2-12-2007

Western bean cutworm management in 2006

Richard O. Pope
Iowa State University, ropope@iastate.edu

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

Part of the Agricultural Science Commons, Agriculture Commons, Entomology Commons, and the Plant Pathology Commons

Recommended Citation
http://lib.dr.iastate.edu/cropnews/1161

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 Users are hereby notified that the content may be inaccurate, out of date, incomplete and/or may not meet the needs and requirements of the user.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 management in 2006

Abstract
Western bean cutworm is a corn pest that has become an economic concern in some parts of Iowa in the past decade. Iowa State University led a pheromone trapping network to monitor the presence and timing of emergence of adults in Iowa. The map shows the reported data on moth captures for the season. ISU Corn and Soybean Initiative partner agronomists were surveyed in December about pest management issues in corn and soybean in the 2006 growing season.

Keywords
Entomology, Plant Pathology

Disciplines
Agricultural Science | Agriculture | Entomology | Plant Pathology

This article is available at Iowa State University Digital Repository: http://lib.dr.iastate.edu/cropnews/1161
Harvest

Depending on environmental conditions, there may be greater potential for disease on corn kernels during harvest when corn is raised following corn. Generation of further disease and storability are affected by excessive damage to the seed coat. Use the lowest combine rotor or cylinder speed to maintain adequate threshing without excessive harvest machine loss.

Assess capacity of harvest equipment, grain transport from the field, drying, and storage. Acres moved from soybean to corn production produce roughly three times the volume of material that must be removed from the field. If field dry-down is not sufficient, corn acres place an additional load on the drying system.

Mark Hanna is an extension agricultural engineer in agricultural and biosystems engineering with responsibilities in field machinery.

Insects and Mites

Western bean cutworm management in 2006
by Rich Pope, Departments of Entomology and Plant Pathology

Western bean cutworm is a corn pest that has become an economic concern in some parts of Iowa in the past decade. Iowa State University led a pheromone trapping network to monitor the presence and timing of emergence of adults in Iowa. The map shows the reported data on moth captures for the season.

ISU Corn and Soybean Initiative partner agronomists were surveyed in December about pest management issues in corn and soybean in the 2006 growing season. Here are summarized results of the survey concerning western bean cutworm, and results involving soybean pests will be presented soon in the ICM newsletter. There were 17 usable responses from 28 companies polled, and responses geographically covered most parts of the state except extreme south-central Iowa.

Number of producers who provided agronomic services (Estimated) ———— 13,900
Number of acres those producers farmed (Estimated) ———— 7.4 million
Percentage of acreage using corn varieties with the Herculex® trait ———— 2.5 to 15%

Both the incidence of western bean cutworm and yield losses from damaged ears varied considerably from field to field and from area to area. Those who estimated losses generally reported 2 to 5 bushels per acre, with one report of losses in a few fields that reached 10 percent. The agronomists were asked how farmers they worked with managed for western bean cutworm, and most reported using the suggested economic threshold of 8 percent of plants with egg masses or newly hatched larvae present; however, two reported that scouting was frustrating to do. It was noted that there were scouted fields that never reached threshold yet suffered apparent economic losses from western bean cutworm damage. Complicating scouting is the difficulty in scouting fields around silking. In addition, one respondent specifically requested information about thresholds for multiple pests (in corn, that could include western bean cutworm and corn rootworm beetle adults, among others).

Rich Pope is an extension program specialist in entomology with responsibilities in integrated pest management and pesticide applicator training.

February 12, 2007 — Integrated Crop Management— 25