

2014 Fruit Report for New Hampshire

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Weather and crop situation:

Winter had lots of snow and relatively cold temperatures, but no super-cold dates. Snow melted late, so spring was late. Summer was relatively wet, and after mid-July, it was cooler than usual. Apple bloom was variable and light, with many king blossoms dead on many varieties. Bill Lord and others suspect late fall and winter weather pattern affected bloom survival/vigor. The peach crop was relatively good... restricted to the better sites (frosted out elsewhere). Strawberries: good crop. Cherries: good crop, and fewer problems with brown rot and rain cracking than last year. Blueberries: relatively good crop, quite variable bush to bush. Mummyberry problems were common. Hail injury to apples was 0.39% this year, well below the 25 year average of 3.23%. In 2013 we saw a lot of fruit russet and frost patch on apples and pears, but there was little this year.

Fruit Pest Situation this Year

The incidence of pest injury on apples at harvest time was 2.76% in 2014. That's below the 25 year average of 5.29%, and well below the pre-IPM incidence of 10 to 12%. The incidence of apple scab [caused by *Venturia inaequalis*] on fruit at harvest was 1.22% this year, with most coming from sites with spray application or calibration problems. Bitter rot was relatively scarce this year. The incidence of flyspeck and sooty blotch were well below the 25-year average. We had a relatively low number of hours of leaf wetness after petal fall, so this result was expected.

Fireblight surprised us in several Hillsborough county apple orchards. Some blocks had many trees with multiple hits. The symptoms appeared Jun 4-10, and fireblight strikes were easy to find in Rockingham, Hillsborough, Merrimack and southern Strafford counties. It appears that some of our growers are not using (or not using properly) the fireblight prediction tools.

Bill Lord reported seeing a lot of **cyclamen mite** [*Phytonemus pallidus* (Banks)] injury on new strawberry plantings this year. We assume that most of these infestations arise at the nursery.

Several blueberry growers reported significant injury this year from **fruitworms**, either cherry fruitworm [*Grapholita packardii*] or cranberry fruitworm [*Acrobasis vaccinii*]. Usually we see little evidence from these caterpillars. Mummyberry (caused by *Monilinia vaccinii-corymbosi*) was moderate to severe in many blueberry plantings this year. Blue-ray and Patriot were heavily hit on some sites, but other varieties were hit as well.

Spotted wing drosophila (*Drosophila suzukii*) populations were significantly lower this year than last year. Although the first adult trapped was at about the same date as in 2012 and 2013, the population built very slowly, compared to 2012 & 13. As usual, the lakes region, Sullivan county, and North country had much lower SWD populations than the southeast.

New/Unusual:

One apple grower in the Connecticut river valley reported that he regularly gets some fruit feeding on Zestar and Honeycrisp apples by rose chafers, *Macrodactylus subspinosus* (Fab). I presume this is late

June or early July. This was a bit unusual to me.

We are seeing increasing frequency of oblique-banded leafroller [*Choristoneura rosaceana* (Harris)] damage. For many years it was either not visible, or at extremely low levels.

Not new, but only recently noticed: when I compare the incidence of fruit “injury” from white apple leafhoppers and mites, in my annual statewide apple evaluations, there has been a major shift. The average incidence of these from 2005 through 2014 is ten times lower than the incidence from 1980 through 1989. Possible causes I’ve identified: 1) release & establishment of predator mites (1999-2005); 2) less reliance on spraying predator mite-toxic pesticides 3) smaller tree sizes.

New IPM publications this year:

Eaton, A. T. and George Hamilton. Managing Squash Vine Borer Problems in New Hampshire. 6pp. [Aug 6, 2014] UNH Cooperative Extension.
http://extension.unh.edu/resources/files/Resource004198_Rep6024.pdf

I know. Only a few of you deal with vegetable pests. I couldn’t resist sticking it in! -Alan

Eaton, A. T. and George Hamilton. Peach Tree Borers in New Hampshire. 7pp [Oct 20, 2014] UNH Cooperative Extension.
http://extension.unh.edu/resources/files/Resource004332_Rep6190.pdf

New Air Blast Sprayer Calibration Videos: <http://extension.unh.edu/Training-Videos>

Prep instructions for farmers/growers wanting to calibrate an air blast sprayer.

1) Pre-Calibration Instructions 2) Air blast sprayer calibration 3) Why calibrating your air blast sprayer is important, from the educator perspective 4) Why calibrating your air blast sprayer is important, from the grower perspective

We are in the process of developing following videos:

1) The first video demonstrates the right sized sprayer for the job.
2) The second video demonstrates: a) How to adjust the air deflectors on a radial air blast sprayer b) How to determine which nozzles should be on or off c) How to match the air settings to the crop canopy d) How to perform the Gear-Up, Throttle-Down method
3) The third video demonstrates: a) How to place water-sensitive papers in a canopy b) How to diagnose coverage using water-sensitive papers

The next video series in development:

Using Vertical Spray Patternator

1. Assembly Patternator
2. Conducting a Patternator Test
3. Interview with Orchardists on Using a Patternator