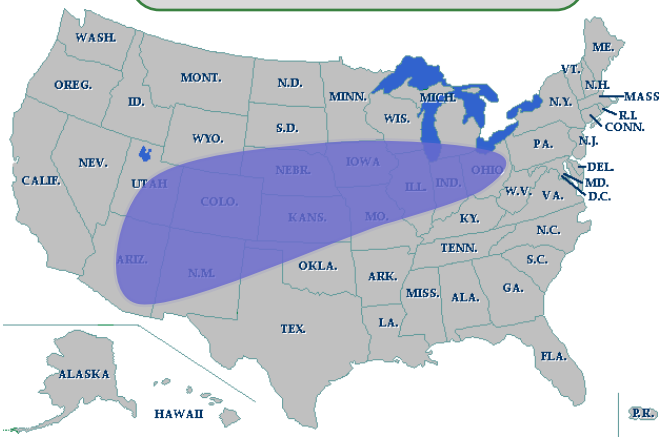
CROPFOCUS

Western Bean Cutworm

Pest Facts and Impact on Crop

- Latin name: *Striacosta albicosta*
- When infestation levels average several larvae per ear, yield reductions can be as high as 30 to 40%
- Major larval feeding coincides with the ear development of corn
- Direct feeding on the ears reduces grain mass
- Feeding by the larvae introduce mold and other fungal spores that then colonize the ear, further reducing grain mass and potentially producing various mycotoxins
- A pest of dry beans in the Western US and of corn in the Corn Belt

Approximate Range of Western Bean Cutworm, Spring 2010



WBC historically occurs in cornfields of the Great Plains but is now also moving east into cornfields of Minnesota, Michigan, Wisconsin, Ohio, Indiana, Illinois, Iowa and Missouri

Pest Symptoms

- Leaf and whorl feeding by mobile second and third instar larvae
- Ear penetration and colonization by late instar larvae
- Secondary infestation by ear molds after protection from shuck covering has been breached

Western Bean Cutworm damage

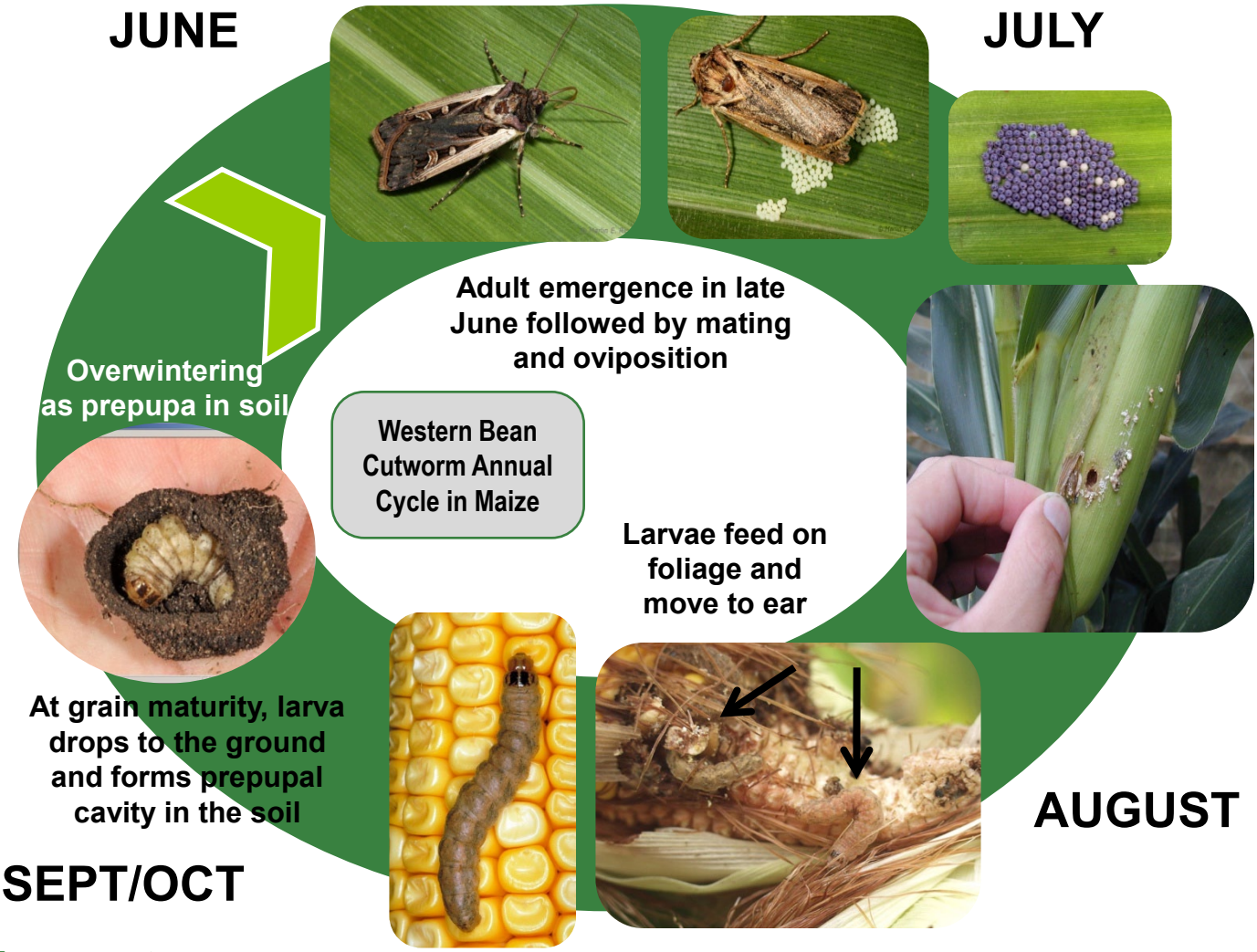
Pest Identification

- 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 and wider line of the corn earworm
- Corn earworms will be found in many colors

Western Bean Cutworm

Fall Armyworm

Corn Earworm



Management

- Several factors may be causing WBC to increase, including mild winters, reduced use of foliar insecticides and increased use of no-till systems
- Other than the normal large predators and a few parasitoids, there are few natural enemies of WBC
- IPM practices
  - Trapping of moths using pheromone traps can be used to determine when and where to scout for adult egg laying
  - Because larvae move, when 8% of the plants have an egg mass or young larva in the tassel, an insecticide application should be considered – read and follow all label directions
- Because application timing is critical and multiple treatments may be needed controlling WBC with insecticides can be difficult.

Management (continued)

- If ear molds are a problem, timely harvest and drying may be desirable to prevent mycotoxin formation
- Pioneer hybrids with the Herculex® I (HX1) and Herculex® XTRA (HXX) traits provide in-plant protection to help manage WBC.

Hybrid with HX1 gene

Without HX1 gene

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