

2012 Fruit Insecticide Registration Update

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Summary of insecticide/miticide label additions, clarifications and corrections to the 2012 MSU Fruit Management Guide (E-154).

Agri-chemical labels and regulations can change quickly so use this information within the context of each compound's legal label.

Insecticide 2012 label additions, clarifications and corrections:

<u>Compound</u>	<u>Label Changes/Restrictions</u>	<u>Crop</u>	<u>Target pests</u>
Admire Pro	Labeled for foliar and soil use	pome & stone fruits, grape, berry crops	
Beleaf 50SG	Labeled pest addition	apples	1 st gen. codling moth
Dimilin 2L	Label uses	pears, peach, plum	psylla, leafrollers
Endosulfan	EPA Phaseout	2012 for stone fruits and strawberry	
Guthion (Azinphosmethyl)	EPA Phaseout	2012 for pome & stone fruits, blueberry	
Imidan 70W	Label rate change	tart cherry – reduced to 2.125 lb/acre	
Malathion 8F	Label rate change	blueberry – reduced to 1.25 pints/acre	Jap. beetle, fruit flies
Rimon .83EC	Label Expansion	pome & stone fruits, blueberry	leafrollers, fruitworms
Voliam Xpress	New label	pome & stone fruits	broad spectrum

New insecticide label information for compounds listed in 2012 E-154: {MSU Fruit Management Guide E-154 product numbers in ()}

Admire Pro (76) (imidacloprid) is a new “thixotropic gel” formulation of this foliar or soil-applied insecticide, and is registered for use in pome and stone fruits, blueberry, strawberry, grape and cranberry. As a foliar spray it is labeled for control of aphids, leafhoppers, pear psylla, mealybug, phylloxera, scale insects, Japanese beetles, and certain *Rhagoletis* fruit flies. With soil application it is labeled for control of aphids, leafhoppers, mealybug, phylloxera, and the white grub complex. When Admire Pro is soil-applied the soil should be moist and irrigated in with 0.5 to 1 inch of irrigation within 24 hours of treatment, or by chemigation to the root zone. Admire Pro contains 4.6 lbs of active ingredient per gallon of formulation product, and for soil application allows a maximum application of 14 oz per acre per season for blueberry, strawberry, grape and cranberry, and 10.5 oz per acre per season for pome and stone fruit crops. For foliar application the label allows a maximum application of 14 oz per acre per season for pome fruits, blueberry, strawberry, grape and cranberry, and 8.4 oz for stone fruit crops.

Beleaf (87) (flonicamid) belongs to the pyrimidine carboxamide class of insecticides, and is registered for use in pome and stone fruit crops. This compound's anti-feedant activity provides control of aphids and plant bugs. Beleaf also controls first generation codling moth in apples. The maximum yearly amount of Beleaf 50SG that can be applied is 8.4 oz per acre.

Dimilin (98) (diflubenzuron) is an Insect Growth Regulator (IGR) insecticide that acts by disrupting the generation of chitin in the insect exoskeleton. This prevents normal development of the insect larval instars and when in contact with eggs suppressing embryo-genesis. Dimilin has no direct activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Dimilin is registered for use in pears for the control of pear psylla, pear rust mites, leafminers and codling moth. Dimilin is registered for use in stone fruits (excluding cherries) for the control of Oriental fruit moth and leafrollers. Dimilin is restricted for pears to 4 applications and 64 oz per season, and for stone fruits to 2 applications and 32 oz per season, but after petal fall stage.

Endosulfan phaseout: EPA is taking action to end the use of the pesticide endosulfan. A formal Memorandum of Agreement with manufacturers of the agricultural insecticide will result in cancellation and phase-out of all existing endosulfan uses in the United States. A phaseout plan has been developed to allow growers time to develop and test alternative pest management tactics for the pests that endosulfan currently controls. For fruit crops grown in Michigan and the Upper Midwest, the last use deadlines are listed below.

Last grower use	Crops
July 31, 2012	Apricot, plum, annual strawberry, tart cherry
July 31, 2012	Other stone fruits including nectarine, peaches, and sweet cherry
July 31, 2013	Pear
July 31, 2015	Apple, blueberry
July 31, 2016	Perennial/biennial strawberry

Guthion (8) (azinphos-methyl) is no longer labeled for use on peaches, nectarines, plums, caneberries, and cranberries. 2012 is the final year of the EPA Phaseout of Guthion for apples, pears, cherries, and blueberries. The maximum yearly amount of Guthion 50 WP to be applied has been reduced to 3 lbs on apples, 3 lbs on pears, 1.5 lbs on blueberries, and 1.5 lbs on cherries. The Pre-Harvest Interval (PHI) for apple and pear use is 14 days, with a 21-day PHI if the last application is greater than 2 lbs of Guthion 50 WP per acre.

Imidan 70W (9) (phosmet) is an organophosphate insecticide labeled for use in many fruit crops, including tart cherries. New commercial product will include a reduced legal rate of 2.125 lbs/acre for use in tart cherries. Older product that lists the rate of 2.5 lbs/acre can still be legally used.

Malathion 8F (13) (dymethyl dithiophosphate) is an organophosphate insecticide labeled for use in most fruit crops, including blueberry. New commercial product will include a reduced legal rate of 1.25 pints/acre for use in blueberries, with a maximum of 3 applications per year, and a 5 day interval between sprays. Older product that lists the rate of 1.5 – 2.5 pints per acre can still be legally used.

Rimon (72) (novaluron) is an insect growth regulator (IGR) insecticide that acts by disrupting the generation of chitin in the insect exoskeleton. This prevents normal development of the insect larval instars and, when in contact with eggs, suppresses embryogenesis. Rimon has no direct activity on adult

insects but suppresses hatching of eggs laid by treated adults. Rimon is registered for use on pome and stone fruits, and blueberries for the control of codling moth, Oriental fruit moth, leafrollers, fruitworms, pear psylla and certain *Rhagoletis* fruit flies. Rimon is safe on most beneficial insects and has a unique mode of action for resistance management purposes. Rimon 0.83 EC is restricted to 150 oz per acre per season in apples, 96 oz in pears, 90 oz in blueberries, and 150 oz in stone fruit crops.

Voliam Xpress (99) (chlorantraniliprole + lambda-cyhalothrin) is an insecticide that combines two active ingredients as a pre-mix formulated compound. Voliam Xpress is registered for use in pome and stone fruits targeting codling moth, Oriental fruit moth, leafrollers, aphids, *Rhagoletis* fruit flies, leafhoppers, leafminers, psylla, plum curculio, stink bugs, and Scarab beetles. Voliam Xpress holds the combined performance attributes of the chlorantraniliprole and lambda-cyhalothrin chemistries. For the purposes of resistance management, after using Voliam Xpress in a given pest generation, products containing either one of chlorantraniliprole or lambda-cyhalothrin shouldn't be used in the subsequent generation. The maximum yearly amount of Voliam Xpress to be applied is 31 fl oz on pome fruits or stone fruits per season.