

Cucurbits

Cutworms

Scientific Names:

Roughskinned cutworm: *Athetis mindara* and other species in the Noctuid family



(Reviewed 12/09, updated 12/09)

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DESCRIPTION OF THE PESTS

Cutworm adults are medium-sized moths, usually brown or gray, about 1 inch long. Mature larvae are robust, nearly 1.5 inches (3.7 cm) long, and their skin is either mottled brown or gray. Larvae tend to curl up into a [C-shape](#) when they are disturbed.

DAMAGE

Young plants are often damaged or killed by cutworms. These caterpillars usually hide in the soil under debris, or under clods during the day. At night they come out to feed, cutting off the plants at or just below the crown level. Several different species of cutworms may cause damage. The roughskinned cutworm is a serious pest of cantaloupes in certain localities, causing scarring to the underside of melons.

MANAGEMENT

Management of cutworm populations begins with the destruction of plant residues from previous crops and avoiding planting in fields that are coming out of pasture. At least 2 weeks before planting, eliminate weeds both within and around the field. Irrigate to speed germination and emergence of the crop. Often cutworm infestations occur in localized areas and spot treatments are adequate.

Organically Acceptable Methods

Cultural controls such as weed management by cultivation, irrigation management, and field sanitation are acceptable to use for an organically grown crop.

Monitoring and Treatment Decisions

Monitor for cutworm injury by walking through the field when plants are in the seedling stage, especially after first weeding and thinning, which concentrates the cutworms on the remaining stand. Pay particular attention to cucurbit crops that follow barley or corn, especially in fields with heavy soils. If an infestation is localized and only a few plants are damaged, taking the loss or replanting may be sensible. Frequently, damage is most serious at the edges of the field, but stand loss can occur in a clumped pattern throughout the field; spot treatments may be effective in these situations. If a large area is infested, treat with insecticides when problems are first observed before stands are severely reduced or fruit is damaged.

Common name (trade name)	Amount/Acre	R.E.I.+ (hours)	P.H.I.+ (days)
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The following materials are listed in order of usefulness in an IPM program, taking into account efficacy, pesticide registrations, information related to [natural enemies and honey bees](#), and environmental impact. Not all registered pesticides are listed. Always read label of product being used.

A. INDOXACARB (Avaunt)	2.5–3.5 oz	12	3
MODE OF ACTION GROUP NUMBER ¹ : 22			
B. DIAZINON* (Diazinon) 50W	4–8 lb	72	3
(Diazinon) AG500	2–4 qt	72	3
MODE OF ACTION GROUP NUMBER ¹ : 1B			
COMMENTS: Only labeled for melons. Broadcast just before planting. Work into the soil immediately, 2–3 inches for surface cutworms, 3–6 inches for subterranean cutworms.			
C. CARBARYL (Sevin) 5% bait	20 lb	12	see label
MODE OF ACTION GROUP NUMBER ¹ : 1A			
COMMENTS: Labeled for use on cucumbers, squash, and melons. Use suitable ground or aircraft equipment that provides good distribution.			
D. ESFENVALERATE* (Asana XL)	5.8–9.6 oz	12	3
MODE OF ACTION GROUP NUMBER ¹ : 3			
COMMENTS: Not labeled for use on casaba, crenshaw, or Persian melons. Apply as a seedling spray; repeat as necessary to maintain control. Do not exceed 0.25 lb a.i./acre/season.			
E. METHOMYL* (Lannate) 90 SP	0.5–1 lb	48	see comments
(Lannate) LV	1.5–3 pt	48	see comments
MODE OF ACTION GROUP NUMBER ¹ : 1A			
COMMENTS: Labeled for use on cucumbers, melons, and summer squash. Highly toxic to bees. PHI is 1 day when 0.5 lb or less for 90SP or 1.5 pt or less for LV formulations is used; when more than 0.5 lb (90SP) or 1.5 pt (LV) is used, PHI is 3 days.			

+ Restricted entry interval (R.E.I.) is the number of hours (unless otherwise noted) from treatment until the treated area can be safely entered without protective clothing. Preharvest interval (P.H.I.) is the number of days from treatment to harvest. In some cases the REI exceeds the PHI. The longer of two intervals is the minimum time that must elapse before harvest.

¹ Rotate chemicals with a different mode-of-action Group number, and do not use products with the same mode-of-action Group number more than twice per season to help prevent the development of resistance. For example, the organophosphates have a Group number of 1B; chemicals with a 1B Group number should be alternated with chemicals that have a Group number other than 1B. Mode of action Group numbers are assigned by IRAC (Insecticide Resistance Action Committee). For additional information, see their Web site at <http://www.irc-online.org/>.

* Permit required from county agricultural commissioner for purchase or use.

PRECAUTIONS

PUBLICATION



UC IPM Pest Management Guidelines: Cucurbits

UC ANR Publication 3445

Insects and Mites

E. T. Natwick, UC Cooperative Extension, Imperial County

J. J. Stapleton, UC IPM Program, Kearney Agricultural Center, Parlier

C. S. Stoddard, UC Cooperative Extension, Merced & Madera counties

Acknowledgment for contributions to Insects and Mites:

R. L. Coviello, UC Cooperative Extension, Fresno County

L. D. Godfrey, Entomology, UC Davis

C. B. Fouche, UC Cooperative Extension, San Joaquin County

C. G. Summers, Entomology, UC Davis/Kearney Agricultural Center, Parlier

J. B. LeBoeuf, AgriData Sensing, Inc., Fresno

M. Murray, UC Cooperative Extension, Colusa/Glenn counties

<http://www.ipm.ucdavis.edu/PMG/r116300211.html>