

Maine 2012 Apple Pest Report

Northeast Tree Fruit IPM Working Group, October 22, 2012
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Weather

Green tip arrived a full month earlier than normal on March 24. McIntosh full bloom was 12 days earlier than long term average date at Highmoor Farm Ag. Research Station. Freezing temperatures on April 27-30 caused roughly 30-40% crop loss.

Dry weather persisted until April 22, almost a month after bud break. May and June were wetter than normal. July was dry. Early August was wet, late August and early September dry, then rain on 22 of 28 days from September 18-October 15.

Apple scab

Estimated scab development was shifted much later than normal in relation to apple bud stage. Instead of peak ascospore infection potential during McIntosh Full Bloom, peak ascospore infection estimated to have been twelve days after full bloom.

Scab ascospore maturation and release estimated to have been almost complete by start of final infection on June 2, with only 2% of adjusted infection potential remaining. However, this wetting period began with 1+ and 2+ inch rains on first two days, followed by daily rain on next 5 days, for a total of approximately 5 inches across 7 days of continuous wetting. Some anecdotal evidence that postinfection fungicide application soon after this event made the difference at preventing scab infection.

Alternative explanation is that even with primary scab releases over, 5 inches of rain with over a week of continuous wetting allows small number of secondary lesions newly developed from earlier primary infections to amplify.

Increased interest in understanding value of fungicide application during rain despite loss of any residual control. Increased interest in use of urea and leaf shredding for scab sanitation.

Combination of incomplete scab control in managed blocks, numerous blocks with reduced scab protection due to crop loss, and frequent rain in late September – early October could make for heavy scab pressure in 2012.

Fire blight

No blossom blight infection periods until 3-7 days after McIntosh Petal Fall. Shoot blight, assumed to be caused by inoculum from overwintered fire blight cankers, appeared at scattered locations in June, and required repeated pruning in one location. Intermittent shoot blight symptoms in blocks with previous history, but no new fire blight infestations in 2012.

Flyspeck/Sooty blotch - No news. Dry July, plus dry late August – early September may have been enough to prevent wet late September-early October from causing problems in protected orchards. Plenty of SBFS on unsprayed trees.

Hoping to replace “Leaf wetness” with “Hours > 90% RH” as measure of flyspeck development.

Powdery mildew – Normally this disease is rarely seen in Maine, but was found in numerous locations in 2012. No serious damage in 2012, but will receive management attention in 2013.

Apple maggot trap captures in 2012 were above counts from 2009-2011, which had been below “normal” of previous years. Effective control with insecticide, but anecdotal reports of increased damage on low spray / no spray trees.

Apple mealybug returned to an orchard that had problem in 2011 despite apparently effective control in summer 2011. As in 2011, because of delayed results from Assail, grower made second treatment with Movento after which population declined.

Stinkbug – Normally, stink bug damage is almost nonexistent in Maine, but as in 2011, there were several 2012 reports of numerous stink bugs and concern about damage potential. Brown Stink Bug seems to be the culprit.

We are counting on growers in RI, CT, MA, and NH to put up a firewall to keep Brown Marmorated Stink Bug out of Maine.

Leafminer, Plum curculio, White apple leafhopper, Codling moth, European red mite – Nothing remarkable in 2011.

Spotted wing drosophila – Everywhere we trapped in Maine. They do not oviposit in intact apples, right?

Other Items

Thinning with Sevin was not effective in 2012. Good fruit set on McIntosh unless there was frost damage.

Interest in non-recycled drenches for pre-storage treatment, especially drenches that do not include fungicide.

Growers still trying to figure out how to grow and store Honeycrisp.

Updated Google Earth aerial photos are great tools for IPM planning.

New state law requiring anyone who sells more than \$1000 produce to get a pesticide applicators license in first year one of three year phase-in.