

2016 Fruit insecticide registration update

Summary of insecticide and miticide label additions, clarifications and corrections to the 2016 Michigan Fruit Management Guide (E0154).

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The following is a review of insecticide and miticide label changes and restrictions to the [Michigan State University Extension](#) Bulletin E0154, “[2016 Michigan Fruit Management Guide](#).” Agri-chemical labels and regulations can change quickly, so use this information within the context of each compound's legal label.

Insecticide 2016 label additions, clarifications and corrections			
Compound	Label changes/restrictions	Crop	Target pests
Warrior II	Replaces Warrior 1CS label	Pome and stone fruits	Beetles, leafhoppers, Lepidoptera
Magister 1.6SC	New label	Cherries	Mites
Sluggo	New label	Fruit crops	Slug and snail bait
Deadline	New label	Blueberries, caneberries and strawberries	Slug and snail bait
Seduce	New label	Fruit crops	Ant and cutworm bait
Endosulfan	EPA 2015 Phaseout complete	Apples and blueberries	---
Closer	EPA cancelled registration	---	---

New insecticide label information for compounds listed in [2016 E0154](#)

MSU Fruit Management Guide E0154 product numbers are in parenthesis ().

Warrior II (66) (lambda cyhalothrin) is a synthetic pyrethroid insecticide labeled for use on pome and stone fruit crops, and replaces Warrior 1CS with twice the active ingredient per gallon for formulated product. It is labeled for control of a broad spectrum of sucking and chewing pests, including leaf rollers, leafhoppers, plum curculio, scarab beetles and internal feeders such as codling moth and oriental fruit moth. This material is also toxic to mite predators and should be used carefully to prevent mite population buildup. Warrior has a unique microencapsulated formulation called “zeon technology” that protects the foliar residue from UV degradation so as to enhance the compound’s residual activity. Warrior II is restricted to 12.8 ounces per acre per season, with only 10.24 ounces applied post-bloom.

Magister (16) (fenazaquin) is a GCIS miticide METI (Mitochondrial Electron Transport Inhibitor) class that is registered for spider mite control in cherries. Magister is active on mites as a larvo-adulticide by contact and ingestion, also with activity on summer eggs of *Panonychus*. Magister provides up to three to five weeks of residual control, and is harmless on most

beneficials, but having moderate toxicity on honey bees and phytoseiid predacious mites. Magister is limited to a single application per year.

Sluggo (18) (iron phosphate) is a slug and snail bait labeled for use in fruit crops. The bait is ingested by slugs and snails when they travel from their shelter to plants, causing them to cease feeding and become immobile, and they begin to die within three to six days. The bait should be distributed on the soil around fruit trees or bushes to be protected, and remains effective after rain or irrigation. Sluggo is [National Organic Program](#) (NOP) and [Organic Materials Review Institute](#) (OMRI) listed, and is considered generally safe for use around pets and wildlife.

Deadline (36) (metaldahyde) is a slug and snail bait, labeled for use in blueberries, strawberries and caneberries. The bait should be applied to the soil during spring growing season before damage occurs and in periods of damp weather. This product may be harmful to children, wildlife or domestic animals if ingested.

Seduce (19) (spinosad) is a soil-applied insect bait for the control of ants, earwigs and cutworms. It is labeled for use in all pome and stone fruits, grapes, blueberry and caneberry crops. The bait should be distributed on the ground around the crops to be protected and requires re-application after rain or irrigation. Seduce can be effective for up to four weeks, and is NOP and OMRI listed.

Closer (8) (sulfoxaflor). Note that on Nov. 12, 2015, [EPA](#) cancelled the registrations of sulfoxaflor-containing products as required in a Sept. 10, 2015, decision by the Ninth Circuit Court of Appeals. The cancellation affects Transform WG, Closer SC and Seeker insecticide products, which contain sulfoxaflor. It is our understanding that Dow AgroSciences is working with EPA to achieve new registrations, and submitted new labels for consideration to EPA in late 2015. In addition, it is our understanding that several states are now in the process of submitting or developing Section 18 applications for the 2016 use season. According to the terms of the existing stocks provision of the cancellation order, any Transform, Closer or Seeker that have been in the grower's possession since Nov. 12, 2015, may be used according to the previously approved labeling. There is no deadline for this product to be applied by the grower. The product in grower's hands may also be used for any Section 18 Emergency Exemption that may be granted.

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