

6-20-2005

Western bean cutworm: Pheromone trapping program

Carol Pilcher
Iowa State University

Marlin E. Rice
Iowa State University, merice@iastate.edu

Rich Pope
Iowa State University

Follow this and additional works at: <http://lib.dr.iastate.edu/cropnews>



Part of the [Agriculture Commons](#), and the [Entomology Commons](#)

Recommended Citation

Pilcher, Carol; Rice, Marlin E.; and Pope, Rich, "Western bean cutworm: Pheromone trapping program" (2005). *Integrated Crop Management News*. 2383.

<http://lib.dr.iastate.edu/cropnews/2383>

The Iowa State University Digital Repository provides access to Integrated Crop Management News for historical purposes only. Users are hereby notified that the content may be inaccurate, out of date, incomplete and/or may not meet the needs and requirements of the user. Users should make their own assessment of the information and whether it is suitable for their intended purpose. For current information on integrated crop management from Iowa State University Extension and Outreach, please visit <https://crops.extension.iastate.edu/>.

Western bean cutworm: Pheromone trapping program

Abstract

Traditionally, western bean cutworms have been a pest of field corn in Colorado and Nebraska. However, this insect pest has caused significant damage to some Iowa corn fields since 2000.

Disciplines

Agriculture | Entomology



Insects and Mites

Western bean cutworm: Pheromone trapping program

by Carol Pilcher, Marlin E. Rice, and Rich Pope, Department of Entomology

Traditionally, western bean cutworms have been a pest of field corn in Colorado and Nebraska. However, this insect pest has caused significant damage to some Iowa corn fields since 2000.

To assist in scouting efforts for this pest, a network of pheromone traps was established in Iowa starting in 2003. Each year these traps have detected the current distribution of the western bean cutworm and have provided information on the proper timing to scout for this pest. In 2004, western bean cutworm adult moths were captured in more than 90 pheromone traps placed throughout Iowa. The northernmost adult moth catches included the counties of Winnebago, Worth, Mitchell, Winneshiek, and Allamakee. The easternmost adult moth catches included the counties of Clinton and Scott.

To better understand the expanding distribution of the western bean cutworm, the pheromone trapping program has also expanded. This growing season the most extensive network of traps will be placed throughout Iowa, Illinois, and northern Missouri. Iowa State University Extension is cooperating with Pioneer Hi-Bred agronomists and researchers at University of Illinois at Urbana-Champaign to conduct this extensive trapping program.

What are western bean cutworm pheromone traps? Pheromone traps consist of a one-gallon plastic milk jug. Square windows (4-inches in length) are cut in the sides of the jug. A 2-inch space between the window

and the bottom of the jug serves as a reservoir that is filled with a 4:1 mixture of water and antifreeze, and a few drops of dish soap. A paper clip, placed inside the jug cap, holds the pheromone lure in place.

What does a trap cooperators do? All pheromone traps will be started on July 1. Each day, trap cooperators will strain the moths out of the solution and will count the adult western bean cutworm moths. They will then enter the results on a Web site that is accessible to the public.



These traps will reflect the moth flight within an area and will indicate the proper time to start scouting for western bean cutworm eggs. In the next few weeks, we will provide more information on accessing the Web site to determine moth flight in your area, scouting protocols, treatment thresholds, and management options for this pest.

Carol Pilcher is an instructor and extension program specialist in entomology with responsibilities in pest management and the environment. Marlin E. Rice is a professor of entomology with extension and research responsibilities in field and forage crops. Rich Pope is an extension program specialist in entomology with responsibilities in integrated pest management.

