Apple Maturity Update

Spur-type Macs in orchards near Highmoor Farm are still good for long-term storage, with no signs of fruit drop at this time. Honeycrisp, in the Monmouth area, are prone to bitter pit if picked at this time and put in storage. However, the chance for soft scald is low right now, but will change to high risk in the next week. McIntosh and Cortland picked at this time and stored longer than four months will develop superficial scald. For more information on superficial scald prevention, refer to the August newsletter.

Honeycrisp at Highmoor Farm in Monmouth were at Starch Index 2.6 on Friday, September 7. Cortland were at 1.2.

Based on observed starch index levels and weather, non-spur McIntosh apples in the Monmouth area might reach 10% of crop Friday, September 7 to Wednesday, September 12.

The 10% drop date range for McIntosh in the Turner area is September 11 to Wednesday, September 18.
Leaf Spot on Golden Delicious in Hudson Valley

Adapted from PROMed news service:

Golden Delicious trees in a Hudson Valley Lab research orchard are yellowing and defoliating. Usually such symptoms are caused by physiological leaf blotch (necrotic leaf blotch or Golden Delicious leaf blotch), but in this appears to be caused by a fungal disease, Glomerella leaf spot.

Symptoms on leaves include irregular spots. Every leaf of the tree can be affected and trees may be completely defoliated by harvest leading to loss of vigor and reduced yield. On apple and pear fruit, the fungi cause flattened rotting areas, often with concentric rings of spores, which may lead to serious yield losses before and after harvest. The pathogens are also responsible for anthracnose diseases of a range of other tree crops.

Glomerella leaf spot and bitter rot of apple and pear are caused by *Glomerella cingulata* (previously *Colletotrichum gloeosporioides*) or *C. acutatum*. Different strains can affect leaves, fruit, or both. Look for dead spots on leaves with a concentric ring pattern. If you find symptoms, you may want to consider a fungicide application to slow it down, especially on late-maturing apple cultivars. Golden Delicious, Gala, Pink Lady, Goldrush, and Pristine cultivars are known to be susceptible.

The fungi generally have a long saprophytic survival ability on dead twigs, fallen leaves and mummified fruit, which are often the main sources of inoculum. Spread may occur with infected plant material, by mechanical means (including insect and human activities), and water splash. Disease management tools include fungicide and phytosanitation to reduce inoculum.

Climate Change Impacts?

A researcher asked for a list of potential climate change impacts on apple production in Maine. Here are my thoughts. He (and I) would appreciate any additions, changes, or comments you have.

**Potential Climate change impacts on tree fruit production in Maine:**

- Crop selection – e.g. peach and other stone fruit more viable with warmer temperature regime?
- Cultivar selection within a crop – later season apples e.g. Pink Lady, Braeburn, Granny Smith become viable options in Maine?
- More frost-freeze damage risk. Meteorologist contact predicts climate change will bring earlier springs AND later last frosts. This is a worrisome combination because fruit tree fruit bud sensitivity to frost increases with earlier start of spring growth.
- Increased drought risk? Increased need for irrigation could coincide with increased competition for water or reduced availability of water sources.
- Higher risk of intense winds could affect support systems needed for dwarf trees.
- Increased chance of devastating hurricane force winds that cause fruit drop would alter the risk equation for crop loss. Economic scenario based on crop loss 1 year out of 4 is substantially different from 1 year out of 5.
- Increased thunderstorm activity would lead to increased hail risk. Structural shift to investment in hail netting?
• More intense rain events remove pesticide protection resulting in need to reapply more frequently.
• More intense rain events impact soil fertility?
• Warm dry autumn increases sales window for pick your own orchards?
• Elevated temperatures could result in insect and disease pests from more southern production regions becoming more common or intense (cedar apple rust, powdery mildew, flyspeck and sooty blotch, obliquebanded leafroller, tufted apple budmoth, codling moth, San Jose scale, Oriental fruit moth).
• Changing rain events impact soil fertility?
• Warm dry autumn increases sales window for pick your own orchards?
• Climate impacts in other regions would affect the nation and international market and economic context for fruit production in Maine. For example, this year the freeze damage in other eastern states is affecting markets and prices for Maine growers.

Maine Apple Sunday

Sunday, September 9 is Maine Apple Sunday, when apple orchards in Maine collectively offer specials or events to attract more customers.

Closing Words

“If you think nobody cares about you, try missing a couple of payments.”

“I spilled spot remover on my dog. Now he’s gone.”

“I used to work in a fire hydrant factory.
   You couldn’t park anywhere near the place.”

~ Steven Wright

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If you are a person with a disability and will need an accommodations to participate in this program, please call Highmoor Farm at 933-2100 to discuss your needs. Receiving requests for accommodations at least 7 days before the program provides a reasonable amount of time to meet the request, however all requests will be accepted.