## 2021 NJ Ag/VGANJ Virtual Convention Update

By now you have probably heard from many venues that the educational sessions of our 2021 NJ Ag/VGANJ Convention will be held virtually the last week of February. Members of the Rutgers NJAES Vegetable Working Group and our colleagues that cover other commodities have developed a comprehensive program covering a wide range of topics. The entire up-to-date program can now be viewed on the Vegetable Growers Association of NJ website – VGANJ.com/schedule.

As you will see on the program, concurrent two and a half hours-long, commodity-oriented sessions and workshops are scheduled each morning and afternoon. There will be sessions offering pesticide recertification credits. To accommodate the limitations of the Zoom platform, category credits will be available in afternoon sessions only, while two lunchtime sessions (Tues and Thurs) offer CORE credits.

Morning sessions may carry over into lunchtime Q&A discussions with speakers, if demand warrants, but on Wed, Feb 24, please join VGANJ President John Banscher for a special Tribute to New Jersey Farmers. We thank you for all your essential work during the pandemic of 2020, and we thank the VGANJ for sponsoring this educational event.

As we have offered at previous conventions, we are partnering with the NJ Dept of Health to offer their required training to those farmers/market managers who participate in the WIC & Senior Farmers Market Nutrition Program. However, so as not to interfere with afternoon sessions, this has been scheduled as a separate Zoom meeting from 4-6pm. More details will follow.

To obtain credits via a virtual meeting requires a couple of extra steps on your part. Please view and familiarize yourself with the steps to be followed in this guide, which will also be available if you sign up for credits after registering with VGA. If you are not looking for credits, you will be able to move from session to session, but those wanting credits will need to be signed into the Zoom meeting within 10 minutes of the start, remain attentive and responsive to random polls, and logged into the session until it ends. There will be some allowance and support if there are technical issues, but otherwise, leaving a meeting early will disqualify you for credits.

### Attachments:
- **2021 NJ Ag/VGANJ Virtual Convention – Educational Program Overview**
- **Instructions for Pest Credits at VGA**

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<table>
<thead>
<tr>
<th>2021 NJ Ag/VGANJ Information</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery and Ornamental Track</td>
<td>2</td>
</tr>
<tr>
<td>USDA extends harmonized GAP Assistance Program for fruit and vegetable growers</td>
<td>3</td>
</tr>
<tr>
<td>NRCS Announces ACEPT Signup for 2021 Funding</td>
<td>4</td>
</tr>
<tr>
<td>USDA Extends Crop Insurance Flexibilities Amid Continuing COVID-19 Pandemic</td>
<td>5</td>
</tr>
<tr>
<td>New Rutgers Fact Sheet</td>
<td>5</td>
</tr>
<tr>
<td>USDA suspends debt collections, foreclosures, more</td>
<td>6-7</td>
</tr>
<tr>
<td>On-Farm Food Safety Classes</td>
<td>7</td>
</tr>
<tr>
<td>Grower Survey Related to Cleaning and Sanitizing</td>
<td>8</td>
</tr>
<tr>
<td>Nominate your Fire Dept. to Win a Grain Bin Rescue Tube</td>
<td>8</td>
</tr>
<tr>
<td>Survey for Basil Growers</td>
<td>8</td>
</tr>
<tr>
<td>Update on X10R Bell Pepper Varieties in NJ</td>
<td>9-12</td>
</tr>
<tr>
<td>New Online Pesticide Exams</td>
<td>13-14</td>
</tr>
<tr>
<td>Annual Water Reports are Due</td>
<td>15</td>
</tr>
<tr>
<td>New Location in Trenton for NJDA</td>
<td>15</td>
</tr>
<tr>
<td>Farm Truck Certificates</td>
<td>15</td>
</tr>
<tr>
<td>Calendar of Important Events</td>
<td>16</td>
</tr>
</tbody>
</table>

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Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and County Boards of Chosen Freeholders. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.
NEW
NURSERY AND ORNAMENTAL TRACK
AT THE 2021 VGA
2 Sessions, 8 Speakers
Register at https://vganj.com/registration

Session I
(9:15 - 11:45am)

Let It Flow – Solving Issues of Clogging in Your Irrigation System

Additional presentations:
Growing Mums for Fall Markets - Bill Errickson (RU-Agent)
Container Production of Broadleaf Evergreens - Steve Kristoph (Nursery owner and RU-Instructor)
Native Plant Production in New Jersey - Tom Knezeck (Pinelands Nursery)

Session II
(1:15 - 3:45pm)
(Pesticide credit bearing session)

Fighting Boxwood Blight Together

Additional presentations:
Using Growing Degree-day Models to Prepare for the Future - Tim Waller (RU-Agent)
Aphids - Biocontrol In Greenhouse, High Tunnels and Microgreen Production Systems - Stanton Gill (UMD-Specialist)
Little Critter, BIG Problem for Nurseries in the Mid-Atlantic (Red headed flea beetle) - Brain Kunkle (UD-Specialist)
USDA Extends harmonized GAP Assistance Program for Fruit and Vegetable Growers

The U.S. Department of Agriculture (USDA) has extended the USDA Harmonized Good Agricultural Practices (GAP) Assistance Program to remain available to eligible producers until all allocated funds are depleted. The program helps fruit and vegetable growers in 16 states enhance market access by paying the cost of user fees for voluntary audits.

Under the assistance program, USDA’s Risk Management Agency (RMA) will continue to provide Agricultural Management Assistance funds to cover up to 100% of the cost of Harmonized GAP and Harmonized GAP Plus+ audits for farmers in 16 states authorized by Congress to receive financial assistance for conservation and financial risk mitigation. The authorized states are Connecticut, Delaware, Hawaii, Maine, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Utah, Vermont, West Virginia and Wyoming.

Produce buyers often require third-party food safety certifications from growers. USDA Harmonized GAP audits, provided by the USDA Agricultural Marketing Service (AMS), verify that fruits and vegetables are produced, packed, handled and stored in the safest manner possible to minimize risk of food safety hazards.

More information is available in Questions and Answers about the GAP Assistance Program on the AMS Harmonized GAP webpage.
NRCS Announces ACEP Signup for 2021 Funding

SOMERSET, N.J., January 5, 2020 – The U.S. Department of Agriculture’s Natural Resource Conservation Service (NRCS) is now accepting applications for the Agricultural Conservation Easement Program (ACEP). Applications that meet eligibility and ranking criteria for ACEP received by February 5, 2021 will be considered for the 2021 program.

ACEP helps landowners, land trusts, and other entities protect, restore, and enhance wetlands, grasslands, and working farms and ranches through two types of conservation easements; Agricultural Land Easements (ALE) and Wetland Reserve Easements (WRE).

“The Agricultural Conservation Easement Program can help landowners, land trusts and other eligible groups preserve New Jersey’s wetlands and farmlands for our descendants,” said New Jersey State Conservationist Julie Hawkins. “The work we decide to do now will help ensure wildlife such as the Bog Turtle can be found in more than just a textbook, and that first juicy bite of a Jersey tomato or the popping sensation you feel when biting into our sweet blueberries will be experiences had by generations to come.”

Under the Agricultural Land Easements component, NRCS helps protect working agricultural lands and limit non-agricultural uses to protect the long-term viability of the nation's food while supporting environmental quality, historic preservation, wildlife habitat, and protection of open space. This component is also available for grasslands of special environmental significance, or high-quality grasslands under threat of conversion to cropping, urban development, and other non-grazing uses.

Landowners interested in ACEP- ALE must work with a cooperating entity and do not submit applications for ACEP-ALE directly to NRCS. State and local governments and non-governmental organizations that have farmland or grassland protection programs are eligible to partner with NRCS to purchase conservation easements. Several New Jersey land trust and governmental organizations are also available to help interested landowners apply for a conservation easement through the NRCS program.

To apply for ACEP-ALE, or for more information, please contact Gail Bartok, NRCS Assistant State Conservationist for Programs, at 732-537-6042 or Lauren Lapczynski, Easement Specialist, at 732-537-6046.

Wetland Reserve Easements allow landowners to successfully enhance and protect habitat for wildlife on their lands, reduce impacts from flooding, recharge groundwater, and provide outdoor recreational and educational opportunities. NRCS provides technical and financial assistance directly to private and tribal landowners to restore, protect and enhance wetlands through the purchase of these easements, and eligible landowners can choose to enroll in a permanent or 30-year easement.

To apply for ACEP-WRE, please contact your local NRCS Service Center.

Vineland - serving Atlantic, Cape May, and Cumberland Counties

1318 South Main Rd., BLDG 5 Suite A, Vineland, NJ 08360  PHONE: (856) 205-7678  FAX: 855-305-7259

Information on these and other NRCS programs can be found on the NJ NRCS website.

USDA is an equal opportunity provider, employer, and lender.
USDA Extends Crop Insurance Flexibilities Amid Continuing COVID-19 Pandemic

Through today’s announcement, USDA’s Risk Management Agency (RMA) is extending crop insurance flexibilities for producers amid the continuing COVID-19 pandemic. Specifically, relief provided for electronic notifications and signatures is extended through July 15, 2021; organic certification, replant self-certification and assignment of indemnity are extended through June 30, 2021.

“We recognize that American agriculture continues to face challenges due to the pandemic,” RMA Administrator Martin Barbre said. “RMA remains committed to providing flexibility that supports the health and safety of all parties while also ensuring that the federal crop insurance program continues to serve as a vital risk management tool.”

RMA is also allowing Approved Insurance Providers (AIPs) further flexibilities for production reporting, submitting written agreement requests, and obtaining producer signatures for written agreement offers. Producer signatures for written agreement offers, issued by RMA on or before June 30, 2021, with an expiration date on or before July 30, 2021, will allow producer signatures to be accepted after the expiration date with proper self-certification or documentation. However, all documentation and signatures for these offers must be completed no later than August 2, 2021. AIPs also have 30 business days to submit written agreement requests and applicable documentation for requests with submission deadlines prior to July 1, 2021.

More Information

RMA announced many other flexibilities that started on March 27, 2020. RMA staff continue to work with Approved Insurance Providers and other customers by phone, mail, and electronically to continue supporting crop insurance coverage for producers. Farmers with crop insurance questions or needs should continue to contact their insurance agents about conducting business remotely (by telephone or email). For the most current updates on available services, please visit farmers.gov/coronavirus.

New Rutgers Fact Sheets

The following new bulletin is available on NJAES Publications:

WASHINGTON — Due to the national public health emergency caused by coronavirus disease 2019 (COVID-19), the U.S. Department of Agriculture announced the temporary suspension of past-due debt collections and foreclosures for distressed borrowers under the Farm Storage Facility Loan and the Direct Farm Loan programs administered by the Farm Service Agency (FSA). USDA will temporarily suspend non-judicial foreclosures, debt offsets or wage garnishments, and referring foreclosures to the Department of Justice; and USDA will work with the U.S. Attorney’s Office to stop judicial foreclosures and evictions on accounts that were previously referred to the Department of Justice. Additionally, USDA has extended deadlines for producers to respond to loan servicing actions, including loan deferral consideration for financially distressed and delinquent borrowers. In addition, for the Guaranteed Loan program, flexibilities have been made available to lenders to assist in servicing their customers.

Today’s announcement by USDA expands previous actions undertaken by the Department to lessen financial hardship. According to USDA data, more than 12,000 borrowers—approximately 10% of all borrowers—are eligible for the relief announced today. Overall, FSA lends to more than 129,000 farmers, ranchers and producers.

“USDA and the Biden Administration are committed to bringing relief and support to farmers, ranchers and producers of all backgrounds and financial status, including by ensuring producers have access to temporary debt relief,” said Robert Bonnie, Deputy Chief of Staff, Office of the Secretary. “Not only is USDA suspending the pipeline of adverse actions that can lead to foreclosure and debt collection, we are also working with the Departments of Justice and Treasury to suspend any actions already referred to the applicable Agency. Additionally, we are evaluating ways to improve and address farm related debt with the intent to keep farmers on their farms earning living expenses, providing for emergency needs, and maintaining cash flow.”

The temporary suspension is in place until further notice and is expected to continue while the national COVID-19 disaster declaration is in place.

USDA’s Farm Service Agency provides several different loans for producers, which fall under two main categories:

- Guaranteed loans are made and serviced by commercial lenders, such as banks, the Farm Credit System, credit unions and other non-traditional lenders. FSA guarantees the lender’s loan against loss, up to 95 percent.
- Direct loans are made and serviced by FSA using funds from the federal government.

The most common loan types are Farm Ownership, Farm Operating, and Farm Storage Facility Loans, with Microloans for each:

- Farm Ownership: Helps producers purchase or enlarge a farm or ranch, construct a new or improve an existing farm or ranch building, pay closing costs, and pay for soil and water conservation and protection.
- Farm Operating: Helps producers purchase livestock and equipment and pay for minor real estate repairs and annual operating expenses.
Farm Storage Facility Loans are made directly to producers for the construction of cold or dry storage and includes handling equipment and mobile storage such as refrigerated trucks.

Microloans: Direct Farm Ownership, Operating Loans, and Farm Storage Facility Loans have a shortened application process and reduced paperwork designed to meet the needs of smaller, non-traditional, and niche-type operations.

Contact FSA

FSA encourages producers to contact their county office to discuss these programs and temporary changes to farm loan deadlines and the loan servicing options available. The local Service Center is at 1318 S Main Rd STE 5, Vineland, NJ 08360

Phone: (856) 205-1225
Grower Survey Related to Cleaning and Sanitizing

Struggling with cleaning and sanitizing practices? You’re not alone.

You asked, we listened, and now we have a few follow-up questions... Partners at the University of Vermont, Cornell University, USDA, and National Farmers Union Foundation are working together to develop a new training program to help small and medium-scale farmers take their businesses to the next level of safe and efficient vegetable handling systems. Do you have a few minutes to complete a short survey to help us? The voice of farmers is invaluable to the process.

Grower Survey: https://forms.gle/zXYeYdXYo9P2ZAqt7
Project Site: http://go.uvm.edu/scrub

Nominate Your Fire Department to Win a Grain Bin Rescue Tube

In support of “Grain Bin Safety Week” (February 21-27, 2021), Nationwide Insurance has partnered with the National Education Center for Agricultural Safety (NECAS), KC Supply, and others to sponsor the “Nominate Your Fire Department Contest”. Winning departments will receive one grain rescue tube and a 6-hour grain entrapment rescue training session at the winner’s location – a combined value of over $8,000.

Entries must be submitted by 11:59 PM (CT) on Friday, April 30, 2021. For more information on entry submission and contest rules, visit https://go.rutgers.edu/voezegwn.

Survey for All Basil Growers in the US

As a follow-up to the virtual Basil Workshop held by UMASS, Rutgers University, and the University of Florida in December 2020, UMASS has created a short survey for any US basil grower to participate in. Below is a link to the survey and additional information that basil growers might find useful.

The link to the survey is: https://forms.gle/NyNz9MuwubFMnHnh8
The slides for the workshop presentations will be posted shortly on a new website. We will have more information in February!

Below are some useful basil links:
Maps & reports for basil downy mildew (BDM) and other basil monitoring: https://basil.agpestmonitor.org/
Note that you can submit reports to this site and help us map the annual spread of BDM. Anyone can follow the Rutgers basil breeding program on Instagram: @rutgersbasil
UPDATE ON X10R BELL PEPPER VARIETIES IN NEW JERSEY

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Introduction:
Bacterial leaf spot (BLS) is caused by the pathogens, \textit{Xanthomonas euvesicatoria}, \textit{X. vesicatoria}, \textit{X. perforans}, and \textit{X. gardneri}, and is the second most important disease on bell and non-bell peppers in New Jersey. BLS has become more of a concern in New Jersey over the last ten to fifteen years. Early survey results from 2019 suggest \textit{Xanthomonas euvesicatoria} is the most prevalent species found in pepper and tomato fields in the state. There are eleven (0-10) races of BLS identified in the United States; and past research has shown that all races are present in New Jersey. The pathogens are favored by high humidity, hard driving rains, vigorous plant growth, infested stakes, and working in the field when plants are wet.

Materials and Methods:
Since 2016, we have screened cultivars and advanced breeding lines with resistance to all races (often referred to as X10R resistance) of bacterial leaf spot. In 2020, Two 128 cell trays were seeded on March 19\textsuperscript{th} and the plants were set by hand on June 2\textsuperscript{nd}. The trial was established in a grower’s field in Vineland, New Jersey on black plastic mulch with one drip line between double rows with distance between plants at 18 inches in double rows and 64 inches between beds center to center. The plots (18 plants/plot) were transplanted June 2\textsuperscript{nd}. Plots were arranged in a randomized complete block design with four replications. All cultural practices such as staking/tying, fertilization and pest management were carried out by the grower. Plots were sprayed weekly for BLS control.

Table 1 summarizes the monthly minimum, maximum and average temperatures, and rainfall for the season. Entries, seed company and reported disease resistance are listed in Table 2.
Discussion:
The trial was evaluated weekly for BLS with the first observed BLS symptoms on July 13 in all four plots of the variety (Paladin) and one plot of Camelot. By July 27, all plots of Camelot showed symptoms. Plots were rated on September 18 after the last harvest. Varieties that showed no symptoms were ‘Antebellum’, ‘3255’, ‘Labelle’, ‘FPP 2862’, ‘Shogun’ and ‘Outsider’. The varieties with the most severe BLS symptoms were ‘Paladin’, ‘Camelot’ X3R, ‘3964’, ‘1819’, ‘Turnpike’, and ‘Aristotle’ X3R. Plots continued to be observed through November 6th with no changes to the varieties that were infected or the severity of the infections.

Plants were sampled for bacterial leaf spot on July 28th and the laboratory identified the pathogen as *Xanthomonas euvesicatoria* which was also isolated from other pepper fields in South Jersey.

A closed plant canopy is important to protect the fruit from sunburn. Plots were evaluated the day prior to the first harvest. The varieties with the most upright plant and closed canopy were ‘Antebellum’, ‘1819’, ‘3964’, ‘Labelle’, ‘FPP 2862’, and ‘Outsider’.

The entries were harvested 4 times starting 66 days after transplanting from August 7 to September 14. Peppers were graded based on weight (extra-large >0.49 lbs., large 0.33 – 0.49 lbs., medium 0.25 – 0.32 lbs., commercials, and culls <0.25 lbs.). Harvest data is summarized for total harvest in table 3. Yield data was analyzed for the first three harvests since at harvest 4 anthracnose *Colletotrichum spp.* severely impacted the trial.

The cultivar ‘1819’ had the highest extra-large, large, and total marketable yield for the first harvest, but was not statistically different from ‘Mercer’, ‘Labelle’, ‘3255’, ‘Turnpike’ or ‘Aristotle’ for the first harvest. ‘Paladin’ had the lowest yield and was significantly lower than all other entries. At the second harvest, ‘Prowler’ had the high extra-large, large, medium, and total marketable yield, but for total marketable yield it was not statistically significant from ‘Nitro’, ‘Shogun’, ‘Camelot’, ‘3964’ or ‘Antebellum’. As in the first harvest ‘Paladin’ had the lowest total marketable yield, but in contrast to the first harvest ‘Outside’, ‘Turnpike’, ‘Mercer’, ‘2862’ and ‘3255’ were not statistically different from it. At the third harvest ‘3964’ had the highest yield, but it was not statistically different than “Tarpon’, ‘1819’, ‘Labella’, ‘3255’, ‘Aristotle’ or ‘Turnpike’. There was no yield for the variety ‘Paladin’ since BLS had completely defoliated the plants. However, ‘Shogun’, ‘Camelot’ and ‘2862’ were not significantly different from it. For the combined yield, ‘1819’ had the highest yield for extra-large, large, and medium fruit percent marketable and total marketable yield. There were several varieties which were not statistically different from its ‘Labelle’, ‘3964’, ‘Mercer’, ‘Prowler’, ‘3255’, ‘Antebellum’, ‘Tarpon’, ‘Aristotle’, and ‘Turnpike’. ‘Paladin’ had the lowest total marketable yield.

The results from 2020 are similar to 2019. The varieties that had the highest yield in 2019 were ‘2964’, ‘1819’, ‘Antebellum’, ‘Turnpike’, ‘Tarpon’, ‘Prowler’, and ‘Aristotle’ X3R. Based on these two years growers have several varieties from which to select. One-point growers need to remember is not spraying is not a possibility especially in areas where other disease maybe prevalent. In New Jersey, anthracnose is becoming more of a problem, especially in the South. This relates to poor rotations and possibly not starting spray programs in a timely matter. For anthracnose management the first applications should be applied at first bloom and continued weekly throughout the harvest period. Once anthracnose is in the field it is difficult to control. Missing one spray could allow anthracnose to become established in a field.
Table 1. Summary of average, minimum and maximum temperatures (°F), and total rainfall, Vineland, New Jersey May-September 2020.

<table>
<thead>
<tr>
<th>Month</th>
<th>Average</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Rainfall (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>60.0</td>
<td>34.7</td>
<td>84.8</td>
<td>1.13</td>
</tr>
<tr>
<td>June</td>
<td>72.6</td>
<td>42.5</td>
<td>90.6</td>
<td>2.44</td>
</tr>
<tr>
<td>July</td>
<td>78.8</td>
<td>64.1</td>
<td>96.2</td>
<td>10.92</td>
</tr>
<tr>
<td>August</td>
<td>75.5</td>
<td>59.8</td>
<td>92.0</td>
<td>10.42</td>
</tr>
<tr>
<td>September</td>
<td>67.1</td>
<td>41.7</td>
<td>88.7</td>
<td>4.36</td>
</tr>
</tbody>
</table>

Table 2. Seed sources and disease resistance as report by the company.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Company</th>
<th>Disease Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1819</td>
<td>Seminis</td>
<td>HR: Xcv 0-5; IR: Pc</td>
</tr>
<tr>
<td>3255</td>
<td>Seminis</td>
<td>HR: Tm 0; IR: Xcv 1-10</td>
</tr>
<tr>
<td>3964</td>
<td>Seminis</td>
<td>HR: Xcv 0-4, 7-9; Tm 0; IR: CMV</td>
</tr>
<tr>
<td>Antebellum</td>
<td>Seminis</td>
<td>HR: Tm 0, IR: TSWV, Xcv 1-10</td>
</tr>
<tr>
<td>Aristotle X3R</td>
<td>Seminis</td>
<td>HR: PVY 0, Tm 0; Xcv 0-3, 7, 8</td>
</tr>
<tr>
<td>Camelot X3R</td>
<td>Seminis</td>
<td>Xcv 1-3</td>
</tr>
<tr>
<td>FPP 2862</td>
<td>Sakata</td>
<td></td>
</tr>
<tr>
<td>Labelle</td>
<td>Seedway</td>
<td>IR: Xcv 1-10</td>
</tr>
<tr>
<td>Mercer</td>
<td>Sakata</td>
<td>HR: TMV:0; Xcv 0-3, 7-8; IR: Pc</td>
</tr>
<tr>
<td>Nitro S10</td>
<td>Sakata</td>
<td>HR: TMV:0, IR: Xcv 0-10</td>
</tr>
<tr>
<td>Outsider</td>
<td>Syngenta</td>
<td>HR: TSWV; Xcv 1-10</td>
</tr>
<tr>
<td>Paladin</td>
<td>Syngenta</td>
<td>HR: Pc</td>
</tr>
<tr>
<td>Prowler</td>
<td>HM Clause</td>
<td>IR: TSWV: 0; IR: Xcv 1-10</td>
</tr>
<tr>
<td>Shogun S10</td>
<td>Sakata</td>
<td>HR: TMV:0, IR: TSWV, Xcv 0-10</td>
</tr>
<tr>
<td>Tarpon</td>
<td>Seminis</td>
<td>HR: Tm:0, Xcv: 0-10; Pc</td>
</tr>
<tr>
<td>Turnpike</td>
<td>Seminis</td>
<td>HR: Tm; Xcv: 0-5, 7-9; IR: Pc</td>
</tr>
</tbody>
</table>

*PVY = Potato virus Y; TMV = Tobacco Mosaic Virus; TSWV = Tomato Spotted Wilt Virus; Tm = Tobamovirus; Xcv = Bacterial leaf spot race resistance; CMV = Cucumber mosaic virus; Pc = Phytophthora capsici, with HR = Highly resistant; IR = Intermediate resistance*
Table 3. Extra-Large, Large, and Medium Sized Fruit, Percent Marketable Yield, and Total Marketable for Three Harvests. (28 Lb. Boxes per Acre); 2020, Vineland, NJ.

<table>
<thead>
<tr>
<th>Variety/Line</th>
<th>XL</th>
<th>L</th>
<th>M</th>
<th>% Marketable</th>
<th>Total Marketable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1819</td>
<td>407.13</td>
<td>ab 689.42</td>
<td>99.80</td>
<td>ab 97.11</td>
<td>1196.30 a</td>
</tr>
<tr>
<td>Labelle</td>
<td>316.94</td>
<td>ab 754.95</td>
<td>50.30</td>
<td>abc 94.65</td>
<td>1122.20 ab</td>
</tr>
<tr>
<td>3964</td>
<td>410.70</td>
<td>a 566.09</td>
<td>a-d 80.24</td>
<td>abc 94.88</td>
<td>1056.90 abc</td>
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<tr>
<td>Mercer</td>
<td>196.73</td>
<td>bc 719.68</td>
<td>a 100.18</td>
<td>ab 96.76</td>
<td>1016.60 a-d</td>
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<tr>
<td>Prowler</td>
<td>222.42</td>
<td>bc 691.59</td>
<td>ab 92.82</td>
<td>abc 91.57</td>
<td>1006.80 a-d</td>
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<tr>
<td>3255</td>
<td>313.50</td>
<td>ab 639.73</td>
<td>a-d 49.59</td>
<td>abc 98.23</td>
<td>1002.80 a-d</td>
</tr>
<tr>
<td>Antebellum</td>
<td>330.66</td>
<td>ab 582.07</td>
<td>a-d 54.50</td>
<td>abc 94.64</td>
<td>967.20 a-e</td>
</tr>
<tr>
<td>Tarpon</td>
<td>155.57</td>
<td>cd 704.60</td>
<td>ab 95.70</td>
<td>abc 91.85</td>
<td>955.90 a-e</td>
</tr>
<tr>
<td>Aristotle</td>
<td>367.90</td>
<td>a 525.08</td>
<td>bcd 52.75</td>
<td>abc 95.79</td>
<td>945.70 a-e</td>
</tr>
<tr>
<td>Turnpike</td>
<td>411.70</td>
<td>a 476.14</td>
<td>d 50.11</td>
<td>abc 98.24</td>
<td>938.00 a-e</td>
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*Within columns, means followed by different letters are significantly different

XL = Extra-Large; L = Large; M = Medium
NJDEP & Rutgers OCPE Announce Roll Out of New Online Pesticide Exam Portal!

January 11, 2021 by Pat Hastings

The New Jersey Department of Environmental Protection and Rutgers University are pleased to announce that the new online Pesticide Applicator Certification Exam Registration (PACER) system is NOW AVAILABLE for your use. Anyone interested in taking a Pesticide exam must register through the PACER system at pacer.rutgers.edu.

- The registration PACER system and exams are available 24/7.
- All exams will be administered via remote proctoring including real-time student ID verification and activity monitoring to uphold the Department’s exam standards and security.
- Exam applicants will be assessed a nominal fee for each exam.
- All exams are CLOSED book.
- The Department no longer offers any pesticide certification exams.

To streamline the pesticide exam process, a new online Pesticide Applicator Certification Exam Registration (PACER) system has been created and is available for your use immediately.

![Image of PACER system](image-url)
Rutgers PACER NJ Pesticide Certification Exams Home Page (click)

How the new system benefits YOU:

- **Online Access**: Web-based PACER application is accessible 24 hours a day, 7 days a week.
- **No More Snail Mail**: Upload your support documents online and eliminate the time and expense required to mail them.
- **Quick Review Turnaround**: Your application will be reviewed within 48 business hours and you will be notified of any problems or concerns with your documentation promptly via email.
- **Immediate Exam Scheduling**: YOU choose your exam date and location when you register; no more waiting to hear which of your exam date and time choices were available.
- **Fast Exam Results**: See your exam grades within 48 business hours of exam completion.
- **More Exam Locations**: Due to COVID-19, all exams are currently being offered online. When these restrictions are lifted, online exams will continue and in-person exams will resume. For in-person exams, new facilities will be added around the state to give you more options for added convenience.
- **More Exam Times**: Online exams are available 24/7. In-person exams will be administered weekdays, evenings and on Saturdays to better accommodate your schedule.
- **Manage Others’ Exams**: Are you responsible for your organization’s employees? Now you can easily track and manage exam applications and scheduling for multiple people in PACER!
- **Support**: Responsive, courteous help desk support is available Monday through Friday, 8:00am-4:30pm.

**Fees – $115 per each Category exam and the Core exam; $50 per each Private licensing exam***

Pay online via credit card or e-check, with no extra surcharge
Purchase Orders will also be accepted via upload

*This fee covers the costs to sustain hosting and maintenance of the PACER system as well as the dedicated professional application review, customer support, and exam proctoring and administration.

The PACER system and exams are administered by the Office of Continuing Professional Education (OCPE), part of Rutgers Cooperative Extension at the New Jersey Agricultural Experiment Station at Rutgers University. Your user experience is paramount to Rutgers OCPE and we invite you to provide feedback after you have used the new PACER system for your next exam.
**Yearly Water Use Report**

February 28 each year is the deadline to submit your water use reports. If you have done this online in the past you will not receive any paper copy to fill out. If you have only submitted the report on the form they sent, you should receive the forms this month. If you do not receive the forms go to [www.njdeponline.com](http://www.njdeponline.com). Step-by-step instructions can be found at [https://www.nj.gov/dep/watersupply/pdf WS_Online_Short_Instr.pdf](https://www.nj.gov/dep/watersupply/pdf WS_Online_Short_Instr.pdf)

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**New Jersey Department of Agriculture Moves to New Building in Trenton**

The New Jersey Department of Agriculture Administration and Staff have moved from their previous office building to a new location. The new building address for the NJDA office is: 200 Riverview Plaza, 3rd Floor, Trenton, NJ, 08611 and the mailing address remains: PO Box 330, Trenton, NJ, 08625

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**Farm Truck Certificates**

We are currently doing farm tag certificates by mail only.

Pick up an application from the front entrance of our building or email: BrandiWi@co.cumberland.nj.us for a downloadable PDF version. The applications are in a plastic bin on the front steps of our office building. You will need a separate application for each different registered name on the motor vehicle registrations. Be sure your application includes the EXACT name on the registration.

For example: If you have a truck registered to “John M. Deere” and a truck registered to “Deere Farms, LLC.” you will need 2 applications.

1) Fill out the entire application and make sure to sign it.

2) Include a self-addressed, stamped envelope in your mailing. This is how we will mail your certificate to you.

3) Mail the application and envelope to us at:

   **Rutgers Cooperative Extension  Ag Dept., 291 Morton Ave., Millville, NJ 08332**

Email: brandiwi@co.cumberland.nj.us if you have any questions or would like a digital copy of the application to print out. You will still have to mail the form and an envelope to us. Call us at 856-451-2800 ext 1 with any questions.
Calendar of Important Events

- Indicates a newly added event or more information since the last calendar

- Online

February 8-11
- 2021 Mid-Atlantic Fruit and Vegetable Conference; Held virtually. The event will feature four days of three or more concurrent educational sessions. Sessions will be recorded and available for several weeks after the Convention. Pesticide credits anticipated for Pennsylvania, Maryland, New Jersey and Virginia.
  - Registration and details at www.mafvc.org

February 12-13
- Great Plains Growers Conference & Trade Show; Held virtually. More information at www.greatplainsgrowersconference.org

February 17-18

February 21-24
- IFTA Annual Conference; Held virtually. More information will be available at www.ifruittree.org

- February 22
  - Winter Commercial Tree Fruit School: Part 1; 9:00 AM-12:30 PM; Zoom Meeting; The annual Penn State Extension Winter Commercial Tree Fruit School: Part I for commercial growers provides an opportunity for growers to learn about the latest innovations, techniques, and concerns for managing orchards in Pennsylvania. This session will review topics including invasive and unexpected fruit pest challenges, a review of the new tree fruit rootstocks, results of the REDpulse Defoliation Trial, and more! Spanish session also available the same day starting at 2:00 PM; Sign up for either session or find more information by going to https://extension.psu.edu/winter-commercial-tree-fruit-school-part-i; Part two on March 1, 2021
  - February 22-25
  - New Jersey Vegetable Growers Conference; Held virtually. Sign up to join the Zoom meeting or find more information at www.vganj.com; Program is attached to this newsletter.

February 25-27
- Moses Organic Farming Conference; Held virtually. More information at Mosesorganic.org/conference

- March 1
  - Winter Commercial Tree Fruit School: Part 2; 9:00 AM-12:30 PM; Zoom Meeting; Sign up or find more information by going to https://extension.psu.edu/winter-commercial-tree-fruit-school-part-ii

May 3
- Rutgers Turfgrass Research Golf Classic, 25th Anniversary; Fiddler’s Elbow Country Club, 811 Rattlesnake Bridge Rd, Bedminster, NJ 07911; This event is the largest turfgrass research golf event in the US; For more information or to register go to https://njta.wildapricot.org/
REGULARLY SCHEDULED MEETINGS

<table>
<thead>
<tr>
<th>Cumberland County Pesticide Certification Exam Schedule</th>
<th>Cumberland County Agriculture Development Board</th>
<th>Cumberland County Board Of Agriculture</th>
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</thead>
<tbody>
<tr>
<td>RCE of Cumberland County &lt;br&gt; 291 Morton Avenue &lt;br&gt; Millville, NJ 08332 &lt;br&gt; (Between Rosenhayn &amp; Carmel)</td>
<td>Virtual Meeting Information can be found on the Public Meeting Calendar on co.cumberland.nj.us</td>
<td>Virtual Meeting Information Email or call Katie &lt;br&gt; <a href="mailto:KatieSi@co.cumberland.nj.us">KatieSi@co.cumberland.nj.us</a> (856) 451-2800 x1</td>
</tr>
<tr>
<td>Rutgers will be taking over the pesticide exam program. &lt;br&gt; More information to come. &lt;br&gt; No exams will be held until further notice.</td>
<td>Feb. 9 March 9 April 13 &lt;br&gt; May 11 June 15 July 13 &lt;br&gt; Aug. 10 Sept. 14 Oct. 12 &lt;br&gt; Nov. 9 Dec. 14</td>
<td>Feb. 18 March 18 April 15 &lt;br&gt; May 20 Sept. 16 Oct. 21 &lt;br&gt; Nov. 18 Dec. 16</td>
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<tr>
<td>No registration at this time. &lt;br&gt; For information call 856-451-2800</td>
<td>Meetings start at 7 p.m. &lt;br&gt; For more information call the Dept. of Planning, Tourism and Community Affairs at 856-453-2175</td>
<td>Meetings start at 7 p.m. &lt;br&gt; For information call Lew DePietro, President at 856-981-9843</td>
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The program in Cumberland County is suspended until further notice.

Cumberland County Improvement Authority (CCIA) Pesticide Container Recycling 9:00 a.m. to 12 Noon Cumberland County Solid Waste Complex 169 Jesse’s Bridge Rd. (located off Route 55 Exit 29)

Sincerely,

Wesley L. Kline, Ph.D. Cooperative Extension Agent Vegetable Production and Food Safety WKline@njaes.rutgers.edu

Timothy J. Waller, Ph.D. Cooperative Extension Agent Nursery Production TWaller@njaes.rutgers.edu

Salvatore Mangiafico, Ph.D. Extension Department Head & Environmental and Resource Mgt. Agent Mangiafico@njaes.rutgers.edu

Pesticide User Responsibility: Use pesticides safely and follow instructions on labels. The user is responsible for the proper use of pesticides, residues on crops, storage and disposal, as well as damages caused by drift.

Use of Trade Names: Trade names are used in this publication with the understanding that no discrimination is intended and no endorsement is implied. In some instances the compound may be sold under different trade names, which may vary as to label.
Have you visited the Cumberland County website for the
Present and/or past issues of “Cultivating Cumberland”? It’s a great
resource for information and dates...
http://Cumberland.njaes.rutgers.edu/

Public Notification and Non-discrimination Statement
Rutgers Cooperative Extension is an equal opportunity program provider and employer. Contact your local Extension Office for information regarding special needs or accommodations. Contact the State Extension Director’s Office if you have concerns related to discrimination, 848-932-3584.

Cooperative Extension of Cumberland County

Since 1915
Instructions & Requirements for Obtaining Pesticide Recertification Credits at the 2021 NJ Ag/VGANJ Virtual Convention

In order to meet NJDEP identity verification requirements, each attendee seeking pesticide license recertification credits must provide a copy of a Government issued photo ID (passport, driver’s license, municipal, or county ID) and their New Jersey Pesticide Applicator License. This is accomplished by uploading photos/scans of your Photo ID and your Pesticide License to a confidential Rutgers website. Please submit your files identified as: “<YourLastname_Firstname>_Photo_ID” and “<YourLastname_Firstname>_Pesticide_License”

Follow these steps to be eligible to receive recertification credits:

1. **You MUST pre-register by Wed, Feb 17, 2021** for pesticide recertification credits at: https://vganj.com/registration

2. **Once registered**, there will be a separate link provided to submit your name, pesticide license number, date of birth. Fill out the first form, then click the second link to submit required photo IDs.
   a. **Upload directions**: Scan a copy of your government issued photo ID and NJ pesticide license into a computer and follow the directions at the upload link. If using a 'smart' device, click the link on your device and follow the on-screen prompts.

During the virtual sessions (Feb 22-25, 2021 - https://vganj.com/schedule)

3. **You must** pre-register and upload documents by the deadline above to earn NJDEP recertification credits. Walk-ins the day of the session are not eligible for NJDEP recertification credits.

4. Join the Zoom meeting offering pesticide credits of your choice. You may only attend one session each afternoon offering category credits, plus CORE credit sessions at lunchtime on Tues and Thurs. **Attend the entire meeting.** Log-in and log-out times will be recorded for all attendees. Note: If you choose to access via a smart device, it is recommended that the unit is fully charged and plugged in; and that no background applications are running.

5. **Attendees must participate** throughout the entire session. DO NOT leave the meeting early. Please stay logged in until the moderator ends the session for all. **Polls will be taken randomly during credit sessions** and attendees must answer these questions to be eligible for recertification credits.

**Note**: Licensed applicators with a recertification period expiring October 31, 2021 have been given an exemption from the NJDEP online credit cap of 25% and are eligible for all credits until that date. Otherwise this exemption does not apply for licenses expiring after 2021.

*Rutgers is dedicated to protecting your privacy and keeping your personal information safe. Upon upload, your files will be encrypted and stored to Rutgers Connect. Your information will be kept strictly confidential; used solely to meet NJDEP ID verification protocol for recertification credit; and will not be used for any other purpose. Your files will be deleted within 60 days after the training event.*
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>Mon Feb 22, 2021</td>
<td>9:00/9:15-11:45</td>
<td>Lunch &amp; Learn Q&amp;A Noon-1:00pm</td>
<td>Ormamentals/Nursery I Waller/Errickson</td>
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<td>Optional Q&amp;A Discussions with speakers between sessions</td>
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<td>Know Your Numbers, Know Your Options II</td>
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<td>Tues Feb 23, 2021</td>
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<td>Organic Production</td>
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<td>New Orchard Establishment I Muehlbauer/Gohil</td>
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<td>Pesticide Regulatory Review for Pesticide Applicators, Businesses, &amp; Agricultural Employers (1 hour for 2 CORE credits) Hastings</td>
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<td>Hemp Bamka/Komar</td>
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<td>Specialty Crops Sciarappa</td>
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<td>Creating Value-Added Products &amp; Services to Increase Profits Hlubik</td>
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<td>Creative Marketing/Agritourism Hlubik</td>
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<td>Through the Looking Glass-Future Technologies for NJ Farms VanVranken</td>
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<td>Integrated Pest Management Holstrom/Ingerson-Mahar</td>
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<td>General Vegetables &amp; Herbs I Orton/Wyenandt</td>
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2021 NJ Ag/VGANJ Virtual Convention – Educational Sessions Agenda

Welcoming Remarks –
(recorded messages presented in each session)
VGANJ – John Banscher, President
NJAES/RCE – Laura Lawson, Interim Exec Director & Brian Schilling, RCE Director
NJDA – Doug Fisher, Secretary

Monday Morning
February 22, 2021
9:15 AM – 11:45 AM

Ornamentals/Nursery I
Bill Errickson & Tim Waller
9:15-9:30am-Welcome & Intro
9:30-10:00am-Growing Mums for Fall Markets
Bill Errickson, County Agent, RCE Monmouth
10:00-10:30am-Let It Flow - Solving Issues of Clogging in Your Irrigation System
Paul Fisher, Professor & Extension Specialist, Environmental Horticulture Dept, Univ Florida
10:30-10:45am-What’s New from Industry/Break
10:45-11:15am-Container Production of Broadleaf Evergreens
Steve Kristoph, Owner, Steven Kristoph Nursery & Adjunct Instructor, Rutgers Univ
11:15-11:45am-Native Plant Production in New Jersey
Tom Knezick, Production Analyst & Seed Specialist, Pinelands Nursery
11:45am-Q&A/Adjourn

Hydroponics/Controlled Environment Systems I
Bill Sciarappa, AJ Both & Albert Ayeni
9:15-9:30am-Welcome & Intro
9:30-10:00am-Growing Systems - What Does Your Crop Need?
AJ Both, Extension Specialist-Controlled Environment Engineering, Rutgers NJAES
10:00-10:30am-Production & Marketing of Leafy Greens
Albert Ayeni, Coordinator, NJAES Rutgers Indoor Cultivation Initiative
10:30-10:45am-What’s New from Industry/Break
10:45-11:15am-Marketing Tools for Small Business
Ramu Govindasamy, Extension Specialist-Marketing, Rutgers NJAES
11:15-11:45am-Food Safety 101 for Hydroponic Operations: Market Access & Federal Compliance
Meredith Melendez, County Agent, RCE Mercer
11:45am-Q&A/Adjourn

Know Your Numbers, Know Your Options I
Robin Brumfield
All workshop presentations by Robin Brumfield, Extension Specialist-Farm Management, Rutgers NJAES
9:15-9:30am-Welcome & Intro
9:30-10:00am-Building Financial Resilience During Tough Times
10:00-10:30am-Constructing and Interpreting a Balance Sheet
10:30-10:45am-What’s New from Industry/Break
10:45-11:15am-Managing Risks Using 3 Key Ratios from Your Balance Sheet
11:15-11:45am-Income Statement – Measuring Profitability
11:45am-Q&A/Adjourn
Monday Afternoon
February 22, 2021
1:15 PM – 3:45 PM

**Ornamentals/Nursery II (pesticide recertification credits)**

*Tim Waller & Bill Errickson*
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-Using Growing Degree-day Models to Prepare for the Future
   Timothy Waller, County Agent RCE-Cumberland
2:00-2:30pm-Aphids - Biocontrol in Greenhouse, High Tunnels and Microgreen Production Systems
   Stanton Gill, University of Maryland (College of Agricultural and Natural Resources)
2:30-2:45pm-What's New from Industry/Break
2:45-3:15pm-Little Critter, BIG Problem for Nurseries in the Mid-Atlantic (Red headed flea beetle)
   Brian Kunkel, Agricultural & Natural Resources, Univ Delaware
3:15-3:45pm-Fighting Boxwood Blight Together
   Chuanxue Hong, Plant Pathology, Virginia Tech
3:45pm-Q&A/Adjourn

**Hydroponics/Controlled Environment Systems II (pesticide recertification credits)**

*Bill Sciarappa, AJ Both & Albert Ayeni*
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-Keeping Your Crops Happy-Environmental Control
   AJ Both, Extension Specialist- Controlled Environment Engineering, Rutgers NJAES
2:00-2:30pm-Production & Marketing of Fruiting Vegetables
   Dave Specca, Assistant Director, Rutgers NJAES EcoComplex
2:30-2:45pm-What's New from Industry/Break
2:45-3:15pm-Exploring Funding Opportunities for the Agricultural Entrepreneur
   Elaine Griffin, Manager-Compliance/Quality Control, Rutgers SEBS/NJAES Office of Grants Facilitation
   Joseph Cronin, Supervisor/Grant Facilitator, Rutgers SEBS/NJAES Office of Grants Facilitation
3:15-3:45pm-Pests & Diseases-Avoiding Headaches
   Steve Rettke, Program Associate-Ornamentals IPM, Rutgers NJAES
3:45pm-Q&A/Adjourn

**Know Your Numbers, Know Your Options II**

*Robin Brumfield*
All workshop presentations by Robin Brumfield, Extension Specialist-Farm Management, Rutgers NJAES
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-Ratios from the Income Statement: Financial Efficiencies
2:00-2:30pm-Cash Flow – a survival strategy in tough times
2:30-2:45pm-What's New from Industry/Break
2:45-3:15pm-How the Pieces Fit Together
3:15-3:45pm-Financial Risk Management Strategies
3:45pm-Q&A/Adjourn
Tuesday Morning
February 23, 2021
9:15 AM – 11:45 AM

**Organic Production**

*Joseph Heckman*

9:15-9:30am-Welcome & Intro

9:30-10:00am-Soil Health & Organic Sweetpotato Production
Joseph Heckman, Extension Specialist-Soils, Rutgers NJAES

10:00-10:30am-Managing Allium Leaf Miner for Organic Onions
Glasis Zinati, Researcher, Rodale Institute

10:30-10:45am-What’s New from Industry/Break

10:45-11:15am-Satisfying the Sulfur Needs of Crops
Joseph Heckman, Extension Specialist-Soils, Rutgers NJAES

11:15-11:45am-Balancing Safety and Nutrition in Organic Foods
Mark McAfee, Founder, Organic Pastures Dairy/Raw Milk

Institute (RAWMI)
11:45am-Q&A/Adjourn

**New Orchard Establishment I**

*Megan Muehlbauer & Hemant Gohil*

9:15-9:30am-Welcome & Intro

9:30-10:00am-Overview of Resources Available to New Tree Fruit Growers in New Jersey
Megan Muehlbauer, County Agent, RCE-Hunterdon
Hemant Gohil, County Agent, RCE-Gloucester

10:00-10:30am-Orchard Site Selection and Pre-Plant Preparation
Michael Basedow, Area Tree Fruit Specialist, Eastern New York Commercial Horticulture Program, Cornell Cooperative Extension

10:30-10:45am-Web Soil Survey – An Efficient Tool to Understand Native Properties of the Soil
Megan Muehlbauer, County Agent, RCE-Hunterdon
Hemant Gohil, County Agent, RCE-Gloucester

10:45-11:15am-Orchard Integrated Pest Management (IPM) Basics
Michael Basedow, Area Tree Fruit Specialist, Eastern New York Commercial Horticulture Program, Cornell Cooperative Extension

11:15-11:45am-Orchard Management in the Early Years – Principles & Practices
Daniel Ward, Assistant Extension Specialist-Pomology, Rutgers NJAES

11:45am-Q&A/Adjourn

**Hemp**

*Bill Bamka & Steve Komar*

9:15-9:30am-Welcome & Intro

9:30-10:00am-Rutgers First Hemp Trials – Observations & Future Direction
Bill Bamka, County Agent, RCE-Burlington

10:00-10:30am-Marketing Considerations for Industrial Hemp Production in NJ
Stephen Komar, County Agent, RCE-Sussex

10:30-10:50am-Laboratory Services for the Hemp Industry in New Jersey
Jim Simon, Extension Specialist-New Crops, Rutgers NJAES

10:50-11:15am-Hemp Diseases in NJ – What We Know
Andy Wyendant, Extension Specialist-Plant Pathology, Rutgers NJAES

11:15-11:45am-Hemp Production in NJ – Challenges & Opportunities (Panel Discussion)
Bill Bamka, County Agent, RCE-Burlington
Raul Cabrera, Extension Specialist-Nursery Production & Mgmt, Rutgers NJAES
Tom Gianfagna, Professor-Plant Biology, Rutgers NJAES
Stephen Komar, County Agent, RCE-Sussex
Jim Simon, Extension Specialist-New Crops, Rutgers NJAES
Andy Wyenant, Extension Specialist-Plant Pathology, Rutgers NJAES
Nimmi Raj, Post-Doc, Rutgers NJAES

11:45am-Q&A/Adjourn
Tuesday Afternoon
February 23, 2021
12:00 PM – 1:00 PM

**Pesticide Regulatory Review for Pesticide Applicators, Businesses, and Agricultural Employers** (1 hour for 2 CORE credits)
*Pat Hastings*
A thorough review of regulatory requirements for pesticide applicator certification, recertification, and licensing in New Jersey, including administrative changes to license renewal processes.

Tuesday Afternoon
February 23, 2021
1:15 PM – 3:45 PM

**Weed Control** (pesticide recertification credits)
*Thierry Besançon*
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-*Weed Management Update for Row crops*
   Dr. Mark VanGessel, Professor & Extension Specialist, Weed Science & Crop Management, UDel
2:00-2:30pm-*Electrical Weeders & Potential Use in Specialty Crops*
   Dr. Lynn Sosnoskie, Assistant Professor Weed Ecology and Management for Specialty Crops, Cornell University
2:30-2:45pm-*What’s New from Industry/Break*
2:45-3:15pm-*Taking Advantage of Plant Weaknesses for Improved Weed Control*
   Meredith Melendez, County Agent, RCE-Mercer
3:15-3:45pm-*Weed Management Update for Vine Crops*
   Dr. Thierry Besançon, Extension Specialist, Weed Science, Rutgers NJAES
3:45pm-Q&A/Adjourn

**New Orchard Establishment II**
*Megan Muehlbauer & Hemant Gohil*
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-*Panel Discussion-Growers’ Perspectives on Delving into Tree Fruit Production*
   Edward Cuneo, Spinella Farms
   Dr. Lewis DeEugenio, Summit City Farms
2:00-2:30pm-*Organic Apple Production - Is it Feasible in NJ?*
   Megan Muehlbauer, County Agent, RCE-Hunterdon
2:30-2:45pm-*What’s New from Industry/Break*
2:45-3:15pm-*Economics of Tree Fruit Production*
   Lynn Kime, Senior Extension Associate, Penn State Extension
3:15pm-Q&A/Adjourn

Tuesday Evening
February 23, 2021
4:00 PM – 6:00 PM

**Specialty Crops** (pesticide recertification credits)
*Bill Sciarappa*
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-*Using Demographic Information to Identify Specialty Crop Markets*
   Michelle Infante-Casella, County Agent, RCE-Gloucester
2:00-2:30pm-*African Marigolds for Fall Markets*
   William Errickson, County Agent, RCE-Monmouth
   Lauren Errickson, Snr Program Administrator, RCE
2:30-2:45pm-*What’s New from Industry/Break*
2:45-3:15pm-*New Crops – RU Hot Peppers & More*
   Albert Ayeni, Ethnic Crop Research Specialist, NJAES
3:15-3:45pm-*Pesticide Safety & Regulatory Update for 2021*
   George Hamilton, Extension Specialist-Entomology, Rutgers NJAES
3:45pm-Q&A/Adjourn

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Tues Feb 23, 2021 – 4:00pm-6:00pm

**NJ Dept Health**

**Training Required for Farmers/Market Managers**
Farmers and market managers are required to attend a training session conducted by NJ Dept Health staff Jose Quann and Dorothy Ngunezi in order to participate in WIC & Senior Farmers Market Nutrition Programs in order to accept payments with EBT cards. Program requirements will be explained. If you cannot attend this session, there will be others scheduled by DOH before the season starts.
### Soil Health/Cover Crops

**Michelle Infante-Casella**
9:15-9:30am- Welcome & Intro
9:30-10:00am- Soil Health 101
  - William Bamka, County Agent, RCE-Burlington
10:00-10:30am- Soil Organisms, Their Functions & How to Increase Beneficial Microbes in the Soil
  - William Errickson, County Agent, RCE-Monmouth
10:30-11:15am- The Great Debate – Residue Management Pros & Cons
  - Kate Brown, Program Associate-Agriculture, RCE-Burlington
11:15-11:45am- Cover Crop Selections for Vegetable Crop Production
  - Kaitlin Farbotnik, Agronomist, NRCS

### Creating Value-Added Products & Services to Increase Profits

**Bill Hlubik**
9:15-9:30am- Welcome & Intro
9:30-10:00am- Growing Beer & Agritourism at the Bullock Farm
  - Brett Bullock, Farmer/Brewer, Bullock Farms, Cream Ridge, NJ
10:00-10:30am- Snapping Turtle Farm – Direct Marketing Ideas for a Changing Consumer Landscape
  - Allison Akbay, Farmer Owner/Operator, Snapping Turtle Farm, Cranbury, NJ
10:30-11:00am- What’s New from Industry/Break
11:00-11:15am- On-Farm Cold Press Juices & Other Value-Added Products on the Marchese Family Farm
  - Andrew Marchese, Farmer Owner/Operator, Marchese Family Farm, Hopewell, NJ
11:15-11:30am- ZaFa Wine – Marketing Strategies for Value Added Products
  - Krista Scruggs, Farmer/Wine Maker, Zafa Farm & Winery, Burlington, VT
11:30-11:45am- Bringing it All Together Roundtable Q&A/Adjourn
  - Bill Hlubik, County Agent, RCE-Middlesex

### Food Safety

**Meredith Melendez**
9:15-9:40am- Welcome & What’s New from Industry
9:40-10:10am- Produce Safety Research Update
  - Kali Kniel, Professor-Microbial Food Safety, UDel
10:10-10:40am- Navigating Food Safety in the Pick Your Own Patch
  - Jeff Stolzfus, Extension Educator, Penn State
10:40-11:10am- Postharvest Priorities to Reduce Produce Safety Risks
  - Chris Gunter, Extension Specialist-Vegetable Production, North Carolina State Univ
11:10-11:40am- Audit & Inspection Updates
  - Chris Kleinguenther, Bureau Chief-Commodity Inspections & Grading, NJ Dept of Agriculture
11:40am- Q&A/Adjourn

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**Wed Feb 24, 2021 – Noon-1:00pm**

**VGANJ Tribute to New Jersey Farmers**

**John Banscher, President**

Join VGANJ President John Banscher in a celebration of all New Jersey’s farmers recognizing your essential work throughout the 2020 pandemic.
Wednesday Afternoon
February 24, 2021
1:15 PM – 3:45 PM

**Small Fruit** (pesticide recertification credits)

**Pete Nitzsche**
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-What Affects the Flavor of Strawberries & Can You Do Anything About It?
   - Marvin Pritts, Professor & Director Undergraduate Studies, Plant Science Dept, Cornell Univ
2:00-2:30pm-A Decade After Spotted-wing Drosophila Invasion in the USA: Lessons Learned
   - Cesar Rodriguez-Saona, Extension Specialist-Entomology, Rutgers NJAES
2:30-2:45pm-What’s New from Industry/Break
2:45-3:15pm-Double Cropping Raspberries
   - Nate Nourse, Owner, Nate Nourse Consulting
3:15-3:45pm-Strawberry Diseases New & Old
   - Andy Wyenandt, Extension Specialist-Vegetable Pathology, Rutgers NJAES
3:45pm-Q&A/Adjourn

**Creative Marketing/Agritourism**

**Bill Hlubik**
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-Challenges and Opportunities in Urban Farmers’ Markets
   - Lauren Errickson, Sr Program Administrator, RCE, Rutgers NJAES
2:00-2:30pm-Utilizing Social Media for Great Customer Service
   - Allen & Alyssa Ward, Farmer Owners/Operators, Ward’s Farm, Mannington, NJ
2:30-2:45pm-What’s New from Industry/Break
2:45-3:15pm-Expanding My Farmers Market in 2020 – Creative Marketing in Tough Times
   - Lenny Prezorski, Farmer Owner/Operator, Cold Spring Farm, Cobleskill, NY
3:15-3:45pm-Innovative Marketing Interviews with New Farmers
   - Brendon Bearsall, Program Coordinator, RCE-Middlesex
3:45pm-Roundtable Q&A/Adjourn
   - Bill Hlubik, County Agent, RCE-Middlesex

**Blueberry** (pesticide recertification credits)

**Gary Pavlis**
1:15-1:30pm-Welcome & Intro
1:30-1:55pm-Green Drop in the Draper blueberry variety, research conclusions
   - Gary C. Pavlis, County Agent, RCE-Atlantic
2:00-2:30pm-Pest Management Highlights from 2020 – The Year in Review
   - Dean Polk, County Agent-Fruit IPM, Rutgers NJAES
2:30-2:45pm-Modern methods of blueberry virus detection
   - James Polashock, Plant Pathologist, USDA-ARS, Blueberry-Cranberry Lab
2:45-3:15pm-Update on Black Shadow Management
   - Peter Oudemans, Extension Specialist-Plant Pathology, Rutgers NJAES
3:15-3:45pm-Searching for novel repellents to manage spotted-wing drosophila
   - Cesar Rodriguez-Saona, Extension Specialist-Entomology, Rutgers NJAES
3:45pm-Q&A/Adjourn
Thursday Morning
February 25, 2021
9:15 AM – 11:45 AM

Grapes I

Hemant Gohil
9:15-9:30am-Welcome & Intro
9:30-10:00am-Frost Protection in the Vineyard
  Michela Centinari, Associate Professor, Penn State Univ
10:00-10:30am-Panel Discussion – New Jersey Grape Growers’ Response to Frost Events (Moderator Daniel Ward)
  Mike Beneduce, Beneduce Vineyards
  Nick Sharko, Alba Vineyards
  Jim Quarella, Bellview Winery
10:30-10:45am-Preventing Herbicide Drift & Injury to Grapevines
  Gary Pavlis, County Agent, RCE-Atlantic
10:45-11:15am-Wine Grape Varieties for North New Jersey
  Megan Muehlbauer, County Agent, RCE-Hunterdon
11:15-11:45am-Alternative Wine Grape Varieties to Consider
  Joseph Fiola, Extension Specialist-Small Fruits, Univ Maryland
11:45am-Q&A/Adjourn

Through the Looking Glass – Future Technologies for NJ Farms

Rick VanVranken
9:00-9:15am-Welcome & Intro
9:15-9:45am-Applications of Cold Plasma in Hydroponics
  Mukund Karwe, Distinguished Professor-Food Engineering, NJAES
9:45-10:15am-Farm-IT – Cost Effective & Open-Source Management Solutions for Small Farm Operations
  Alon Rabinovich, Doctoral Student, Dept Earth & Environmental Sciences, Rutgers NJAES
10:15-10:45am-Agriculture & Solar – History and Status of the Massachusetts Solar PV Dual-Use Program
  River Strong, Associate Director, UMass Clean Energy Extension, Amherst
10:45-11:15am-Controlled Environment Agriculture – A Tool to Understand Flavor Profiles and Consumer Demand for Baby Leafy Greens
  Regina O’Brian, Doctoral Student, Dept Food Science, Rutgers NJAES
11:15-11:45am-From the Horizon to the Far Out – Production Enhancing Ag Technologies
  Gene Giacomelli, Professor & former Director of Controlled Environmental Ag Center, Univ Arizona
11:45am-Q&A/Adjourn

General Vegetables & Herbs I

Tom Orton & Andy Wyenandt
9:15-9:30am-Welcome & Intro
9:30-10:00am-Bacterial Leaf Spot Populations & Copper Resistance Development in Vegetable & Tree Fruit Crops in NJ
  Nrupali Patel, Research Plant Microbiologist-Dept Plant Biology, Rutgers NJAES
10:00-10:30am-Understanding Bacterial Leaf Spot Populations on Tomato & Pepper
  Jeff Jones, Distinguished Professor-Dept Plant Pathology, Univ Florida
10:30-10:45am-What’s New from Industry/Break
10:45-11:15am-Update on X10R Bell Pepper Varieties in NJ
  Wes Kline, County Agent, RCE-Cumberland
11:15-11:45am-Grafting Tomato & Peppers for Controlling Bacterial Wilt & Root Knot Nematode
  Frank Louws, Dept Head-Hort Sciences & Director-Center for Integrated Pest Management, NC State Univ
11:45am-Q&A/Adjourn
Thursday Afternoon
February 25, 2021
12:00 PM – 1:00 PM

Respiratory Protection Requirements of WPS-Labeled Pesticides (1 hour for 2 CORE credits)
Pat Hastings
Session will highlight the requirements of the federal WPS and New Jersey Worker Protection regulations covering use of respirators for pesticide applications.

Thursday Afternoon
February 25, 2021
1:00 PM – 3:45 PM

Grapes II (pesticide recertification credits)
Hemant Gohil
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-Understanding Risk and Evaluating Growing Practices in the Face of Emerging Invasive Pathogens
   Peter Oudemans, Extension Specialist-Plant Pathology, Rutgers
NJAES
2:00-2:30pm-Application of CRISPR-Gene Editing to Improve Grape Disease Resistance
   Rong Di, Associate Research Professor, Rutgers NJAES
2:30-2:45pm-What’s New from Industry/Break
2:45-3:15pm-Spotted Lantern Fly Update
   Anne Nielsen, Extension Specialist-Entomology, Rutgers
NJAES
3:15-3:45pm-Pesticide Safety and Regulation Update for 2021
   George Hamilton, Extension Specialist-Entomology, Rutgers
NJAES
3:45pm-Q&A/Adjourn

Integrated Pest Management (pesticide recertification credits)
Kris Holmstrom & Joe Ingerson-Mahar
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-Refining Your Disease Management Program for Pumpkin and Winter Squash
   Margaret McGrath, Extension Specialist-Plant Pathology, Cornell
2:00-3:15pm-Application of CRISPR-Gene Editing to Improve Grape Disease Resistance
   Rong Di, Associate Research Professor, Rutgers NJAES
2:30-2:45pm-What’s New from Industry/Break
2:45-3:15pm-Invasive Jumping Worms – Are There Any Risks to Agriculture?
   Josef Görres, Associate Professor-Soil Science, Univ Vermont
3:15-3:45pm-The Plague of Peppers – An Unexpected Tale of the Pepper Weevil in Ohio
   Elizabeth Long, Associate Professor-Horticultural Entomology, Purdue Univ
3:45pm-Q&A/Adjourn

General Vegetables & Herbs II (pesticide recertification credits)
Tom Orton & Andy Wyenandt
1:15-1:30pm-Welcome & Intro
1:30-2:00pm-Understanding & Controlling Cucurbit Downy Mildew in 2021
   Gary Vallad, Professor-Plant Pathology, UFL/IFAS Gulf Coast Research & Extension Center
2:00-2:30pm-Managing White Flies & Thrips in Field Vegetables
   Hugh Smith, Associate Professor-Entomology & Nematology, UFL/IFAS Gulf Coast Research & Extension Center
2:30-2:45pm-What’s New from Industry/Break
2:45-3:15pm-Alternaria Diseases of Brassicas-an Emerging Problem in the Mid-Atlantic
   Steve Rideout, Professor & Extension Specialist-Plant Pathology, Virginia Tech
3:15-3:45pm-Pepper Anthracnose-Appetite for Destruction
   Andy Wyenandt, Extension Specialist-Vegetable Pathology, Rutgers NJAES
3:45pm-Q&A/Adjourn