# A REPORT FROM THE

# EXECUTIVE DEAN OF AGRICULTURE AND NATURAL RESOURCES

Report to the New Jersey State Board of Agriculture September 2013

The Network for Environmental and Weather Applications (NEWA) is a web-based weather and pest reporting and forecasting system for insect and disease pests of fruits and vegetables, operated by and funded through the NYS IPM Program. For 2013, NEWA has been available free-of-charge to New Jersey growers via support from Rutgers NJAES, with initial funding in 2012 courtesy of the Outer Coastal Plain Vineyard Association. Previous research has shown that when integrated into a farm IPM plan, users report significant savings in spray costs and crop loss prevention as a direct result of using NEWA. NEWA keeps growers apprised of local conditions and aids in decision-making, resulting in enhanced pest control with reduced costs and environmental burden. The goal of the Rutgers NJAES initiative, led by agricultural agent **Win Cowgill** and extension specialists **Andy Wyenandt** and **Peter Oudemans**, is to develop site-specific applications for pests and diseases of New Jersey fruit and vegetable crops such as apples, cranberries, blueberries, grapes, tomatoes and potatoes. In 2013, apple chemical thinning forecasts were added for New Jersey utilizing the NEWA Apple Carbohydrate Thinning Model which provides growers with a validated tool for making apple chemical thinning decisions. Chemical thinning with plant growth regulators is an essential task for all modern apple farmers. **Win Cowgill** conducts research on this model and provides input to New Jersey apple orchardists.

Vegetable IPM Program Coordinator **Joe Ingerson-Mahar** reports the Vegetable IPM Program is learning how the invasive pest, pepper weevil, is entering the state. Annually, the weevil is a serious and costly pest to New Jersey pepper growers. New Jersey has a unique situation of processing plants, crops, and environmental conditions that enable the weevil to spread rapidly with the threat of severe crop loss. The IPM Program will be devising recommendations to reduce or eliminate the introduction of the pest and to slow its spread from farm to farm.

A Horticultural and Field Crop Research Twilight Meeting was held at the Rutgers Snyder Research Farm on September 10th. Over 45 farmers participated in field tours of research at Snyder Farm including: apple tall spindle and super spindle production systems; 2010 northeast Asian pear variety trial; pumpkin powdery mildew trial; BMSB- latest monitoring techniques and controls and apple varietal differences; crop insurance updates; fruit variety showcase; ethnic greens and basil breeding for downy mildew resistance; farm pond algae control using aeration systems; and evaluation of agronomic impacts of establishing a corn maze. Field crop trials included 67 full season soybean varieties; evaluating soybean resistance to white mold; double crop soybean variety trial following canola; evaluating 65 soybean varieties resistance to white mold; field corn variety study evaluating different fertilizer treatments; and a field corn trial comparing different liming agents. Hosts were Rutgers Cooperative Extension agricultural and resource management agents Win Cowgill, Peter Nitzsche and Dave Lee.

At the 2013 international annual tri-society meeting of American Society of Agronomy, Crop Science Society of America and Soil Science Society of American (ASA-CSSA-SSSA), **Joseph Heckman** and colleagues will be presenting an overview of the 10 year accomplishments of the Committee on Organic and Sustainable Agriculture (COSA). COSA is a special ASA-CSSA-SSSA committee that develops programming for annual meetings on sustainable and organic agriculture. **Heckman** is chair of Organic Management Systems for 2013, an outgrowth of COSA.

### Of Interest:

In his summer 2013 Overview, New Jersey State Climatologist **Dave Robinson** reports summer rainfall averaged 19.93" around the state. This is 7.18" above the 1981-2010 normal, ranking summer 2013 as the second wettest



on record. Three of the seven wettest summers have been in the past five years. No other years in the top 10 fall closer than six years apart. Temperature-wise, while not as warm as the past three summers, 2013 averaged 73.8°, which is 0.9° above the 1981-2010 average. This ranks 2013 as the 12th warmest - only eleven summers have been warmer, and eight of these have occurred since 1999.

The Upper Salem River Watershed Agricultural Mini-Grant Program provides funding for producers to implement agricultural management practices that improve water quality in the Upper Salem River and its tributaries or to promote water conservation and efficiency. Eligible applicants must be located within the Upper Salem River Watershed and be on land currently in agricultural usage (includes cropland, nursery, pasture, sod farms, livestock) and propose a conservation measure known to reduce erosion or protect water quality. For more information visit the Water Resources Program website:

http://www.water.rutgers.edu/Projects/UpperSalem/UpperSalemImplementation.html

The following new Factsheets by **Michael Westendorf** and colleagues are now available from county extension offices or on-line at <a href="http://njaes.rutgers.edu/pubs">http://njaes.rutgers.edu/pubs</a>:

Why Do I Need a Farm Map? How to Prepare a Usable Map for Your Farm (FS1189)

Horses and Manure (FS036)

Horse Manure Management: Bedding Use (FS537)

Nutrient Management on Livestock Farms: Tips for Feeding (FS1064)

Managing Manure on Horse Farms: Exercise or Sacrifice Lots for Horses (FS1190)

New Jersey Livestock Drought Management Plan (FS1194)

#### **Events:**

#### **Pond Maintenance to Prevent Weeds and Algae**

October 21, 6:30 - 7:30 PM, Cooperative Extension of Cumberland County, 291 Morton Ave., Millville, NJ October 23, 6:30 - 7:30 PM, Cooperative Extension of Salem County, 51 Cheney Rd., Woodstown, NJ What can be done to prevent the excessive weeds and algae that are often perennial problems in so many of our lakes and ponds? Does barley straw really work? And what can I do about Canada geese? Contact: **Sal Mangiafico**, 856-769-0090

#### The Grapes of Delight - Old and New Wine Grape Cultivars for NJ

November 16, Rutgers Ag Research and Extension Ctr. Farm, 121 Northville Rd., Bridgeton NJ An exciting grape symposium with guest speakers: Marco Stephani, grape breeder from Italy; Larry Perrine, CEO Channing Daughters Winery and grower of Italian Vinifera on Long Island; Paolo Sabbatini, viticulture researcher from Mich. State Univ. Contact Outer Coastal Plain Vineyard Association at info@outercoastalplain.com.

## Visit our Rutgers NJAES online resources:

Vegetable Crops Online Resource Center: http://njveg.rutgers.edu

Jersey Vegetable Crops Ag Updates: <a href="http://jerseyvegcropsagupdates.blogspot.com">http://jerseyvegcropsagupdates.blogspot.com</a>

Fruit Ag Updates: <a href="http://jerseyfruitagupdates.blogspot.com">http://jerseyfruitagupdates.blogspot.com</a>
Field & Forage Crops Nutrient Management Ag Updates:
<a href="http://fieldforagecropsnutrientmanagement.blogspot.com">http://fieldforagecropsnutrientmanagement.blogspot.com</a>

Sustaining Farming on the Urban Fringe: http://njsustainingfarms.rutgers.edu

What's in Season from the Garden State: http://www.njfarmfresh.rutgers.edu/archive.html

