RUTGERS
New Jersey Agricultural Experiment Station

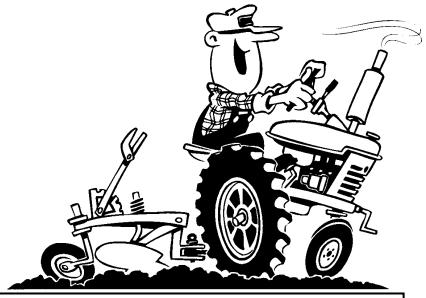
Cooperative Extension of Cumberland County
Extension Education Center
291 Morton Avenue
Millville, NJ 08332-9791

http://cumberland.njaes.rutgers.edu

Phone: (856) 451-2800 x1
Fax: (856) 451-4206

Cultivating Cumberland

November - 2021 VOL. 26, ISSUE 11



Inside this issue:

The office remains closed to the public.

Topics Covered

- Cleaning Packing Equipment
- Difference between Cleaning & Sanitizing
- Different products to use for monitoring pH and sanitizer concentration
- Cleaning Harvest Equipment
- Hands-on Activities

on-farm food safety team

This program is free but please visit the link below to register in advance by November 12th. Ten people must register to hold this event,
HTTP://RUTGERSONFARMFOODSAFETY.EVENTBRITE.COM
Any questions contact Brandi at (856) 451-2800 x 1 or email BrandiWi@co.cumberland.nj.us.

MASK POLICY
As per Rutgers policy, masks will be required during the entire meeting, no exceptions. If you do not have a mask, one will be provided. Hand sanitizer will be available as well.

Fall and Winter Management of Ruminants

Hank Bignall

- Forage Management for Sheep Flocks
- Winter feeding and management of ruminants
- Parasite management in small ruminants

Presenters:

1. Kara Riccioni, PhD Student at West Virginia University
2. Dr. Michael Westendorf, Animal Science Extension Specialist/Professor at Rutgers University
3. Hank Bignell, Sr. Program Coordinator, Rutgers Cooperative Extension of Warren County

Our guest speaker for this evening is Kara Riccioni

- Riccioni was born and raised on a livestock farm in Hunterdon County, NJ. She grew up participating in the local 4H program and competed at many junior livestock shows with Polled Dorset and Natural Colored breeding sheep.
- She and her fiancé raise and show Simmental cattle and sell feeder steers, show heifers, and breeding stock.
- She received her BS degree from Penn State University in Agricultural Business Management. While at Penn State she was a member of the livestock judging team.
- She received an MS degree from University of Kentucky in Animal Sciences focusing on Ruminant Nutrition and an MBA from DelVal University focused on Food and Agribusiness.
- Riccioni is currently a PhD student at West Virginia University in the Resource Management program.
- She previously worked for a farm seed company as a product manager for silage and forage lines and currently works for PA Small Business Development Centers as the Director of Agricultural Business Development.

November 8, 2021; 7:00 PM to 8:30 PM
Register online at https://go.rutgers.edu/RUruminant

Spotted Lanternfly Reporting Tool

William Errickson, July 29, 2021

Spotted Lanternfly (SLF) sightings are increasing on many NJ farms, especially as customers from across the tri-state area visit agritourism and pick-your-own operations, contributing to the spread of this invasive insect. Accurate reporting is important for understanding the movement of this pest and for developing a comprehensive management plan.

SLF sightings should be reported to the NJ Department of Agriculture using their online reporting tool: https://www.nj.gov/agriculture/divisions/pi/prog/pests-diseases/spotted-lanternfly/#reporting-tool

If the sighting was in a known quarantine county (*Burlington, Camden, Gloucester, Hunterdon, Mercer, Salem, Somerset, or Warren*) you do not need to fill out the report.
Additional resources for managing SLF on your farm can be found at:
https://njaes.rutgers.edu/spotted-lanternfly/

https://www.nj.gov/agriculture/divisions/pi/prog/pests-diseases/spotted-lanternfly/business-resources/

Planning for 2022 Production Season

Wes Kline

The 2021 production season is coming to an end with mixed results. Good quality and quantity of produce in many parts of south Jersey, but wholesale prices were nothing to write home about. Now is the time to think about what to do in 2022. Are you going to grow the same crops or the same amount? Should you be changing planting dates? What about growing your own plants or having someone to grow them for you? The first question you should ask yourself is where am I going to sell the crop? Market channels are changing and many of the old ways of marketing are not working. How long can you continue to sell your crop in the same way and lose money? Along with that question is do you really know how much it costs to grow a crop. When seed, fertilizer, equipment, and box prices continue to increase each year and this past year several times in one year knowing costs is even more important. Now is the time to look at what it really cost you to produce each crop and the return on investment.

Let's take an example of a cardboard box. Say it cost $2.25 at the start of 2021. How much did it increase over the summer? I have heard increases as high as 30% which means that box at the end of the summer would cost $2.93. Can you afford to sell squash at $3.00 or even $8.00? Think about labor, chemicals, equipment maintenance, etc. I have seen too many times over the years that product is sold below cost just because it "needs to be harvested." Does it make more sense just to delay harvest or pick it and leave it in the field or disc it down? Yes, it may be a waste, but isn't it better that it is a waste than going broke selling something?

As part of looking at costs evaluate your disease, insect, and weed management programs. Are you applying materials at the right time? Was the application needed at all? What about what you are putting down at planting or transplanting was it really needed? Evaluate each one to see if there may be some cost savings.

As we look to the future agriculture is changing at a more rapid pace than when tractors started being used. Computers, drones, artificial intelligence equipment such as planters, weeders, harvesters i.e., strawberry or apple harvesters, etc. Spray equipment is now available to direct chemicals just to weeds in a lettuce field. Robots are being developed that will identify diseases and insects in fields and make a pesticide application just to those locations. How does this fit into a South Jersey fruit and vegetable grower? The answer is it better! We need to keep moving forward or the industry will continue to shrink. This doesn't mean that an operation must go out and buy the most recent or most expensive equipment but think about what will save labor. As our labor force becomes smaller or more expensive what can you do to become more efficient. This may mean the next time you need to purchase a transplanter looking for one that can be run by two people instead of six. What about using a harvest aid to speed up harvest?

Application Period Opens for Pandemic Response and Safety Grant Program to Provide Relief to Small Producers, Processors, Distributors and Farmers Markets Impacted by COVID-19

The U.S. Department of Agriculture (USDA) today announced a Request for Applications (RFA) for the new Pandemic Response and Safety (PRS) Grant program and encourages eligible entities to apply now for funds. Applications must be submitted electronically through the grant portal at https://usda-prs.grantsolutions.gov/usda by 11:59 p.m. Eastern Time on Monday, November 22, 2021. Approximately $650 million in funding is available for the PRS grants, which are funded by the Pandemic Assistance provided in the Consolidated Appropriations Act of 2021.

The PRS Grant program will assist small businesses in certain commodity areas, including specialty crop producers, shellfish farming, finfish farming, aquaculture, and apiculture; specialty crop, meat, and other processors; distributors; and farmers markets. Small businesses and nonprofits in these industries can apply for a grant to cover COVID-related expenses such as workplace safety measures (e.g., personal protective equipment (PPE), retrofitting facilities for worker and consumer safety, shifting to online sales platforms, transportation, worker housing, and medical costs. The minimum funding request is $1,500 and the maximum funding request is $20,000.

The RFA and the PRS Grant Portal provide more details about eligibility for the grant. Eligible entities are required to obtain a free DUNS Number from Dun & Bradstreet (D&B) before applying for this program. USDA has created a custom PRS DUNS number portal at https://support.dnb.com/?CUST=PandemicResponse.

Application resources, including Frequently Asked Questions (FAQs), tip sheets in English and Spanish on applying for a DUNS Number, videos on “How to Apply” and more, are available on the PRS Grant Portal.

For more information, you can also reach out to the PRS help desk, Monday-Friday, 9 a.m.-9 p.m. ET at (301) 238-5550 or usda.ams.prs@grantsolutions.gov.

Check your eligibility, obtain a DUNS number, and learn more about the application process at the PRS Grant Portal.

Webinar on Spotted-Wing Drosophila Monitoring and Sampling

Cesar Rodriguez-Saona
November 2, 2021

Registration is now open for our annual Sustainable SWD Management webinar, scheduled for **Nov 10th at 1pm ET**. Register here: https://ncsu.zoom.us/webinar/register/WN_JhupsLFhSKi_f8z4mzl56g

This year's webinar is entitled: Monitoring and sampling tools to improve spotted-wing drosophila management. This 1hr session will share current recommendations for adult and immature SWD sampling methods and practical applications of these tools for fruit growers. Presenters include: Rufus Isaacs & Steve Van Timmeren (Michigan State University), Hannah Burrack (NC State University), Cesar Rodriguez-Saona (Rutgers University), Phil Fanning (University of Maine), and Vaughn Walton (Oregon State University).
You can read more about the Sustainable SWD Management Project here: https://swdmanagement.org/

We look forward to sharing our work with you on November 10!

Study targets dust's role in potential produce cross-contamination

Center for Produce Safety

Researchers have conducted significant research into the role of water in foodborne outbreaks and to a lesser extent, soil's contribution, but the potential for dust particles to transfer pathogens onto produce has been largely overlooked.

Through her project, "When the E. coli hits the fan! Evaluating the risks of dust-associated produce cross-contamination," Kelly Bright, Ph.D., with the University of Arizona, hopes to gain a better understanding of the role of dust in pathogen transfer. Ultimately, she and her fellow researchers plan to develop best management practices (BMPs) to help growers better understand the risks and implement mitigation measures.

Bright will lead a combination of laboratory experiments and field studies in Arizona's arid farming region, home to winter leafy greens production. Her work will involve conventionally and organically grown spinach and Romaine lettuce. Joining her as co-principal investigators at the University of Arizona are Walter Betancourt, Ph.D., and Charles Gerba, Ph.D.

At the University of Georgia, co-PIs Govindaraj Dev Kumar, Ph.D., and Laurel Dunn, Ph.D., will conduct the same laboratory and field studies, although under Georgia's more humid conditions. Their work will involve bell peppers and tomatoes, two of the state's predominant crops.

Conducting the research in two diverse production regions will broaden the usefulness of the results, Bright said.

"With our collaborators being in Georgia, it will provide an entirely different region with a completely different environment, so that's useful," she said. "We could do the work just in Arizona, but then the type of data would be limited to regions that are arid. With different types of crops, different environmental and atmospheric conditions, and different growing seasons, it makes the data more applicable for a wider variety of crops and regions.

"We want to partner our lab studies with the field studies to flesh out the data and have more relevant information to develop models."

For the laboratory experiments, the researchers collected soil samples from their respective areas and shared them with their cross-country collaborators. They separated the soils based on textures and particle size: clay, loam and sandy. They also measured soil organic matter, soil moisture content and background flora.

The researchers then inoculated the soil particles with a known quantity of a pathogen. They are working with strains of Salmonella Newport and Typhimurium and E. coli O157:H7 to determine the survivability and transferability differences among the microorganisms. The original isolates were collected from cattle, chickens or lettuce. Dev Kumar has modified them to possess antibiotic resistance to improve their detection in environmental matrices such as dust.

To measure potential transfer, they apply pathogen-inoculated particles to plants using a “duster” to simulate wind-blown dust. The crops are then reared in biosafety level 2 growth chambers where the researchers can control relative humidity and other environmental conditions.

The researchers are evaluating the role of humidity, agricultural practice (organic versus conventional) and soil characteristics on pathogen recovery. They will also take the crop to harvest to measure bacterial persistence.

The field studies will involve collecting air samples at varying distances from beef and/or poultry production facilities over multiple days and under various weather conditions.

The researchers will assay the dust samples collected from air in the field for the presence of generic and pathogenic E. coli and Salmonella species. They also will look for the presence of biomarkers, such as fecal genetic markers, bile salts and metabolites, that could indicate fecal contamination.

A dust sample only provides a snapshot of what is occurring at that specific place in time, Bright said. But collecting multiple samples over a long period and under various conditions paints a more detailed picture.

The laboratory data, combined with the field sampling results, will allow the researchers to develop a QRMA – or quantitative microbial risk assessment — model. Bright said they plan to distill the results down into more user friendly grower BMPs. Included will be possible mitigation measures and buffers between produce fields and livestock operations, to name a few.

Key Takeaways

- Research delves into dust’s largely overlooked role in possible produce cross-contamination.
- Collaborators in Arizona and Georgia will conduct studies under different environmental conditions and
- Results should be applicable to a broader set of producers.
- Researchers plan to distill findings into grower best management practices.

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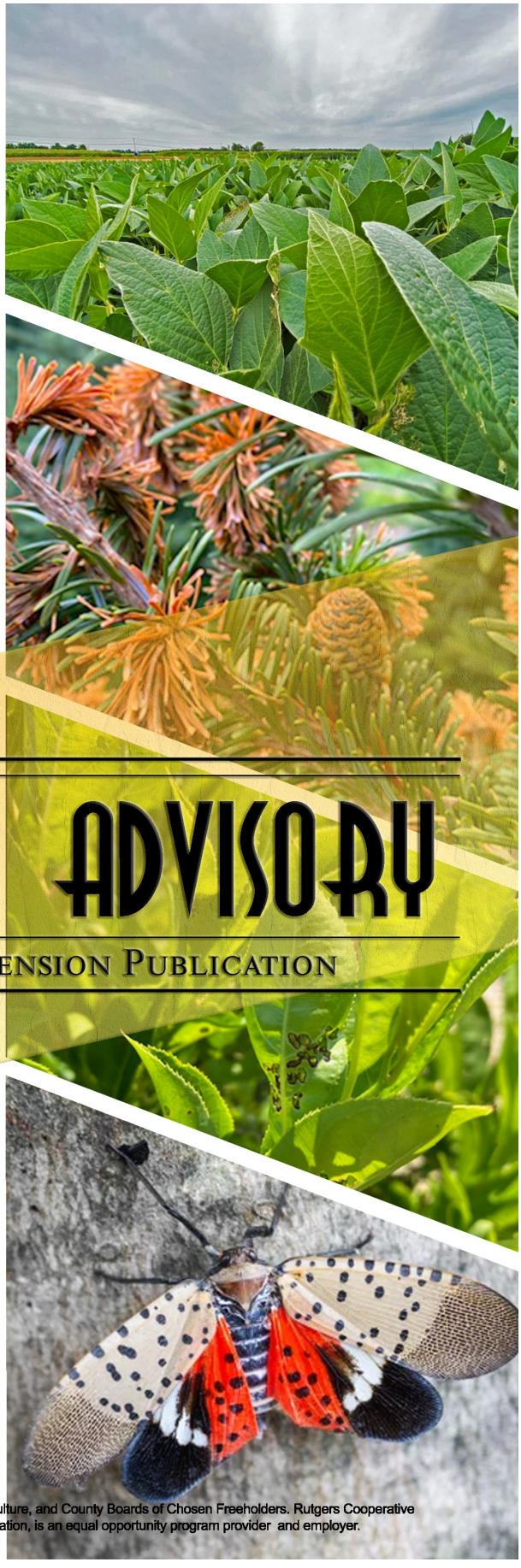
HAVE YOU SIGNED UP FOR **PLANT & PEST ADVISORY** UPDATES YET?



PLANT & PEST ADVISORY

A RUTGERS COOPERATIVE EXTENSION PUBLICATION

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WE R HERE WHEN YOU NEED US

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.

Calendar of Important Events

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

× **November 15-16**

New Jersey Farm Bureau Annual Meeting; The Westin at Forrestal Village in Princeton, NJ; This years meeting will have a special guest at the banquet, comedian Tim the Dairy Farmer. Annual meeting speakers program and agenda can be found at njfb.org/2021-annual-meeting/

× **November 29– December 1**

Ag Expo– Looking to the Future; Sherton Imperial Hotel; Raleigh-Durham, NC; Presented by the North Carolina Vegetable Growers Association; Trade show with several exhibitors; $170 each or addition attendees from same farm for $85; Find more information and register at www.ncvga.com/index.php

December 1-2

Organic Grower Summit; Monterey, CA; Two days of information, education, and networking opportunities with organic growers; provides growers firsthand knowledge and information in a variety of areas ranging from Agtech to food safety to sustainability. Through engaging educational sessions, insightful Keynote presentations and a trade show floor featuring nearly 100 exhibitors offering supply chain and service provider opportunities for growers, OGS 2021 is an event not to be missed! Find more information and sign up at organicgrowersummit.com

× **December 1-2**

FSMA Produce Safety Rule Training, ONLINE ONLY; 10:45AM-3:30PM; This training meets the FDA requirements for FSMA; Register by November 17; Find more information and register online at onfarmfoodsafety.eventbrite.com

× **December 7-9**

New Jersey Green Expo Turf and Landscape Conference; Borgata Hotel & Casino; Atlantic City, NJ; The Education Sessions share cutting-edge information that deliver case studies, industry trends, applications, and best practices for your profitable business. The Trade Show is one of the largest Green Industry events in the Northeast. Come to see new products, new services, and update your network in the Green Industry; Pesticide Credits will be available; Register online at https://njta.wildapricot.org/

December 7-9

Great Lakes Fruit, Vegetable & Farm Market EXPO; Over three days, the program includes sessions on fruit crops, vegetable crops, other specialty crops, greenhouse crop production and marketing, farm marketing ideas and operations, farmers' markets and organic production and marketing. There will also be sessions covering a diversity of general interest topics, including food safety and labor; Registration opens in October; Find more information at glexpo.com

December 6-8

Washington State Tree Fruit Association Annual Meeting; Yakima Convention Center, Yakima, Washington; More information available at Wstfa.org

December 6-10

2021 Irrigation Show and Education Week; Long Beach, Ca; More information available at www.irrigation.org

December 11-12, 2022

Empire State Producers Expo; The Oncenter, 800 South State Street, Syracuse, NY 13202; Agricultural trade show and education for the fruit and vegetable grower and marketer; 45 educational sessions; For exhibitor information call (800)218-5586 or email dwren@leepub.com

January 31, 2022

Harmonized Audit Training; Online Event; What records do you need? What does the audit language mean? Join us for an open discussion of each requirement in the audit standard so you are prepared for your audit; $25.00 per person; Deadline to register 1/27/22; Hosted by the Rutgers On-Farm Food Safety; Register online at rutgersonfarmfoodsafety.eventbrite.com

January 31– February 2, 2022

Global Organic Produce Expo 2022; Seminole Hard Rock Casino & Resort, Hollywood, FL; As the only globally driven show for organic produce, this show creates a forum for unique and specific opportunities. Network, exchange ideas, source new products and services, and do business with the industry's leading growers, distributors, packer and retailers. Register online at https://events.farmjournal.com/global-organic-produce-expo-2022/home

February 1-2, 2022

Total Pro Professional Landscape, Nursery & Hardscape Expo & Conference; New Jersey Convention Center, Edison, NJ; The Northeast's professional landscaping event of the year! Trade show, educations, equipment and supplies, discover new products, suppliers and services and much more! Early bird registration open now at $20.00. Use code BLUEBIRD; Find more information or register at totalproexpo.com

February 1-3, 2022

Mid-Atlantic Fruit and Vegetable Convention; Hershey Lodge, PA; The premier grower meeting in the Northeast, normally combining three days of six or more concurrent educational sessions with a large industry trade show and numerous networking opportunities. Find more information at www.mafvc.org

February 8-10, 2022

2022 NJ Agricultural Convention and Trade Show; Atlantic City, NJ; Vegetable Growers Association will hold their annual convention with educational sessions and trade show. Save the date! Find more information at vganj.com

× **February 10, 2022**

Food Safety Modernization Act: Produce Safety Alliance Grower Training, NJ Ag Convention, Atlantic City, NJ; You MUST be registered for the Vegetable Growers Association of New Jersey Conference to attend this program. Find more information and register online at https://www.eventbrite.com/e/fsma-psr-training-feb-10-2022-nj-ag-convention-in-atlantic-city-tickets-191237134417

March 2, 2022

Harmonized Audit Training; Online Event; What records do you need? What does the audit language mean? Join us for an open discussion of each requirement in the audit standard so you are prepared for your audit; $25.00 per person; Deadline to register 2/26/22; Hosted by the Rutgers On-Farm Food Safety; Register online at rutgersonfarmfoodsafety.eventbrite.com

REGULARLY SCHEDULED MEETINGS		
Pesticide Certification Exams	**Cumberland County Agriculture Development Board**	**Cumberland County Board Of Agriculture**
Testing is currently being held virtually because of the COVID pandemic.	Virtual Meeting Information can be found on the Public Meeting Calendar on co.cumberland.nj.us	Virtual Meeting Information https://rutgers.zoom.us/my/smangia Meeting ID: 529 557 9817 Passcode: Sal2020 Or call 1 (646) 558-8656
Rutgers will be taking over the pesticide exam program.	Nov. 9 Dec. 14	Nov. 18 Dec. 16
Sign-up and find more information at https://pacer.rutgers.edu/	**Meetings start at 7 p.m.** **For more information call the Dept. of Planning, Tourism and Community Affairs at 856-453-2175**	**Meetings start at 7 p.m.** **For information call Lew DePietro, President at 856-981-9843**

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)
Deerfield Township, New Jersey
Questions? Call Division of Ag & Natural Resources, NJ Dept. of Ag 609-292-2242

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

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/

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Since 1915

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