

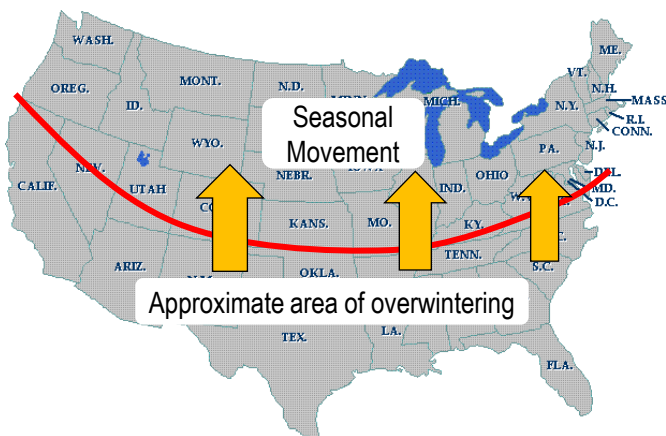
Pest Facts and Impact on Crop

- Latin Name: *Heliothis zea*
- Closely related or indistinguishable from:
 - Cotton bollworm: *Helicoverpa armigera*
 - Tobacco budworm: *Heliothis virescens*, etc.
- Importance
 - Grain losses estimated at 2.5% annually
 - Losses in southeastern 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



Distribution



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 a quality problem at harvest



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



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IPM Practices

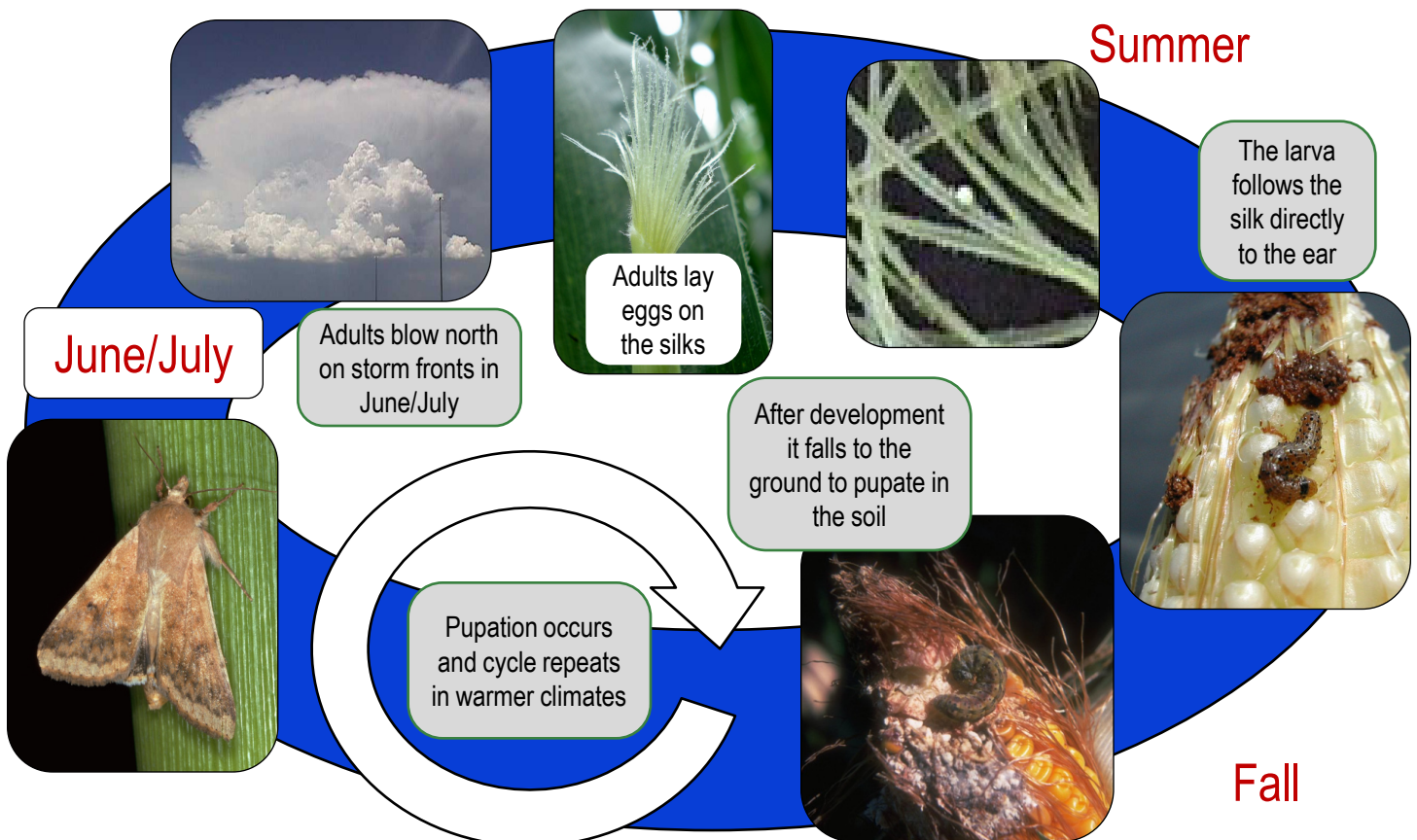
- Trapping
 - Light traps or pheromone traps can indicate when adults are flying
- Scouting
 - Scouting can be done in the field by looking for eggs on the green silks and turning back the silks at the tip of the ear to look for larvae
- Management timing
 - Because the larva is exposed outside the ear for only a short time, economical timing of insecticides is difficult
 - Stop application after silks turn brown
- Resistance available
 - Tight husks give some relief but real resistance is lacking except through the use of Bt hybrids
- Pesticide use
 - In field corn, pesticide 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

Best Management Practices Using Pioneer Products

- Transgenic offerings
 - YieldGard® Corn Borer, Herculex® I and Herculex XTRA *Insect Protection* products provide suppression / moderate control of corn earworm populations
- Beware that in cotton producing counties, additional requirements for refuge are required because of cross resistance of cotton bollworm/corn earworm to the YieldGard Bt gene



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