

## Fruit IPM 4-15-2015

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### Peach:

**Brown Rot:** Blossom infections from the brown rot fungus can occur whenever pistils are exposed and a favorable climate exists. Infection can occur during any wetting period when temperatures are between 41 and 86°F. However *optimum conditions* for infection occur with **wetting and temperatures in the mid 70's**. During long wetting periods (several days or more) blossoms can be infected regardless of temperature. Generally infections that occur when conditions are sub optimal are less severe. Blossoms and fruitlets will remain susceptible until the pistil desiccates (sometime between petal fall and shuck split).

**Oriental Fruit Moth:** A biofix point for OFM has not been set in commercial orchards in the southern region as of yet. The first insecticides for first generation Oriental Fruit Moth control should be applied at 150-175 degree days after biofix. This timing generally coincides with petal fall in peaches. The first captures usually occur in April as the bloom is opening, so a biofix is not far off.

**Green Peach Aphid:** GPA colonies begin forming sometime during bloom. Examine trees for the presence of colonies from pink to shuck split. Count the number of colonies on ten trees and use a treatment threshold of 2 colonies/tree at petal fall for peach, and 1 colony/tree for nectarine. The best way to scout for aphids during bloom is with a [beating tray](#). See the [2015 NJ Commercial Tree Fruit Production Guide](#) for recommended materials and rates.

### Pear:

**Pear Psylla:** If using Esteem or Centaur for psylla control, make one application delayed dormant through popcorn, or two applications delayed dormant through petal fall. In lieu of oil, Surround may also be applied starting at swollen bud. We are past that stage now but additional applications made at green cluster and petal fall will help suppress [egg](#) laying. If using oil, apply a second application combined with a pyrethroid at green cluster. See the [Scaffolds article by Peter Jentsch](#) at Cornell for a more detailed control discussion.

**Pear Diseases:** Include effective materials such as Ziram and EBDC formulations for [Pear Scab](#) beginning at the cluster bud stage. See the NJ Commercial Tree Fruit Production Guide for materials and rates.

### Apple:

**Apple Scab:** Orchards that had scab last year should start a scab control program using very effective materials at ½" green. Scab, powdery mildew, and cedar apple rust are diseases of concern starting at tight cluster. Powdery mildew is more prevalent in years with dry weather and high humidity. Cedar apple rust infections can occur anytime between pink and 3<sup>rd</sup> cover and favor warm rains. Over the year Rally (DMI) has been the standard scab, mildew and rust material, especially when combined with an EBDC such as Manzate. In recent years, Scab and mildew resistance to DMI fungicides (FRAC Group 3) has been noted in the Hudson Valley and other regions, and scab resistance to Qol fungicides (FRAC group 11) has been confirmed in one New Jersey Orchard in a northern county. Manage resistance by rotating DMI materials with different chemistries. See table below and the NJ Commercial Tree Fruit Production Guide for more information

**Remember: Do not use Captan with oil or within 7 to 10 days of an oil application. Do not apply Merivon with EC formulations or crop oils. Do not tank mix Fontellis with Captan.**

**Classes of Apple Fungicides At Risk for Development of Resistance** (Yoder, 2014 Mid Atlantic Fruit & Vegetable Conference. See <http://shaponline.org/wp-content/uploads/2014/02/Fungicide-Resistance-Management.pdf>)

FRAC Chemical Class	Compound	Trade Name(s)
Strobilurin (Qol) (Group 11)	kresoxim-methyl trifloxystrobin pyraclostrobin + boscalid	Sovran Flint Pristine

Carboximide (SDHI) (Group 7)	boscalid + pyraclostrobin (not a carboximide) penthiopyrad fluopyram + trifloxystrobin fluopyram + pyrimethanil fluxapyroxad + pyraclostrobin	Pristine Fontelis Luna Sensation Luna Tranquility Merivon
Guanidine	dodine	Syllit, Cyprex
Sterol inhibitors (SI) (Group 3)	myclobutanil triflumizole fenbuconazole difenoconazole+ cyprodinil flutriafol	Rally (Nova) Procure Indar Inspire (Super) Topguard
Anilinopyrimidine (AP) (Group 9)	Cyprodinil pyrimethanil cyprodinil + difenoconazole	Vanguard Scala, Penbotec Inspire (Super)
Group 29	fluazinam	Omega

**Rosy Apple Aphid: It's too late for Lorsban or IGR's since we are past 1/2" green.** Vydate @ 2.5-3 pt/A, Assail, Actara, and Calypso may be applied up to prepink, however pollinator protections as displayed in the [new pollinator protection box](#) on the label should be adhered to. If a pre-bloom application cannot be made monitor for colonies during bloom and use a treatment threshold of 1 colony/tree at petal fall. Systemic materials such as Vydate or neonicotinoids are best used at this timing, but remember Vydate will cause thinning. Check with your beekeeper before using any of these materials.

**European Red Mite; San Jose Scale:** Oil applications for mite suppression and scale control should start at 1/4" green. Apply 4-6 gals oil/acre at 1/4" green to tight cluster; 2-3 gals/acre at tight cluster to pink. An additional oil application at 1-1.5 gals /ac may be made at pink (optional). Oil should not be applied if temperatures are expected to dip into the mid 30's.

### Blueberry:

**Cranberry Weevil:** Our first catch of adult cranberry weevil (CBW) was on April 7<sup>th</sup>, for Burlington and Atlantic counties. Colder weather moved in after the first catch and CBW activity slowed down towards the end of the week. However, after a couple of nice days over the weekend, CBW adult activity has increased.

Cranberry Weevil Summary April 6 to April 13, 2015	
Max average per bush	12.0
Min average per bush	0.0
% positive sites	37.7
% of sites above threshold (5 CBW/bush)	8.3

Currently, 8.3% sites are above the CBW threshold of 5 CBW/bush. Samples with adult activity above threshold level are monitored on edge rows and at least 6 rows into the field to determine if border sprays or full field sprays are necessary. Of the sites above threshold levels there was an average of 7.8 CBW/bush on the edge rows and 0.3 CBW/bush 6 rows into the field. Having levels below threshold in the inner field allows Growers to do border sprays for CBW compared to spraying the entire field.

### Scouting Calendar – Tree Fruit

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 over the past 5-10 years in Gloucester County. Events in northern New Jersey should occur 7-10 days later.

Pest Event or Growth Stage	Approximate Date	2015 Observed Date
Bud Swell (Redhaven)	March 23 +/- 15 Days	April 14
1/4" Green Tip Red Delicious	March 31 +/- 13 Days	April 7
Pink Peach (Redhaven)	April 4 +/- 15 Days	Not yet observed
Tight Cluster Red Delicious	April 9 +/- 13 Days	Not yet observed
Oriental Fruit Moth Biofix	April 9 +/- 13 Days	Not yet observed
Full Bloom Peach (Redhaven)	April 9 +/- 14 days	Not yet observed