Black Cutworm in Michigan

Chris DiFonzo, PhD, MSU Department of Entomology

Black cutworm can devastate field crops, especially when plants are small. Adult black cutworms (moths) migrate into Michigan in early spring; crop damage sometimes occurs by mid to late May. Extension personnel often report heavy catches of cutworm as the moths head north, so you can get a warning of a potential problem by checking extension newsletters from Indiana and Ohio.

Before the crop emerges, female black cutworm moths lay eggs on low-growing plants in and around fields. This includes plants along field margins and ditches, cover crops within the field, and especially in areas with low, densely growing weeds. When the weeds or cover crops are killed by herbicide, larvae move onto the nearest green plants, i.e. the crop. Small larvae initially feed above-ground, making small pinholes in the leaf or chewing on the leaf edges. Larger larvae move down and feed near or below the ground, cutting off plants at the base. Cut plants are wilted or simply dead.

Effective weed control avoids or reduces black cutworm infestations. Controlling low lying, densely growing weeds such as chickweed, deadnettle, and mustards reduces the areas for egg-laying by female moths. If weeds or a cover crop can be killed a week or two before crop emergence, most cutworm larvae will starve. Over the last few years, there have been cutworm problems in corn, beans, and sugar beets, perhaps because of earlier planting or changes in production practices to no-till. Also, there has been a large increase in Roundup Ready crops, so fields may be weedier early in the season.

Scout for cutworms at seedling emergence. Look for wilted or cut plants, and dig around the base of nearby seedlings to find the larvae. If you can’t find a cutworm, move down the row to the next apparently undamaged plant. Larvae feed at night and hide during the day, so the best time to look for larvae is in the morning.

A general threshold is five percent or more of plants showing cutworm damage. Rescue (foliar) insecticide treatments are the preferred way to manage cutworm because few fields will have a significant problem. Insecticides are most effective if sprayed in the evening when the cutworms are active. In crops like corn, beans and alfalfa, pyrethroids such as Ambush, Baythroid, Mustang, Pounce and Warrior are particularly effective against cutworms (check labels for specific crop registrations and rates). For sugar beets, options include Asana, Declare, Lorsban and Mustang.

For good pictures of black cutworm damage in corn, visit: http://www.ent.iastate.edu/imagegal/plantpath/corn/bcutworm/