2021 Northeast NY Apple Season Highlights

Persons Reporting: Michael Basedow, Cornell ENYCHP

McIntosh Phenology in Peru NY

Year	Silver Tip	Green Tip	Half Inch Green	Tight Cluster	Pink	First Bloom	Full Bloom	95% Petal Fall
2021	4/1	4/6	4/13	4/26	5/2	5/6	5/11	5/20

General Weather Conditions - *Weather data collected from RainWise weather station in Peru NY.*

Conditions were reasonably good for acclimation to winter cold when transitioning from fall to winter. Trees carried an average to heavy crop in 2020, and we expected some stress due to the lack of rain throughout much of the summer in 2020. We had some early cold spells on Oct 9 (31.9F) and again on Oct 12 (28.3). Our first really bad freeze came on 10/30 (22.7F).

Our first single digit temps came on 12/15, when we got down to 7F, followed by 1.5F the next morning. We had a few warm days, Christmat saw a high of 59.8.

Much of the rest of the winter was fairly seasonable until March, where we saw some early warm days throughout the latter half of the month that sent our phenology to about a week ahead of our normal. Scattered frosts and freezes occurred on a few dates that likely impacted fruit buds on some farms.

Dry conditions started right about when the season did. July turned cloudy and cool. Tell that to the farmers. We received more average rainfall heading into harvest, and had a warmer than usual harvest period.

Horticulture Overview

Crop was average to heavy for almost all cultivars in Northern NY in 2020. Bloom density was subsequently low in 2021. Water stress from 2020 also likely played a role, as farms that rarely have return bloom issues in Honeycrisp had very light blocks. Pollination weather was poor to begin bloom, but we had a few good days of bee activity later in bloom as things warmed up. Thinning weather was a challenge. We had very good deficits during the petal fall period, and a surplus during the 12mm period. Growers that thinned at petal fall on hot days were either happy with the amount they removed, or overthinned some of their varieties. The surplus of rain in the summer, along with lighter crop loads, led to very large fruit. Warmer than usual conditions have led to coloring issues in some of our varieties. Bitter pit is a problem this year.

Pest Management Overview

Primary Apple Scab Infection Periods:
4/15, 4/18, 4/21, 4/25, 4/29, 5/5, 5/12, 5/23, 5/26, 5/30, 6/3

***McIntosh Green Tip Date:** 4/7

Estimated date of 100% Ascospore Maturity (NEWA): 6/4

According to the NEWA apple scab model, primary apple scab season lasted for approximately nine weeks in 2020. Overall, scab was well managed this season. Powdery mildew was a headache in some orchard blocks, as there was a lot of strikes from the 2020 season causing fresh infections.

Fire Blight Blossom Blight Infection Periods:

Fire blight was once again a challenge in northern NY, although not as bad as in 2020. Infections occurred on May 18, May 22, and May 23, wherever open bloom was present. Thankfully, at this point most varieties were approaching or at petal fall. A few blocks did end up with bad fire blight.

Arthropod Pests

We continued our region wide scouting network. Overall, captures were relatively low in most of our traps this season. First catch of OFM did not occur until May 17 in Peru, and our numbers remained low throughout the season. First catch of CM occurred on May 26, and captures remained low throughout the monitoring season, only reaching a management threshold on July 26th. We did not catch any OBLR in our Peru traps this season. Our first AM was caught on June 28 in Peru, and management threshold was first exceeded on July 19. We saw very high levels of Japanese beetle and Lymantria this season. Pest management overall was good overall. A few growers struggled with early season lep damage, and a few also had some PC injury. Dogwood borer damage was severe in an orchard block of NY-1 on Geneva 11 rootstock.