

PLANT & PEST ADVISORY

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Special Issue: Apple Advisory

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Apple Maturity Update and Hurricane Isabel

Win Cowgill, County Agricultural Agent, and Meredith Compton, North Jersey Tree Fruit Program Associate

Growers should be preparing as one of the most powerful storms in recent memory, Hurricane Isabel, moves toward the Atlantic coast toward possible landfall on Thursday. Isabel's top winds weakened slightly to 125 mph tonight as it takes a path that could bring it ashore along the Chesapeake Bay near Washington D.C., through Virginia, Maryland and Pennsylvania, according to the U.S. National Hurricane Center.

Although its track is uncertain, it could affect millions of people in some of the most heavily populated areas of the Eastern Seaboard including Richmond, Virginia, Washington, D.C., Baltimore, Philadelphia and parts of New Jersey. Apple growers particularly are at risk as the ground becomes saturated and trees are loaded with fruit. Past hurricanes have devastated apple orchards due to the combination of high winds and saturated soil conditions.

Any fruit that can be harvested, even if a hair on the green side, should be before the storm hits.

Gala and Honeycrisp harvest are almost complete in North Jersey and McIntosh harvest in North Jersey is well underway. Non-Retained Macs and Cortland's should be harvested before the anticipated high winds arrive late in the week. NAA as a stop drop may also help but it takes a full three days to take effect.

Jonagold is the next cultivar to be ready in the Hunterdon County area; sugar and starch are almost there with a Brix of 13 and SI of 2.5-3.3.

The following maturity observations were conducted in our lab at the Rutgers Snyder Research and Extension Farm on Monday evening.

Location	County/Town	Cultivar	Sample Date	Pressure	Brix	Starch
Hunterdon-Rutgers Snyder	Liberty		9/15	25	8	2.1
Hunterdon-Rutgers Snyder	Jonagold		9/15	18	13	3.3
Hunterdon-Rutgers	Jonagold-JonaGo	Red	9/15	19.6	13	2.5
Hunterdon-Pittstown 2	Jonathan		9/15	17	8	3.2
Hunterdon-Pittstown 2	Gold Del. (ReTain)		9/15	18	10.5	3.5
Warren-Belvidere	Cortland		9/12	16	6	3

Cortland is usually picked one week after Macs begin (remember Macs can be picked over 3 weeks if stop drop is used. We harvested

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Cortland's on September 12 and 15 at the Rutgers Snyder Farm. They do not starch the best but it can be used as a guideline, target a starch of 5-6.

Red Delicious

Location County/Town	Cultivar	Sample Date	Pressure	Brix	Starch
Warren-Belvidere	Red Delicious	9/12	16.4	8.5	1.5
Hunterdon- Pittstown-1	RedChief	9/15	19	8	2
Hunt. Pittstown-2 (Retain®)	Red Delicious	9/15	22	7	3
Hunt. Rutgers Snyder	SuperChief	9/15	18	9	21.6

Retain®: Reminder Retain® must be applied 28 days before anticipated harvest. If blocks were not treated with Retain®, it is too late for this season to apply for all but our October maturing apples, Sun crisp®, Stayman, etc. □

Preparing Greenhouses for a Hurricane

Skip Paul, Grower, Little Compton, RI

Reprinted from Vermont Vegetable and Berry News, September 15, 2003, University of Vermont Extension.

This week a large hurricane is heading toward New England. My farm is a half mile from the coastline with not much between us and the sea. Dealing with the inevitable showdowns with hurricane force winds has been an obsession of mine since I built my first greenhouse. Now we have six with over 20,000 square feet. Here is some advice I've collected about preparing greenhouses for a powerful storm.

- 1.) Clean and check all the plastic inflation fans, and open their reduction apertures as the storm approaches. You want the two layers of plastic extra tight and rigid so the greenhouse superstructure moves as little as possible. Have a backup generator ready so if you loose power you won't lose your inflation fans and then have a loose gigantic sail smashing into your greenhouse adding to its misery.
- 2.) Be sure all connectors are tight. As the years go by and wind storms come and go your greenhouse moves and shakes. These small movements can unwind some critical bolts that could lead to failure of major structural components. (Every time you change your greenhouse covering, take an hour to check critical bolts and points of stress. It is much easier then when it is all clear and exposed).
- 3.) Don't let the wind get inside the structure. That means check that all doors are secured; check all intake and fan output louvers are locked down and can't flap open. Duct tape on the bottom three fins works well.
- 4.) Check your system for securing the plastic. If it fails wind will get in. Don't rely on weak twine or single strands of rope to hold everything in place; add a second rope here and there across the run for added security.
- 5.) Install diagonal wind braces during initial construction at both ends of the greenhouse. Insist that the greenhouse manufacturer make them to fit. Don't assume they will be included; it is cheap insurance.
- 6.) Take a minute to contemplate the environment immediately outside your greenhouse. It will do you no good to go through all these preparations if you don't notice a loose metal object like a trash can top and it gets sent through the greenhouse walls.
- 7.) We've built lean-to sheds on the north end of our newest greenhouses. They are 18' by 12' and serve many purposes: a home for furnaces and indoor oil storage, storage for chemicals and misc. pots, and most importantly they add considerable rigidity to greenhouses.
- 8.) We cement in every other ground post and add cement filled sonotubes to the end walls which increase greenhouse rigidity and act as anti-lifting anchors. □

2nd Annual Rutgers Farm Safety/Health Twilight Program

September 24, 2003

Registration Time: 4:30 p.m.

**Russo's Orchard Lane Farm
310 Extonville Road
Allentown, NJ**

All farm families are invited to attend the 2nd Annual Rutgers Cooperative Extension Farm Safety/Health Twilight Program designed to address the issues of farming safety and farmer's health. We intend this program to be an informal, educational experience with hands-on demonstrations, and a lot of fun for the entire family.

Some of the topics:

- ❖ Chainsaw Safety
- ❖ Gun Safety
- ❖ Fire Safety and Preparedness
- ❖ Farm Safety for Children

Also:

- ❖ An exceptional buffet supper, PLUS outstanding desserts provided by the Burlington County Farm Bureau Women's Committee!
- ❖ Receive safety related items!
- ❖ Pesticide credits will be issued.

Reservations are necessary. Please call Rutgers Cooperative Extension of Burlington County at (609) 265-5050 by September 19, 2003. □

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