

Fruit IPM Report 5-7-2015

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Peach

Thrips including western flower thrips: Thrips are being found in southern peach and nectarine blocks. This is common in years when we have warm dry weather during and shortly after bloom. Delegate is the best material to use, followed by Lannate. Entrust can also be used but will be more expensive. Both Delegate and Lannate will control OFM, but neither does a good job on PC. Closer is labeled for thrips suppression, but its use is discouraged if high thrips populations are present.

Oriental Fruit Moth (OFM): As of 5/7 we have accumulated 229 DD in southern counties. In northern counties the biofix was set for 4/28. We have had 140 DD accumulate since then. The first of two applications for OFM should be going on now in southern counties, and about 5/10-12 in northern counties (using Snyder Farm as our degree day point).

Plum Curculio (PC): PC adults usually begin egg laying once the fruit is out of the shuck. Preferred materials that offer PC control now are Actara, Avaunt, and Imidan. If using high rates of a neonicotinoid (i.e. Actara, Belay, Assail), be aware that there is a synergistic effect when used in tank mixes with DMI materials (i.e. Rally) with regard to bee toxicity. If pyrethroids are being used, then high rates are advisable, since low rates often do not control this insect, especially in hot weather. Where PC is a problem, growers should rotate away from pyrethroid insecticides if possible. Avaunt or Imidan are the best choices at this time. Actara and Belay will not control OFM.

Tarnished Plant Bugs and Other Catfacing Insects: This is the other key insect complex at this time of year. Tarnished plant bugs will become more of an issue as temperatures warm and mowing and other ground cover activities become more common. General spray timing at this time of year should still be targeted at **Oriental Fruit Moth and/or Plum Curculio (PC)**. Most materials, except the diamides (Altacor, Belt, Turismo) used for these pests will have some efficacy for plant bugs.

Bacterial Spot: Copper formulations should be used starting now to suppress bacterial spot. Generally we recommend starting at 0.5 ozs metallic copper and gradually lowering the rate as the season progresses. The rate applied will depend on the formulation. Dr. Lalancette published a chart listing common copper formulations and rates for peach and nectarine applications. ([Copper Bactericides for Peach Bacterial Spot Management](#)) Avoid combining copper with captan especially if it has been overcast for several days. Also avoid acidic spray solutions when applying copper.

Peach Scab: In addition to Rusty Spot and Bacterial Spot, peach scab requires protective applications at this time. Gem, Topsin-M and Quadris Top are the best materials for blocks that had scab last year, with Quadris Top being the best of the three. Both Gem and Topsin should be used at the high rate to deactivate overwintering lesions on the wood. Quadris Top can be used in within the recommended rate range. Quadris Top contains Azoxystrobin which is phytotoxic to many apple varieties. Phytotoxic residues can remain in the tank for long periods after an application is made, even if a tank cleaner is used. **Do Not use Quadris Top in the same sprayer used for apples.**

Apple

Apple Scab, Powdery Mildew (PM) and Cedar Apple Rust (CAR): Overwintering ascospores are now about 80% mature (per [NEWA](#)) in southern counties. Additional wetting periods late in the week and over the weekend can cause severe infection periods if the trees are not protected.

Fire Blight: Blossom sprays using antibiotics should be applied anytime temperatures are 65°F or above and the relative

humidity is 60% or above even where most bloom is over. In southern counties, blocks of particular concern are Rome, Gala and other cultivars that have a propensity to produce “rat-tail” blooms after petal fall. Refer to the production guide for recommended materials and rates. Fire Blight is not modeled in the same way as scab; Heat units, tree phenology, dews, leaf wetness, cultivar, rootstock, and short or severe storms and/or hail all play a roll. Check the [NEWA](#) site for local predictions. Fire blight activity has the potential for being quite severe by the end of the week. Some researchers are suggesting strep. be included in the petal fall spray, especially if the variety has a propensity for extra late blooms and predictions are favorable for infection.

Plum Curculio (PC): See peach section above.

European Apple Sawfly (EAS): EAS adults feed on pollen during bloom and lay eggs on fruitlets after petal fall. Control is usually not difficult except in years where bloom is prolonged or where varietal mixes make it difficult to make timely petal fall applications. Effective materials include Avaunt, Imidan, Assail, and Calypso. Pyrethroids are also effective but are not recommended on apples because they can flare mite populations. The key to EAS control is timely petal fall insecticide applications. Do not apply insecticides until all petals are off.

Blueberry

Cranberry Weevil (CBW): Cranberry weevil activity has decreased over the past week. However, we are still finding CBW at very low numbers. Bloom is now occurring and bees are present in the fields so no treatment applications can be made.

Plum Curculio (PC): Our first capture of adult PC was on Monday April 20th. We continue to find adults in low numbers in Burlington and Atlantic counties. Maximum count was 0.4 adult PC per site. There are no chemical controls targeting the adult PC during bloom.

Leps. and other larvae: One sample was seen in Atlantic county with the presence of cutworm.

Insect Counts April 25 to May 1, 2015	CBW	PC
Max average per bush	5.2	0.4
Min average per bush	0.0	0.0
% positive sites	55.6	13.0
% of sites above threshold (5 CBW/bush)	1.59	n/a

Tree Fruit Scouting Calendar Southern Counties

The following table is intended as an aid for orchard scouting. It should **not** be used to time pesticide applications. Median dates for pest events and crop phenology are displayed. These dates are compiled from observations made since 1995 in Gloucester County. Events in northern New Jersey should occur 7-10 days later.

Pest Event or Growth Stage	Approximate Date	2015 Observed Date
1/4" Green Tip Red Delicious	March 31 +/- 13 Days	April 14
Tight Cluster Red Delicious	April 9 +/- 13 Days	April 19
Oriental Fruit Moth Biofix	April 9 +/- 13 Days	April 20
Pink Peach (Redhaven)	April 4 +/- 15 Days	April 19
Pink Apple (Red Delicious)	April 14 +/- 12 Days	April 22
Full Bloom Peach (Redhaven)	April 9 +/- 14 Days	April 27
Green Peach Aphid Observed	April 16 +/- 16 Days	Not yet observed

Full Bloom Apple (Red Delicious)	April 22 +/- 11 Days	April 30
Petal Fall (Redhaven)	April 22 +/- 10 Days	May 4
Petal Fall (Red Delicious)	April 27 +/- 14 Days	Not yet observed
Shuck Split (Redhaven)	April 30 +/- 11 Days	Not yet observed
Tufted Apple Bud Moth Biofix	May 4 +/- 10 Days	Not yet observed
First PC Oviposition Scars Observed	May 3 +/- 18 Days	Not yet observed
Codling Moth Biofix	April 27 +/- 13 Days	Not yet observed

Tree Fruit Trap Counts – Southern Counties

Weekend	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM-P	LPTB	PTB
4/18	0	-	-	-	0	-	0	-	-	-
4/25	23	-	-	-	5	-	0	-	-	-
5/2	8	-	-	-	9	-	0	-	-	-

Tree Fruit Trap Counts – Northern Counties

Weekend	STLM	TABM-A	CM	AM	OFM-A	DWB	OBLR	OFM-P	TABM-P	LPTB	PTB
4/18	0	-	-	-	0	-		0	-	-	-
4/25	14	-	-	-	0	-	-	0	-	-	-
5/2	36	-	-	-	0	-	-	0.6	-	-	-