will be found per ear.



PEST FACTS AND IMPACT ON CROP

- Latin name: *Helicoverpa zea*
- Closely related or indistinguishable from:
 - Cotton bollworm: *Helicoverpa armigera*
 - Tobacco budworm: *Heliothis virescens*
- Importance
 - Grain losses estimated at 2.5% annually.
 - Losses in south-eastern U.S. as high as 16.7%.
 - Losses in sweet corn as high as 50% in unsalable produce.
- Found worldwide but does not usually overwinter in most of the Corn Belt and must re-infest each year.
- Large range of hosts including corn, cotton, tobacco, tomatoes and other fleshy fruits and vegetables
- In addition to the ear, occasionally larvae can be found in the whorl and foliage on younger plants



PEST SYMPTOMS/INJURY ID

- Corn earworms are cannibalistic and normally only one will be found per ear.
- They will frequently be near the tip but may feed down the ear creating a track of damaged kernels.
- The injury creates an ideal environment for ear fungi to invade and may lead to quality problems at harvest.



DISTRIBUTION



PEST ID:

- Similar species
 - Note the lack of straight lateral lines or large tubercles on the sides of the western bean cutworm
 - Contrast with the thin white line of the fall armyworm
 - Contrast with the wider line of the corn earworm
- Corn earworms are found in many colors



Western bean cutworm



Fall armyworm



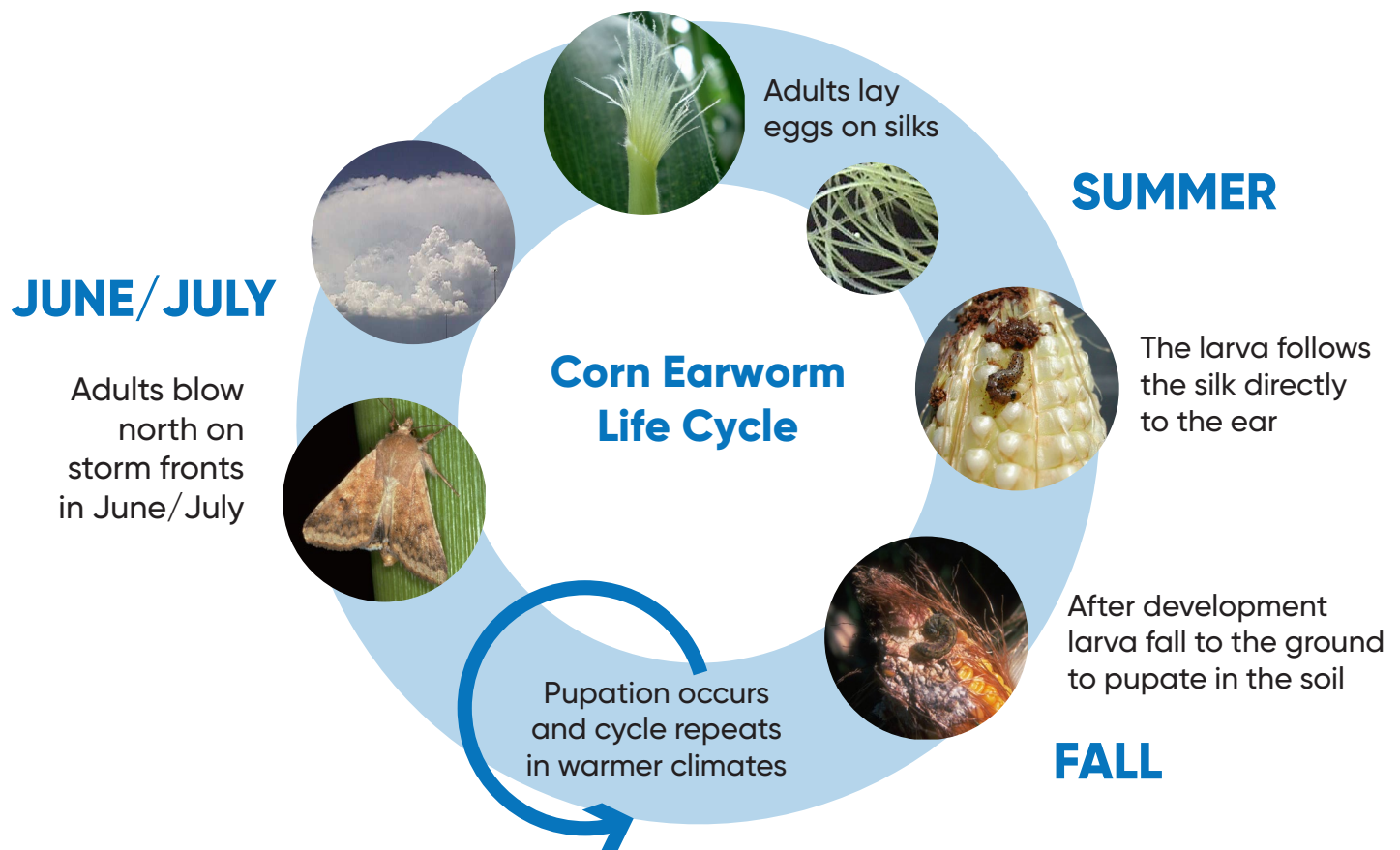
Corn earworm

IPM PRACTICES

- Trapping
 - Light traps or pheromone traps can indicate when adults are flying.
- Scouting
 - Scouting can be done in the field by looking for eggs on the green silks and turning back the silks at the tip of the ear to look for larvae.
- Management timing
 - Because the larva is exposed outside the ear for only a short time, economical timing of insecticides is difficult.
 - Stop application after silks turn brown.
- Resistance available
 - Tight husks give some protection, but real resistance is only available with Bt hybrids.
- Pesticide use
 - In field corn, insecticide use is rarely warranted.
 - Please check local accepted practices and label instructions when growing either sweet corn, seed corn, or another specialty crop.

MANAGEMENT CONSIDERATIONS

- Favorable conditions
 - Warm humid nights.
- Natural enemies
 - Predators include birds, big-eyed bugs, lady beetles, and minute pirate bugs.
 - *Trichogramma* parasites infest some eggs, but control is minimal.
- Corn products with Optimum® Leptra® insect protection provides strong above-ground insect control with a superior level of efficacy against ear-feeding pests for cleaner ears and improved grain quality.
 - These products provide protection against a broad spectrum of pests, including corn earworm, European corn borer, southwestern corn borer, fall armyworm, black cutworm and western bean cutworm.
 - Each product contains 95 percent of a corn hybrid with three modes of above-ground insect protection, blended with 5 percent in-the-bag refuge of a similar non-Bt hybrid with herbicide tolerance.
 - A 20 percent separate structured refuge is required in EPA-designated cotton counties.



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