

# Cucurbits

## Grasshoppers

Scientific Name: *Melanoplus* spp.

(Reviewed 12/09, updated 12/09)

In this Guideline:

- [Description of the pests](#)
- [Damage](#)
- [Management](#)
- [Publication](#)



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### DESCRIPTION OF THE PEST

[Grasshoppers](#) may occasionally attack cucurbit crops, particularly if planted adjacent to foothill rangeland. They normally migrate from the range into cultivated areas as vegetation on the rangeland dries up.

### DAMAGE

Grasshoppers destroy leaf tissue and, if present in extremely large numbers, will consume the entire plant. They may also chew on fruit, scarring the surface and netting of cantaloupes.

### MANAGEMENT

Keep fields and surrounding areas weed-free. Grasshopper problems usually occur when a migrating population from a foothill range area is attracted to the crop. Plant a trap crop between the crop and the direction that the grasshoppers might migrate from. The trap crop can be treated with cryolite. Treat the crop if feeding damage warrants control action.

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. CARBARYL

5% bait	20 lb	12	see label
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MODE OF ACTION GROUP NUMBER<sup>1</sup>: 1A

COMMENTS: Apple pumice baits work better for crickets and grasshoppers than bran baits. Baits lose their attractiveness as they dry out. Apply in early evening to avoid drying out too soon from sun exposure. Use suitable ground or aircraft equipment that provides good distribution. Repeat application probably necessary.

... Or ...

(Sevin) XLR Plus*	1–2 pt	12	3
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COMMENTS: Observe plant response precautions listed on the label. Avoid excessive applications. Be certain spray volumes are appropriate to assure adequate coverage. Use low rate for nymphs and high rate for adults.

**B. ESFENVALERATE\***

(Asana XL)

5.8–9.6 oz

12

3

MODE OF ACTION GROUP NUMBER<sup>1</sup>: 3

COMMENTS: Repeat as necessary to maintain control. Do not exceed 0.25 lb a.i./acre/season.

**C. MALATHION**

Label rates

see label

see label

MODE OF ACTION GROUP NUMBER<sup>1</sup>: 1B

- + 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.
- <sup>1</sup> 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.

**PUBLICATION***UC IPM Pest Management Guidelines: Cucurbits*

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Insects and Mites

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<http://www.ipm.ucdavis.edu/PMG/r116302011.html>