

2012 Fruit Report for New Hampshire

Alan Eaton, George Hamilton, Cheryl Smith - UNH Cooperative Extension

Weather and crop situation:

Spring warmup may have been the earliest on record. March had three dates (20th thru 22nd) when the temperature exceeded 80F in Durham. After a warm early spring, the weather turned overcast and cool for about 3 weeks. Summer was relatively warm and fairly dry. The apple crop was down 20% or more (killing temperatures around bloom). McIntosh in particular was hard hit by the spring freeze. Summer was not particularly dry. The peach crop was very good. Strawberries: early, pretty good. "June" strawberry crop was over before spotted wing drosophila (SWD) activity began. Much of the late blueberry crop was lost to SWD. Many blueberry varieties were ripe about 2 weeks earlier than usual.

Fruit Pest Situation this Year

The incidence pest injury on apples was 3.0% in 2012. The 25 year average is 5.28%. The incidence of **apple scab** [caused by *Venturia inaequalis*] on fruit at harvest was 1.29% this year. *Venturia inaequalis* ascospore maturation was very confusing to all of us this year. This year the incidence of **bitter rot** was higher than scab, in many orchards. Cortland variety had the most bitter rot. **Flyspeck** and **sooty blotch** were barely detectable this year in the late August harvest evaluations. At some apple orchards, there was a lot of **moldy core** on Cortlands, obvious by August 27th. On those fruit, we presume the calyx end didn't fully seal during rainy spring weather.

Tarnished plant bug and **plum curculio** injury on apples were both below average incidence this year. The 10 year average for TPB damage before release & establishment of *Peristenus digoneutis* was 3.18%. The 20 year average after establishment of this braconid parasite was 1.21%.

Mummyberry (caused by *Monilinia vaccinii-corymbosi*) was fairly bad on blueberry this year. Spring weather was favorable for the disease.

Pecking by turkeys was bad at one orchard. It was all within 18" of the ground, and concentrated along the path the flock regularly took through the orchard. Cortland was heavily hit.

Hail injury to apples was 3.14%, very close to the 25 year average. There was a much higher than average incidence of fruit russet and frost patch on apples this year.

Brambles More spur blight this year than Cheryl Smith has seen for a few years (fall bearing).

New/Unusual:

White Pine Blister Rust on Ribes (Gooseberries and Currants) After the report out of CT in 2011 of *C. ribicola* on black currant 'Titania,' NH DRED did a survey of all sites where permits for Ribes species had been issued. 'Rust' found on Ribes sp. From 24 sites. Of those, samples from 12 site had visible telia. 11 Samples were sent to Kerik Cox at Cornell for PCR. PCR yielded positive identification (positive for *C. Ribicola*) on black currant varieties 'Willoughby' and 'Consort', and Gooseberry variety 'Clark'. The other samples would likely have yielded positive PCR results, but there was not enough fungal material for PCR.

Kyle Lombard (NH DRED) has issued a one year moratorium on any new Ribes planting permits. An extensive survey is planned for 2013 (Collaborators: NH DRED, US Forest Service, Cornell Univ., & C. Smith (& maybe Kirk Broders, UNH). Both Ribes species and White Pine will be surveyed, with rust samples sent to Kerik Cox for PCR confirmation. Pending the results of the 2013 survey, NH DRED will make a decision to continue or expand the planting moratorium.

Spotted wing Drosophila (*Drosophila suzukii*). We set out some SWD traps in June, and had traps out on 16 or more farms by the time of our first trap captures July 11th. SWD catch in the “June” crop of strawberries were zero. July trap catches were highest in woods borders and raspberries. By Aug 14, SWD adults were visible in high numbers feeding on dropped stone fruit, and there were indicators of increasing attack in blueberries. At several sites (including Univ. NH) traps failed to detect SWD’s in blueberries before there was significant fruit damage.

Damage from **apple leaf-curling midge** *Dasineura mali* (Kieffer) was evident again this year on shoots and suckers in the same orchard I reported last year. This makes the third year in a row for that site, where the grower prefers not to intervene with insecticides unless it is economically important.

Powdery mildew (of apple) was easy to find on shoots this year. We are crediting the unusually mild winter.

Green stinkbug *Acrosternum hilare* was present in very high numbers this year. I saw quite a few adults in early spring, so maybe the mild winter allowed for very high survival this year. Nymphs were especially abundant in late July and August, feeding on apples, peaches, plums, blueberries, tomato, pepper and other plants. Usually we see more brown stinkbugs [*Euschistus servus*] on stone fruit, but this year green SB was much more common. Cheryl Smith says green stinkbug in high numbers on fall-bearing red Raspberry.

Brown marmorated stinkbug, *Halyomorpha halys*, was found in two new municipalities (Durham, Nashua), adding to the four already confirmed: Portsmouth, Stratham, Rochester and Chichester. None were found in crops.

We continue to find some problems from **Asiatic garden beetle** [*Maladera castanea* (Arrow)] larvae in strawberry beds.

We had several reports of **apple and thorn skeletonizer** this year.

Alan found a single apple in West Lebanon NH that matched a 1986 slide of his. The miner is a gracillariid moth, **apple serpentine miner** *Marmara pomonella* Busck. The name of the NH town where the 1986 fruit grew was lost. The larva occasionally mines the surface of the fruit, producing a distinctive trail in the skin.

Sun scald was evident on apples at much higher than usual rates, and much of it was healed over when fruit evaluations were done Aug 26 to Sept 3. Two orchards had a scald incidence of 5%.

One orchard had significant **phytotoxic burn** (especially on McIntosh) from a calcium spray.

The Plant Diagnostic Lab had a couple of samples of **Rose Stem Girdler** (*Agrilus aurichaleceus*) on *Rosa rugosa*. The damage was significant in both plantings, with lots of dieback on the rose canes. The injury is a spiral girdling in the cane (often just visible as a slight swelling). This critter also attacks raspberry (but we have not gotten samples on raspberry), so something to watch out for.