

## **2011 New England Tree Fruit Management Guide Revisions**

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The Extension Specialists from New England have finished the revisions for the 2011 New England Tree Fruit Management Guide.

A number of changes were incorporated into the revised guide and are summarized here.

### **Updates to Pesticide Efficacy Tables**

Table 7.1.1 lists the pesticides labeled for apples with efficacy ratings for each pest. This table was updated and a new column was added for stink bugs, and specifically for brown marmorated stink bug (BMSB). The ratings are preliminary and may not apply equally to all stink bug species. There are no documented reports of BMSB injury to crops in New England as of 2010, but it has become an important pest of tree fruit and other crops in the mid-Atlantic states. BMSB ratings are based on laboratory studies conducted at the USDA-ARS Appalachian Fruit Research Station. These ratings may change after pesticide field trials are conducted in 2011. Table 7.1.4, the efficacy chart for pesticides labeled for stone fruits, was also revised to include stink bugs.

### **Changes to Existing Pesticide Labels**

#### ***Insecticides:***

##### **Guthion (azinphosmethyl)**

The only remaining tree fruit uses include apples, pears and cherries, which will be phased out by September 30, 2012. The current Guthion Solupak 50% label includes maximum use rates for years 2008-2012. These rates change depending on year and crop. For 2011, the maximum use rate is 3.0 lbs. formulation per acre per year for apples; 3.0 lbs. formulation per acre per year for pears; and 1.5 lbs. formulation per acre per year for cherries. The REI is 14 days for apples and pears and 15 days for cherries. The preharvest interval (PHI) is 14 or 21 days for apples and pears (depending on rate) and 15 days for cherries. "Pick-Your Own" harvesting is prohibited on pears and cherries if Guthion is used. On apples, the REI for anyone who is not covered by the Worker Protection Standard, such as members of the general public involved in "Pick Your Own" operations, varies from 33 to 44 days, depending on rate used. There are also restrictions regarding spray drift and buffer zones for water bodies. Be sure to read this label very carefully!

##### **Lorsban (chlorpyrifos)**

The labels for the three Lorsban formulations (Lorsban 4-E, Lorsban Advanced and Lorsban 75WG) are now the same regarding use on apples. There has been confusion over these labels in the last few years. Only one application of any chlorpyrifos product can be made per year on apples. The application can be either a prebloom dormant/delayed dormant spray to the canopy or the trunk or a post-bloom application to the lower 4 feet of the trunk. The Restricted Entry Interval (REI) for all products is 4 days. Note that the Lorsban 50W is no longer available.

There are various generic chlorpyrifos products, e.g. Whirlwind, Warhawk, Govern, and Nufos. Be sure to read each label and follow carefully as their information may be different than Lorsban labels.

Lorsban and the chlorpyrifos generic products can also be used on other tree fruits. Check each label carefully for specific use restrictions for peach, nectarine, pear, plum, prune, and cherry.

### Thionex (endosulfan)

Thionex and generic endosulfan products are being phased out over the next few years. Different crops are removed from the label each year from now through 2016. Here is the schedule for fruit crops.

Group	Last Day of Grower Use	Fruit Crops in Each Group
A	July 31, 2012	apricots, tart cherries, plums, prunes, annual strawberries
B	July 31, 2012	remainder of stone fruits (peaches, nectarines, sweet cherries)
C	July 31, 2013	pears
D	Florida crops only	
E	July 31, 2015	apples, blueberries
F	July 31, 2016	strawberries - perennial/biennial

Thionex and other endosulfan insecticides produced after December, 2010 do not include crops listed in Group A (apricots, tart cherries, plums, prunes, and annual strawberries). However, old product with these crops on the label may be used until July 31, 2012, according to those label directions.

In addition, there have been significant changes to Restricted Entry Intervals (REI) and Preharvest Intervals (PHI) for Thionex and generic endosulfan.

Product	Crop	REI	PHI
Thionex 50W	Apple	20 days	21 days
	Nectarines/Peaches	20 days	21 or 30 days
	Cherries, sweet	20 days	21 days
	Pears	20 days	20 days
	Strawberries (perennial/biennial)	12 days	12 days
	Blueberries	22 or 15 days	Bud Swell
Thionex 3EC	Apple	7 days	21 days
	Nectarines/Peaches	7 days	21 or 30 days
	Cherries, sweet	7 days	21 days
	Pears	7 days	7 days
	Strawberries(perennial/biennial)	7 days	7 days
	Blueberries	6 or 10 days	Bud Swell

## *Fungicides*

**Orbit (propiconazole)** was replaced by **Tilt** which has the same active ingredient.

**Rubigan EC (fenarimol)** was replaced with **Vintage SC** which has the same active ingredient.

### **New (or Reinstated) Pesticide Labels**

In some cases, pesticides listed below as ‘New’ or ‘Expanded Label’ may have been around for a year or so but they were incorporated into the guide for the first time.

## *Insecticides & Miticides:*

**Belay (clothianidin), Valent**, a Group 4a insecticide (neonicotinoid), has a supplemental label which includes pome fruit and peach, but no other stone fruit crops. It is for foliar post-bloom use on a wide variety of pests of peach and pome fruit. In recent laboratory tests conducted at the USDA-ARS Appalachian Fruit Research Station, it ranked fairly high among the neonicotinoid group as a control for the brown marmorated stink bug. Belay must not be applied during bloom or if bees are actively foraging. The Preharvest Interval (PHI) is 21 days for peach and 7 days for pome fruit. The Restricted Entry Interval (REI) is 12 hours.

**Movento (spirotetramat), Bayer**, is a foliar insecticide labeled for use on pome fruits, stone fruits and grapes. This is not a new product, but registration was recently reinstated.

**Voliam Xpress (lambda-cyhalothrin + chlorantraniliprole), Syngenta**, is labeled for use on both pome and stone fruits. It is a combined formulation of lambda-cyhalothrin (the a.i. found in Warrior) and chlorantraniliprole (the a.i. found in Altacor). The long list of pests on the label includes most of those found on the Warrior and Altacor labels.

## *Herbicides*

**Sandea (halosulfuron-methyl), Gowan**- There is a supplemental label for apples and highbush blueberries. Sandea has both pre- and post-emergent activity on broadleaf weeds and nutsedge. Do not apply to apple trees established less than one year.

**Venue (pyraflufen ethyl), Nichino**– A nonselective contact herbicide for post-emergence control of broadleaf weeds in pome and stone fruits. The label restricts use on bearing trees to the postharvest to pre-bloom season only. It can be used full season for nonbearing fruit trees only.

**Treelix (saflufenacil), BASF** – A postemergence directed broadleaf herbicide labeled for apple and pear only. An adjuvant system consisting of MSO (Methylated Seed Oil) PLUS AMS (Ammonium Sulfate) or UAN (Urea Ammonium Nitrate) must be used with Treelix for best results. Do not use year of planting.

## Expanded labels

### *Insecticides/Miticides*

**Danitol (fenpropathrin)** – In addition to pome fruits, the label has been expanded to include a number of pests of stone fruits, bushberries (e.g. blueberry, gooseberry, currant) and caneberries (blackberry, raspberry, etc.).

**Zeal (etoxazole)** – In addition to pome fruits, the label for Zeal miticide now includes all stone fruits.

### *Fungicides*

**Quintec (quinoxifen)** was previously labeled for powdery mildew on cherries and grapes. The supplemental label now includes the remainder of stone fruits including apricot, plum, nectarine, peach, and plum.

## No Longer Available for Tree Fruit Crops

**Spintor (spinosad)** is no longer available and has been replaced with **Delegate (spinetoram)**. **Entrust**, the organic version of spinosad, is still available.

**Devrinol (napropamide)**– This herbicide is no longer labeled for use on pome fruits or stone fruits.

**Clutch (clothianidin)** is no longer marketed. It has been replaced by Belay (see above).