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Stalk Borer Migration Is Beginning

Erin W. Hodgson
Iowa State University, ewh@iastate.edu

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Abstract
Warm June temperatures have accelerated insect growth and development, including stalk borers. Start looking for migrating stalk borer larvae when 10 percent movement is predicted. The 2010 forecast for 10 percent stalk borer movement in Iowa is starting this week (Fig. 1).

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Stalk Borer Migration Is Beginning

By Erin Hodgson, Department of Entomology and Adam Sisson, Corn and Soybean Initiative

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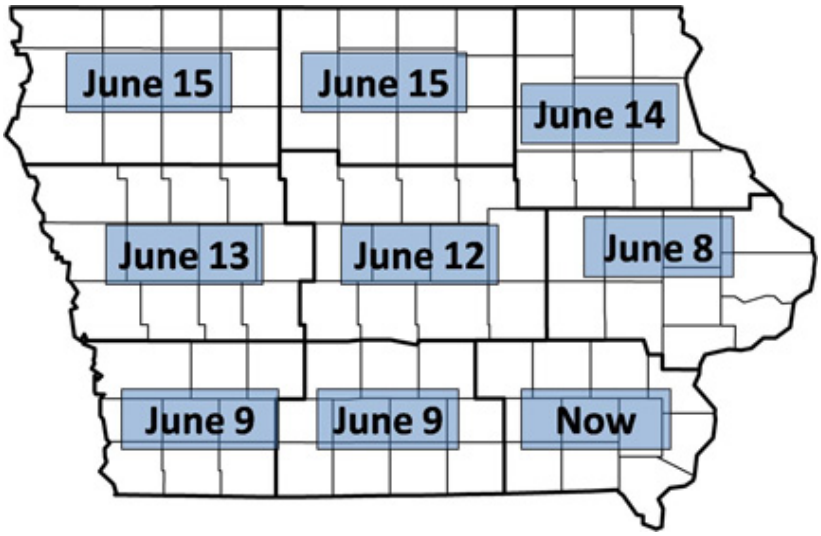

Fig. 1. Predicted 2010 dates of 10 percent stalk borer migration.

Stalk borers have a wide host range, with larvae feeding on over 175 different plant species. In the spring, young larvae are commonly found on brome grass and giant ragweed. Stalk borer larvae hatch around 500 growing degree days (base 41 F) of accumulated temperatures. Older larvae can quickly outgrow grass and weed stems and begin moving to corn and occasionally soybean around 1,400 growing degree days.

The larvae are not very mobile and typically only move into the first four to six rows of corn. Look for new leaves with irregular feeding holes or for small larvae resting inside the corn whorls. Larvae will excrete a considerable amount of frass pellets in the whorl or at the entry hole in the stalk. Exposed larvae can be killed with a foliar insecticide treatment, but tunneling larvae are not susceptible. Young corn is particularly vulnerable to severe damage, but plants are unlikely to be killed once reaching V7 (seven true leaves).

Management

Regular weed management within and around corn fields is crucial for reducing stalk borer populations. Stalk borers can cause damage throughout a field if grasses and broadleaf weeds are not controlled in a no-till system. Just killing weeds in a highly infested area will force larvae to feed on corn -

this practice could significantly reduce a stand.

To prevent stand loss, scout and determine the percent of infested plants. The use of an economic threshold, first developed by ISU entomologist Dr. Larry Pedigo, will help determine justifiable insecticide treatments based on market value and plant stage. Young plants have a lower threshold because they are more easily killed by stalk borer larvae. For treatment threshold guidelines and labeled products, see a previous ICM article.

Erin Hodgson is an assistant professor of entomology with extension and research responsibilities. She can be contacted by email at ewh@iastate.edu or phone (515) 294-2847. Adam Sisson is a program assistant with responsibilities with the Corn and Soybean Initiative. Sisson can be contacted by email at ajsisson@iastate.edu or by calling (515) 294-5899.
