

Squash

Cucumber Beetles

Cucumber beetles damage plants through direct feeding and transmission of bacterial wilt, squash mosaic virus, and cucurbit yellow vine decline (CYVD) to plants. Plants exhibiting symptoms, such as, wilting and stunting should be removed from the planting area. Seed treatments for direct seeded crops may be used. Soil drenches applied during planting may protect young plants from adult feeding. Contact insecticides should be applied in the evening when flowers are closed and bees are not foraging, which will reduce direct exposure to insecticide residues.

Weekly scouting is sufficient to track beetle populations and inform spray decisions. Economic damage can occur on fruit from feeding by both adult beetles and larvae. Beetles found in flowers do not pose a risk to the plant but as flowering decreases, rind feeding may increase and thresholds may need to be lowered.

From seedling to the 4-leaf stage

Treat when at 0.5 beetle per plant for cucumbers and cantaloupes/muskmelons, or 1 beetles per plant for pumpkin, squash and watermelon

From 4-leaf stage to harvest

Treat when at 1 beetle per plant for cucumbers and cantaloupes/muskmelons, or 5 beetles per plant for pumpkin, squash and watermelon

Non-Pesticide

Non-Pesticide Options

Yellow sticky traps are attractive to cucumber beetles and can detect mass emergence during periods of heavy beetle activity. Excluding cucumber beetles with row cover can prevent feeding on vulnerable young plants in smaller plantings or by targeting susceptible varieties. While row covers can be used to protect young plants, they need to be opened at flowering to allow access to pollinators. Trap crops, such as blue hubbard squash, can be planted before and adjacent to the main crop to draw beetles out of the cash crop.

Pesticide

Admire Pro | imidacloprid | 7.0-10.5 fl. oz. per acre.

See label for various soil application methods. Should never be used in combination with insecticide seed treatments.

REI: 12-hour. PHI: 21-day. IRAC 04A .

Asana XL | esfenvalerate | 5.8-9.6 fl. oz. per acre. REI: 12-hour. PHI: 3-day. IRAC 03A . RUP.

Assail 30SG | acetamiprid | 2.5-5.3 oz. per acre.

Use 30SG formulations at 2.5-5.3 oz. per acre. Use 70WP formulations at 1.1-2.3 oz. per acre.

REI: 12-hour. PHI: 0-day. IRAC 04A .

Azera | azadirachtin , pyrethrins | 48 fl. oz. per acre. REI: 12-hour. PHI: 0-day. IRAC UN . IRAC 03A . OMRI-listed.

Baythroid XL | beta-cyfluthrin | 2.4-4.8 fl. oz. per acre. REI: 12-hour. PHI: 0-day. IRAC 03A . RUP.

Belay | clothianidin |

Soil applications: 9-12 fl. oz. per acre.

Foliar applications: 3-4 fl. oz. per acre, and stop once 4th true leaf on main stem has unfolded.

REI: 12-hour. PHI: 21-day. IRAC 04A .

Brigade 2EC | bifenthrin |

Use 2EC formulations at 2.6-6.4 fl. oz. per acre. Use 10DF, 10WP, or 10WSB formulations at 8-16 oz. per acre.

REI: 12-hour. PHI: 3-day. IRAC 03A . RUP.

Danitol 2.4EC | fenpropathrin | 10.67-16 fl. oz. per acre. REI: 24-hour. PHI: 7-day. IRAC 03A . RUP.

Harvanta | cyclaniliprole | 10.9-16.4 fl. oz. per acre. REI: 4-hour. PHI: 1-day. IRAC 28 .

Mustang Maxx | zeta-cypermethrin | 2.8-4 fl. oz. per acre. REI: 12-hour. PHI: 1-day. IRAC 03A . RUP.

Perm-Up 25DF | permethrin | 6.4-12.8 oz. per acre.

Use 25W, 25WP, and 25DF formulations at 6.4-12.8 oz. per acre. Use 3.2EC formulations at 4-8 fl. oz. per acre. High rate for aphids.

REI: 12-hour. PHI: 0-day. IRAC 03A . RUP.

Seed treatments for insects | various ingredients |

Rates vary by product, and are often multiple premixed ingredients. Seed treatments containing thiamethoxam (FarMore FI400, Cruiser 5FS) offer maximum protection against cucumber beetles and root maggots for about 2 to 3 weeks after seedling emergence. For transplanted crops and direct-seeded plants over 3 weeks old, the concentration of insecticide from seed treatments is no longer strong enough to kill beetles, but can still harm bees due to sublethal doses in the pollen and nectar. Seed treatments should never be used in combination with at-plant soil drenches with flupyradifurone (Sivanto), imidacloprid (Admire or generics), or thiamethoxam (Platinum).

Sevin XLR Plus | carbaryl | 1 qt. per acre.

When applied during hot, humid conditions, carbaryl may cause some phytotoxicity, especially on seedlings and newly set plants. See pollinator precautions.

REI: 12-hour. PHI: 3-day. IRAC 01A .

Warrior II | lambda-cyhalothrin | 1.28-1.92 fl. oz. per acre. REI: 24-hour. PHI: 1-day. IRAC 03A . RUP.

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