

New Jersey Agricultural Experiment Station

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

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Cultivating Cumberland

May - 2023

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South Jersey Wine Grape Twilight Meeting May 11, 2023; 4:30 PM Auburn Road Vineyards and Winery 117 Sharptown-Auburn Rd, Pilesgrove, NJ 08098 4:30 pm Welcome Remarks and Updates and Social

Hemant Gohil, Gloucester County Agricultural Agent, Rutgers NJAES Julianne Donnini, Owner, Auburn Road Vineyards

Bird Management in the Vineyard – Different Approaches *Aaron T. Guikema, State Director, USDA – APHIS Wildlife services* Interactive session with growers' challenges and successes in bird control

Potassium Fertilizer Chemistry for Wine Grape Joseph Heckman, Extension Specialist in Soil Fertility, Rutgers NJAES

2023 Recommendations for Wine Grape Disease Management *Peter Oudemans, Extension Specialist, Small Fruit Pathology, Rutgers*

Brief Overview of Alternative Options to Paraquat for Postemergence Weed Control

Thierry Besancon, Extension Specialist, Weed Science, Rutgers NJAES

Early Season Field Observations from the IPM Program *Dave Schmitt, IPM Program Associate, Rutgers NJAES*

Spotted Lantern Fly and Other Vineyard Insects Management Anne Nielsen, Tree Fruit Entomologist, Rutgers NJAES

7:30 pm Pesticide re-certification credits and Adjourn *Pesticide Credits Approved: CORE (1); PP2 (5); 1A (5); 10 (4)*

Light fare will be provided. Please email Joan Medany at <u>jmedany@</u> <u>co.gloucester.nj.us</u> or call 856-224-8030 if you are planning to attend. This site is accessible to the physically impaired. For the additional assistance, please contact Hemant Gohil at 856-224-8029 before the meeting.

Attachments:

- Board of Ag Scholorship
- Nursery and Landscape Pest Scouting with Growing Degree-days
- Redheaded Flea Beetle in Nurseries
- Sign-up for Plant and Pest Advisory
- Phytophthora and Pythium Root Diseases in Nurseries
- Food Market at Cumberland Mall

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and Boards of County Commissioners, Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity provider and employer.

Water Survey

Wes Kline; April 18, 2023

The On-Farm Food Safety Team is involved in a national survey to determine what the produce industry understands about the water subpart (Subpart E) in the Food Safety Modernization Act Produce Safety Rule. The harvest and post-harvest portions of Subpart E have been implemented starting this year. However, the preharvest portion is still being reviewed by the Food and Drug Administration. We are trying to learn about your operation and how you use preharvest (irrigation) production water on the farm. There may be some confusions and misunderstandings as to what has been proposed. This survey will help us get a better understanding of what you know and how we can help you get a better understanding of the proposed rule. Please take a few minutes and fill out the survey listed below.

Take the survey at https://go.rutgers.edu/x4qyodav

Use this QR code to go directly to the survey!



DO YOU IRRIGATE PRODUCE?

Take this survey (anonymous & less than 10 min) CLICK HERE: <u>https://rutgers.ca1.qualtrics.com/jfe/</u> form/SV_bl714wv4yjsWmnY

Help us learn about your operation and how you use production water on the farm as part of a successful food safety program

For questions or concerns, email Channah@cals.arizona.edu

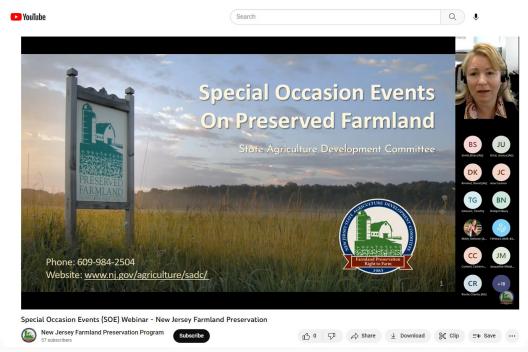


Special Occasion Events (SOE) on Preserved Farms

The Special Occasion Events on Preserved Farms went into effect February 2023. Susan Payne, the Executive Director of the State Agricultural Development Committee (SADC) has posted a webinar on YouTube that answers many of the questions on how SOE will function and the procedures a preserved farm will need to do to comply with the SOE.

The contact person in the SADC is David Kimmel (609) 984-2504 or www.nj.gov/agriculture/sadc.

Anyone who is interested in holding events or wants more details concerning SOEs should view the webinar. Go to <u>https://youtu.be/QyyQnJCgtXQ</u>



New Postharvest FoodTransport App

Steve Sargent, Ph.D.; email: sasa@ufl.edu Jeff Brecht, Ph.D.; email: jkbrecht@ufl.edu UF/IFAS Postharvest Horticulture Laboratory

We are excited to share the link for our new App – FoodTransport – that provides easy access to shipping recommendations for perishable foods – fruits and vegetables, meats, poultry, seafood, dairy and canned goods. It also covers food safety guidelines. The app is based on our EDIS publication HS1328, Protecting Perishable Foods During Transport by Truck and Rail https://edis.ifas.ufl.edu/publication/HS1328

Click on the link below for the press release that describes FoodTransport in greater detail and has links for both Android and Apple downloads. <u>https://blogs.ifas.ufl.edu/news/2023/04/04/foodtransport-app/</u>

We would appreciate any feedback that you might have.

NRCS invests \$75 million to assist producers transitioning to organic production

The U.S. Department of Agriculture (USDA) today announced details around its \$75 million investment in conservation assistance for producers transitioning to organic production. As part of the multi-agency Organic Transition Initiative (OTI), USDA's Natural Resources Conservation Service (NRCS) will dedicate financial and technical assistance to a new organic management standard and partner with new organic technical experts to increase staff capacity and expertise.

Direct Farmer Assistance

NRCS will dedicate \$70 million to assist producers with a new organic management standard under the Environmental Quality Incentives Program (EQIP).

NRCS will help producers adopt the new organic management standard, which allows flexibility for producers to get the assistance and education they need such as attending workshops or requesting help from experts or mentors. It supports conservation practices required for organic certification and may provide foregone income reimbursement for dips in production during the transition period.

Higher payment rates and other options are available for underserved producers including socially disadvantaged, beginning, veteran, and limited resource farmers and ranchers.

How to Apply

Eligible producers include farmers, ranchers, forest landowners, and other producers beginning or in the process of transitioning to organic certification. While NRCS accepts applications year around, those interested in this program should apply by June 9, 2023 to be elgible for funding through NRCS at their local USDA Service Center. For more information, visit <u>farmers.gov/organic</u>.

About the Organic Transition Initiative

These NRCS investments are part of the OTI, a multi-agency \$300 million effort to support organic and transitioning producers. OTI also includes farmer-to-farmer mentoring, direct support for crop insurance, and market development projects.

In addition to NRCS, USDA's Agricultural Marketing Service (AMS) and Risk Management Agency (RMA) are the primary agencies supporting OTI and are closely collaborating on implementation. As part of OTI's cross-agency coordination, NRCS organic specialists will be closely connected with the AMS Transition to Organic Partnership Program regional partners, to align and share resources and best practices. NRCS and AMS's National Organic Program also plan to coordinate data collection activities, to prevent transitioning farmers from having to submit duplicative information as much as possible. AMS will also soon announce a funding program to support the creation of new and improved markets for domestically produced organic products and provide critical companion resources to existing and transitioning organic producers.

RMA reminds producers interested in the Transitional and Organic Grower Assistance Program, also part of OTI, to visit with their crop insurance agent for more information. Premium benefits for eligible policies will be automatically applied to the producer's billing statement later this year.

Other USDA Organic Assistance

OTI complements existing assistance for organic producers, including FSA's Organic Certification Cost Share Program which helps producers obtain or renew their organic certification.

RMA also administers federal crop insurance options, including Whole Farm Revenue Protection and Micro Farm, which may be good options for organic producers. The National Organic Program is a federal regulatory program, administered by AMS, that develops and enforces consistent national standards for organically produced agricultural products sold in the United States.

<u>2023 Cumberland County Fair</u> 4-H Program/Ad Book Order Form

Full Page Back C	over—\$300.00(Please call to che	eck availability)	
Full Page Front I	Inside Cover—\$250.00 (Please ca	all to check availability)	
Full Page Back In	nside Cover - \$250.00(Please cal	l to check availability)	
Full Page Ad (8")	h x 5"w) - \$100.00		
1/2 Page Ad (4"h	x 5"w) - \$50.00		
Business Card A	d (2"h x 5"w)- \$30.00		
Friend of 4-H Bo	ooster (50 character maximum/li	ne) - \$5.00	
Line 1			
		Total Due	
	Ads and Booster	<u>s are due by May 15, 2023</u>	
Please encl	Return th	o: 4-H Leaders Association is form and check to: 91 Morton Avenue, Millville, NJ ady ad/booster to deannja (08332.
Name			
Business/Compa	any Name		
Address			
Town		Zip	
Phone	Fax	E-mail	
Th	ank you for your support. Proce	eds will benefit the Cumberland	l 4-H Program.

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Newsletter Sign-up!

Do you know someone who should also receive this newsletter? Give them this sign-up sheet to fill out and send it back to us at RCE of Cumberland County, 291 Morton Ave., Millville, NJ 08332 or email it to <u>brandiwi@cumberlandcountynj.gov</u>

SIGN UP FOR OUR DE WSLEEDERS	Please check all that apply: Business Affiliation O Commercial Farmer Ag-Related Business O Private Consultant Agricultural Agent O Rutgers O Other University/College O Government Agency Media O Food Safety
Contact Information Name Farm Name Address	Ornamentals O Nursery Turf Landscape Greenhouse Christmas Trees Golf Course
Phone Email Sign me up for Oultivating Cumberland Commercial Growers What's Growing On Homeowners and Gardeners	Vegetables O Fresh Vegetables O Processing Vegetables O Herbs O Specialty Crops O Farm Market O Pick Your Own
I would prefer to receive my copy e-mailed mailed See other side for business affiliation information	Other Small Fruit Tree Fruit Hay Production Other Field Crops Livestock

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A PUBLICATION OF RUTGERS COOPERATIVE EXTENSION OF CUMBERLAND COUNTY

Pesticide Container Recycling

Helena Chemical 440 N. Main St.	Helena Chemical 66 Route 206	Rutgers Fruit and Ornamental Research Extension Center
Woodstown, New Jersey	Hammonton, New Jersey	283 Route 539
May 19	May 12	Cream Ridge, NJ 08514-9634
June 23	June 16	May 26
July 21	July 14	June 30
August 18	August 11	July 28
September 22	Sept. 15	August 25
October 20	Oct. 13	September 29
		October 27

Plastic Pesticide Container Processing Steps and Size Limits

- All pesticide containers must be either triple rinsed or pressure rinsed, drained and dry inside;
- All pesticide containers must be free of residue (other than stains);
- The booklet must be removed (it is not necessary to remove the paper labels glued to the container);
- Foil seal must be removed;
- Only non-refillable pesticide containers will be accepted you must drill a ¼-inch hole in the bottom of the container or with a utility knife make a 6-inch slit in the bottom of the container so the container will not hold liquids;
- Only pesticide containers embossed with HDPE or the recycling #2 will be accepted;
- Pesticide containers up to 55-gallons in capacity will be accepted. 5-gallon pales must be cut in half; 30-gallon containers into at least 4 pieces; and 55-gallon containers into at least 8 pieces. This can be accomplished using a sawszall, chainsaw, circular saw, or reciprocating saw. It is not necessary to cut up containers less than 5-gallons; and Pesticide containers must have originally held an EPA registered pesticide.

Items that Will Not Be Accepted and Will Be Returned to the Participant

- Pesticide containers with dried formulation on the container, pour spout or the spout threads;
- Pesticide containers with any liquid residue;
- Pesticide containers where the insides are caked with dried residue;
- Mini-bulk, saddle tanks and nurse tanks, which can be made of fiberglass;
- Pesticide containers with lids; or
- Containers that held any type of petroleum oil product or antifreeze.

Non-Waxy Cardboard

Helena Chemical will also be accepting non-waxy cardboard 1 p.m. to 3 p.m and during the scheduled pesticide container collection times. The clean non-waxy cardboard must be broken down and flattened. Cardboard delivered to the Atlantic County site must be tied. Clean Non-waxy cardboard will also be accepted year-round at the Cumberland County Solid Waste Complex's Convenience Center.

1 CORE credit given if you take your NJ Pesticide License with you to drop off. More information can be found at <u>www.nj.gov/agriculture/divisions/anr/nrc/processingsteps</u>

Calendar of Events

• Indicates a newly added event

<u>May 8-11</u>

Food Safety Summit; Donald E Stephens Convention Center, Rosemont, IL; The Food Safety Summit is a solution-based conference and expo designed to meet the educational and informational needs of the entire food industry. The Summit provides a 3-day comprehensive educational program to learn from subject matter experts, trainers, exchange ideas and find solutions to your current job challenges; Find more information and register online at <u>https://www.food-safety.com/food-safety-summit</u>

• <u>June 15</u>

Annual Growers Meeting at Cumberland Nursery; Cumberland Nurseries, 1521 Bridgeton Millville Pike, Millville, NJ Hosted by the New Jersey Nursery and Landscape Association (NJNLA); Pesticide Credits will be available; More information can be found at <u>www.njnla.org</u>

July TBD

Rutgers Nursery IPM Training; Nursery Agent, Tim Waller will be hosting an IPM Training this July. Date and location to be determined at a later date. Check <u>http://plant-pest-advisory.rutgers.edu/category/</u> <u>landscape-nursery-turf/</u> for updates or look in our newsletter next month for updated info!

<u>July 4- 8</u>

Cumberland County Fair; 3000 Carmel Rd., Millville, NJ 08332; Fun filled, family-friendly event that has been a summer staple for generations and attended by thousands from throughout the state. A demolition derby, amusement rides, all the tastes of a county fair, roaming entertainment, merchandise vendors and local 4-H exhibits, animals and activities. Interested in being a vendor and sponsor, go to <u>cumberlandcofair.com</u>

July 24- August 18

Grape and Wine Science Certificate Program; NJ Institute for Food Nutrition & Health, Room 205, 61 Dudley Rd., New Brunswick, NJ 08901; This program will provide foundational knowledge in three major areas of grape and wine science – grape growing, wine making, and business operations – following the path of grapes from the field to the winery to the glass. The program will feature 4 weeks of classroom instruction, complemented by hands-on workshops; Find more information and register online at https://cpe.rutgers.edu/food-science-safety/grape-and-wine-science-certificate

• <u>August 16</u>

Summer Plant Symposium; Duke Farms, 1112 Dukes Pkwy W., Hillsborough Township, NJ; Hosted by the New Jersey Nursery and Landscape Assocation (NJNLA); Pesticide Credits will be available; Find more inforamtion at <u>www.njnla.org</u>

September 25-27

Florida Fruit & Vegetable Association Annual Convention Ritz Carlton Hotel Naples, FI; Find more info at <u>www.ffva.com/page/convention</u>

September 27

From the Ground Up: Produce Safety Planning for Beginning Growers; Rutgers Cooperative Extension of Mercer County, 1440 Parkside Ave., Ewing, NJ 08638; 10AM-2PM; \$30.00 each; Lunch provided; Gain basic understanding of Food Safety Culture and why it is important, five things growers can do right away on their farm to reduce risk, cleaning and sanitizing, and key points of FSMA: PSR the growers need to know; Find more info and register at https://go.rutgers.edu/kcx1n6bj

Regularly Scheduled Meetings

Pesticide Credit Exams

Virutal testing available.

Sign-up, exam schedule, and find more information at <u>https://pacer.rutgers.edu/</u>

Cumberland County Agriculture Development Board

Virtual Meetings Information can be found on the Public Meeting Calendar on <u>co.cumberland.nj.us</u>

Meetings are held on the 3rd Tuesday of each month. Meetings start at 7 p.m.

For more information call the Dept. of Planning, Tourism, and Community Affairs at 856-453-2175

Chair: Al Caggiano, Jr

Commissioner Liaisons: Victoria Groetsche-Lods

Cumberland County Board of Agriculture

Meetings are held on the 3rd Thursday of September - May at 7 p.m. in-person at RCE

> Next meeting May 18, 2023

Virtual Meeting Information https://rutgers.zoom.us/my/smangia Meeting ID: 529 557 9817 Passcode: Sal2020 or call in at 1 (646) 558 - 8656

President: Keith MacIndoe

Commissioner Liaisons: 1. Victoria Groetsche-Lods 2. Joseph Sileo Alt. John Capizola Jr.

Sincerely,

Wealey L. Kline

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

Au Subeller

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

Achatra S Mangfrin

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... <u>https://Cumberland.njaes.rutgers.edu/</u>

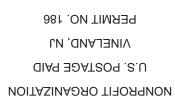
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Cooperative Extension of Cumberland County



Since 1915



RUTGERS New Jersey Agricultural Experiment Station

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

Cumberland County Board of Agriculture Scholarship

Student must be a Cumberland County resident pursuing a degree in Production Agriculture/Horticulture, Agricultural Education, Agronomy or related field.

The purpose of this scholarship is designed to support the general welfare of agriculture in Cumberland County. Through this program the board wishes to encourage the scientific study of agriculture and promote as a useful, profitable, and dignified career. Education in production agriculture is a necessary tool in today's intensified agriculture field. The scholarship program hopes to encourage students to avail themselves of agriculture and related programs in higher education.

\$2,000 Scholarship

Return to: Cumberland County Board of Agriculture; 291 Morton Ave., Millville NJ 08332 by May 31th

Name :	Age:
Address :	
High School/ College :	GPA :
Phone : Email :	
Clubs and or volunteer work in the community:	
Name of College or Technical School :	
Address :	
Course of Study :	
Why have you chosen a career in agriculture:	

What are your plans after college:

Why should the scholarship committee select you for this scholarship:

References : (at least 3)		
Name :	Phone :	
Name :	Phone :	
Name :	Phone :	

Please provide one letter of recommendation

Payment of the scholarship will be made directly to college or technical school pending acceptance and enrollment

Signed :		Date :
	(Applicant)	
Singed :		Date :
	(Parent/Guardian)	

Nursery and Landscape Pest Scouting with Growing Degree-days (MAY 2023)

Projected GDD50 accumulation as of 4/45/2023												
Region	Location	25-Apr	1-May	1-Jun	1-Jul	1-Aug						
Southern	Upper Deerfield (NJ50)	251	278	679	1367	2218						
Central	Howell / Freehold (NJ10)	190	206	537	1159	1956						
Northern High Point (NJ59) 142 144 372 865 1507												
	Forecast: 7-month NMME based	l seasonal clin	nate forecast	(LISPEST OR	G)							

Compiled by Tim Waller 4/25/2023 – Rutgers Cooperative Extension – Cumberland Co.

Group	Common Name	Scientific Name	GDD Min (50F)	GDD Max (95F)	Ref.	Developmental / Target Stage / Notes	Favored Host Plants
Leafminer / Midge / Fly	Douglas fir needle midge	Contarinia pseudotsugae	200	400	3	Adults emerge from soil	Conifer
.eafminer / Midge / Fly	Elm leafminer	Fenusa ulmi	215	240	5	Adult emergence	Elm
Cicadellidae	Spotted Lantern Fly	Lycorma delicatula	225	1100	9	1st-4th Instar (nymphs) - control target	Many
Sawfly - Wasp	Roseslug sawfly	Endelomyia aethiops	230	-	6	Egg hatch / early instars	Wild and cultivated roses
Lacebug	Hawthorn lacebug	Corythucha cydoniae	239	363	1	Nymphs/Adults	Deciduous, many
Beetle	Redheaded flea beetle	Systena frontalis	242	600	8	First control target - egg hatch / larval activity	Many
eafminer / Midge / Fly	Arborvitae leafminer	Argyresthia thuiella	245	360	1	Larvae Treatments (1st generation)	Conifer
Borer - Caterpillar	American plum borer	Euzophera semifuneralis	245	440	5	Adult flight, egg laying	Prunus
Mites	Boxwood mites	Eurytetranychus buxi	245	600	1	All Stages	Boxwood
eafminer / Midge / Fly	Lilac leafminer	Caloptilia syringella	246	363	5	Larvae Treatments	Lilac
.eafminer / Midge / Fly	Holly leafminer	Phytomyza ilicis	246	448	1	Larvae Treatment	Holly
Scale / Adelgid / Whitefly / Psyllid	Taxus mealybug	Dysmicoccus wistariae	246	618	1	Adults/Crawlers	Yew
Sawfly - Wasp	Pine sawflies (Red-headed)	Neodiprion lecontei	246	1388	1	Larvae (1st generation)	Conifer
eafminer / Midge / Fly	Boxwood leafminer	Monarthropalpusi flavus	249	-	6	Adult emergence	Boxwood
Scale / Adelgid / Whitefly / Psyllid	Eastern spruce gall adelgid	Adelges abietis	250	310	5	egg hatch, galls begin forming (not a control target)	Conifer
.eafminer / Midge / Fly	Birch Leafminer	Fenusa pusilla	275	375	4	Adults laying eggs	Birch
Scale / Adelgid / Whitefly / Psyllid	Boxwood Psyllid	Cacopsylla busi	290	440	1	Nymphs	Boxwood
Scale / Adelgid / Whitefly / Psyllid	Pine Needle Scale	Chionaspis pinifoliae	298	448	1	Crawlers (1st generation) - control target	Conifer
.eafminer / Midge / Fly	Locust leafminer	Odontota dorsalis	298	533	5	Typical treatment window	Locust
Mites	Pine eriophyid mites	Eriophyidae	298	533	5	Typical treatment window	Conifer
Caterpillar	Redbanded leafroller	Argyrotaenia velutinana	298	618	5	Typical treatment window	Malus
Mites	Privet rust mite	Aculus ligustri	298	802	1	All stages	Privet
Scale / Adelgid / Whitefly / Psyllid	Kermes oak scale	Allokermes spp.	298	912	5	Typical treatment window	Oaks
Beetle	Turpentine beetle	Dendroctonus terebrans	300	350	4	Parent beetles colonizing brood material	Conifer
Weevil	Pine root collar weevil	Hylobius radicis	300	350	4	1st adults active	Conifer
Aphids / Thrips	Spirea aphid	Aphis spiraecola	326	-	6	Adults/nymphs	Spirea
Scale / Adelgid / Whitefly / Psyllid	Hemlock woolly adelgid	Adelges tsugae	350	350	1	Eggs and 50% hatch	Conifer
Borer - Clearwing moth	Lesser peach tree borer	Synanthedon pictipes	350	375	4	Adult flight, egg laying	Malus, Prunus, many
Lacebug	Azalea Lacebug	Stephanitis pyrioides	350	646	1	Adults (1st generation)	Rhododendron
orer - Clearwing moth	Dogwood borer	Synanthedon scitula	350	850	4	adults, eggs, caterpillars	Dogwood, apple, pecan, el hickory, willow
Scale / Adelgid / Whitefly / Psyllid	Elongate Hemlock Scale	Fiorinia externa	360	700	1	Crawlers (1st generation)	Conifer
Beetle	Elm leaf beetle	Xanthogaleruca luteola	363	530	1	Larvae treatment (1st generation)	Elm
Caterpillar	Larch casebearer	Coleophora laricella	363	618	2,4	Nymphs active - typical treatment window	Conifer
Aphids / Thrips	Woolly beech aphids	Grylloprociphilus imbricator & Phyllaphis fagi	363	707	5	Typical treatment window	Beech
Mites	Walnut blister mite	Eriophyes erinea	363	707	5	Typical treatment window	Walnut



MAY 2023 - Continued

Group	Common Name	Scientific Name	GDD Min (50F)	GDD Max (95F)	Ref.	Developmental / Target Stage / Notes	Favored Host Plants
Scale / Adelgid / Whitefly / Psyllid	Oystershell Scale	Lepidosaphes ulmi	363	707	1	Crawlers	Many
Leafminer / Midge / Fly	Pine needle midge	Thecodiplosis brachynteroides	400	500	7	Adults (1st generation)	Conifer
Scale / Adelgid / Whitefly / Psyllid	Striped pine scale	Toumeyella sp.	400	500	3	Crawlers (1st generation)	Conifer
Scale / Adelgid / Whitefly / Psyllid	Pine tortoise scale	Toumeyella parvicornis	400	1000	4	Crawlers	Conifer
Weevil	Black Vine Weevil	Otiorhynchus sulcatus	400	2800	1	Adults treatment	Yews, Rhododendrons, many
Lacebug	Basswood lacebug	Gargaphia tiliae	415	-	6	Adults/nymphs	Basswood
Hemiptera (true bugs)	Fourlined plant bug	Poecilocapsus lineatus	435	-	6	Egg hatch / early instars	Many
Mites	Two-Spotted Mite	Tetranychus urticae	437	997	1	Adults (build-up activity)	Many
Borer - Flathead / Metalic beetle	Bronze Birch Borer	Agrilus anxius	440	880	1	Adults (egg laying)	Birch
Leafminer / Midge / Fly	Boxwood Leafminer	Monarthropalpusi flavus	448	700	1	Larvae treatment	Boxwood
Scale / Adelgid / Whitefly / Psyllid	Azalea whitefly	Pealius azaleae	448	700	5	Adults/nymphs (1st generation)	Rhododendron
Caterpillar	Hemlock looper	Lambdina fiscellaria	448	707	5	Typical treatment window	Conifer
Caterpillar	Oak skeletonizer	Bucculatrix ainsliella	448	707	5	Typical treatment window	Oak
Beetle	Pine shoot beetle	Tomicus piniperda	450	500	4	Adults emerge; begin shoot feeding - control target	Conifer
Beetle	Pine Chafer (Anomela Beetle)	Anomala oblivia	450	600	7	Adults (1st generation)	Conifer
Caterpillar	Spongy moth (formerly Gypsy)	Lymanttria dispar	450	900	4	Caterpillar to pupation - control target missed	Many
Scale / Adelgid / Whitefly / Psyllid	Maskell scale	Lepidosaphes pallida	470	-	6	Crawlers (1st generation)	Juniper
Caterpillar	European pine shoot moth	Rhyacionia buoliana	480	710	5	Larvae Treatment	Conifer
Scale / Adelgid / Whitefly / Psyllid	Peach Tree Borer	Synanthedon sp.	500	600	1	Adults - emerge (1st treatment both types)	Malus, Prunus, many
Borer - Clearwing moth	Rhododendron borer	Synanthedon rhododendri	509	696	1	Adults emerge	Rhododendron
Scale / Adelgid / Whitefly / Psyllid	White prunicola scale	Psedaulacaspis prunicola	513	-	6	Crawlers (1st generation)	Many
Beetle	Redheaded flea beetle	Systena frontalis	517	1028	8	Adults - feeding / laying eggs	Many
Scale / Adelgid / Whitefly / Psyllid	Cottony camellia / taxus scale	Pulvinaria floccifera	520	-	6	Crawlers (1st generation)	Many
Leafminer / Midge / Fly	Birch Leafminer	Fenusa pusilla	530	700	1	Larvae (2nd generation)	Birch
Leafminer / Midge / Fly	Arborvitae Leafminer	Argyresthia thuiella	533	700	1	Adults (egg laying) - larvae treatments	Conifer
Scale / Adelgid / Whitefly / Psyllid	Euonymus Scale	Unaspis euonymil	533	820	1	Crawlers (1st generation)	Euonymus
Leafminer / Midge / Fly	Oak blotch leafminers	Cameraria spp. ; Tisheria spp.	533	912	5	Typical treatment window	Oak
Caterpillar	Greenstriped mapleworm	Dryocampa rubicunda	533	1645	5	Control target	Maple
Leafminer / Midge / Fly	Balsam gall midge	Paradiplosis tumifex	550	700	4	Galls apparent	Conifer
Scale / Adelgid / Whitefly / Psyllid	Juniper scale	Carulaspis juniperi	550	700	7	Egg hatch	Conifer
Borer - Clearwing moth	Greater peach tree borer	Synanthedon exitiosa	575	710	4	Adult emergence	Malus, Prunus, many
Scale / Adelgid / Whitefly / Psyllid	Cryptomeria scale	Aspidiotus cryptomeriae	600	800	3	First crawler emergence	Conifer
Caterpillar	Bagworm	Thyridopteryx ephemeraeformis	600	900	1	Larvae (early instars) - ONLY CONTROL WINDOW	Conifer
Scale / Adelgid / Whitefly / Psyllid	Cooley spruce gall adelgid	Adelges cooleyi	600	1000	7	Nymphs active - Douglas fir (control target)	Conifer
Beetle	Elm leaf beetle	Xanthogaleruca luteola	600	1300	7	Larvae (2nd generation)	Elm

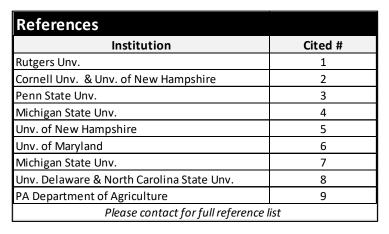
SCAN HERE for Full – Nursery Pest Scouting Guide



SCAN HERE for Full – Conifer Pest Scouting Guide







Redheaded flea b	eetle	- life sta	ge predi	ctions fo	or South,	Central	, and No	rthern N	New Jers	ey with material considerations in Nurseries		
				Calendo	ur date pred	dictions for	r target ra	nge as of ·	4/7/2022		Information compiled by Dr. Timothy J. Waller - Rutgers Cooperative Extension (2021)	
		GDD50 TARGET	GDD50 TARGET		UTH rfield (NJ50)	CENT	FRAL 1 (NJ10)		RTH int (NJ59)	NOTES (high infestation locations)	Material / Compound Considerations	
Growth Stage	Gen.	RANGE	RANGE -HIGH-	LOW (DATE)	HIGH (DATE)	LOW (DATE)	HIGH (DATE)	LOW (DATE)	HIGH (DATE)	Systemic (S) - Contact (C) - Biologicals (B) - Herbicides (H)	(Examples = no endorsements implied) [IRAC GROUP #]	
Egg hatch - larvae	1	242	600	4/21	5/28	5/6	6/4	5/19	6/16	 (S) Initiate systemic treatments 1-month prior to adult activity (S) Systemic granular or granular incorporation @ planting is effective (C) Contact materials may be used to knock-down larvae (B) Some bio-rational / logicals are effective on larvae 	<u>SYSTEMIC DRENCHES</u> Cyantraniliprole [28] (Mainspring) Chlorantraniliprole [28] (Acelepryn) Organophosphates [1B] - Acephate (Orthene, Acephate 97UP) Neonicotinoids [4A]- Dinotefuran (Safari 20SC) ; Thiomethoxam (Flagship	
										 Look for larval activity on the outside of root balls Larvae may be active prior to this GDD50 timeframe 	25 WG) ; Imidacloprid (Imidacloprid 2F, Marathon 1%G, Marathon II)	
Adults (feeding / laying eggs)	1	517	1028	5/22	6/17	5/30	6/25	6/11	7/9	 (S/C/B) Start adult contact sprays - continue systemic treatments (H) Control weeds - adults will hide-in and feed-on them Adult feeding damage will be apparent Scout to determine best time for applications 	GRANULAR APPLICATIONS and INCORPORATIONS Neonicotinoids [4A] Imidacloprid (Marathon 1%G, Coretect tablets, Mallet 0.5G)	
					РОТ	ENTIAL (OVERLA	P OF	- Use of agitator compounds may drive adults from hiding (Initiate systemic treatments 1		(Initiate systemic treatments 1-month prior to adult activity)	
Egg hatch - larvae	2	1570	1860	7/8	GE1 7/19	NERATIO 7/17	<mark>NS / STA</mark> 7/28	GES 8/3	8/18	 (S) Continue systemic treatments (C/B) Contact materials to target larvae AND adults Potential for considerable overlap of larvae - adult stages (H) Control weeds - adults will hide in and feed on them 	CONTACT Bifenthrin [3A] (UP Star SC, Talstar Select) Clyfluthrin [3] (Decathalon 20WP) - Rotation partner Carbamates [1A] - Carbaryl (Sevin SL) Tolfenpyrad [21A] (Hachi-Hachi SC) Cyclaniliprole [28] (Sarisa) + Flonicamid [29] (Pradia)	
Adults (feeding / laying eggs)	2	1878	2318	7/19	8/4	7/28	8/15	8/18	9/15	 (C/B) Adult contact sprays (S) * If pest pressure is high * - continue systemic materials (H) Control weeds - adults will hide-in and feed-on them - Adult feeding damage will be apparent - Use of agitator compounds may drive adults from hiding 	BIOLOGICAL / BIORATIONAL Azadirachtin (Aza-Direct, Azatin-O) Beneficial nematodes (Millennium) Entomopathogenic fungi (Ancora, BotaniGuard) Adult Agitator (Captiva Prime)	
* A third gene			vae and f and cent	0		oossible i	n the	the Estimated using USPEST.org, 3.5-month CFSv2 based seasonal climate forecast, simple average growing degree-days, min temp: 50F, max temp: 95F. Insect development growing degree-day ranges based on trials by Dr. Kunkel - Extension Specialist - University of Delaware - subject to change				

SYSTEMIC DRENCHES

Cyantraniliprole [28] (Mainspring)

Chlorantraniliprole [28] (Acelepryn)

Organophosphates [1B] - Acephate (Orthene, Acephate 97UP) Neonicotinoids [4A]- Dinotefuran (Safari 20SC) ; Thiomethoxam (Flagship 25 WG) ; Imidacloprid (Imidacloprid 2F, Marathon 1%G, Marathon II)

GRANULAR APPLICATIONS and INCORPORATIONS

Neonicotinoids [4A]

Imidacloprid (Marathon 1%G, Coretect tablets, Mallet 0.5G) (Initiate systemic treatments 1-month prior to adult activity)

CONTACT

Bifenthrin [3A] (UP Star SC, Talstar Select) Clyfluthrin [3] (Decathalon 20WP) - Rotation partner Carbamates [1A] - Carbaryl (Sevin SL) Tolfenpyrad [21A] (Hachi-Hachi SC) Cyclaniliprole [28] (Sarisa) + Flonicamid [29] (Pradia)

BIOLOGICAL / BIORATIONAL

Azadirachtin (Aza-Direct, Azatin-O) Beneficial nematodes (Millennium) Entomopathogenic fungi (Ancora, BotaniGuard) Adult Agitator (Captiva Prime)



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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.

Oomycete Material Options for Nurseries - Phytophthora and Pythium Root Diseases

Prepared by Dr. Timothy Waller – Rutgers University – Agricultural Agent – Nursery Crops (1/27/2023)

FRAC	Risk of pathogen resistance	Active(s)	Example Tradenames	(Please see each specific label) Notes	Translocation Movement in plant
4	High	Mefenoxam	Subdue Maxx, Subdue GR	See each label. Typically, spring and fall drench applications with total allowable of 6lb/A/year (Subdue Maxx). Foliar, drench, soil directed, soilless media incorporation, and chemigation applications. See label for minimum reapplication intervals for drench applications (ranging from 3 weeks to 4 months). Mefenoxam resistance has been detected in the USA.	Xylem mobile systemic - translocation upwards (acropetal)
P07	Low	Phosphonates. Aluminum tris (O-ethyl phosphonate)	Areca, Aliette, <i>generic</i> fosetyl-Al	See each label. Foliar and drench/soil reapplication interval is 30d or greater. Do not apply group P07 and copper-based fungicides within 14d of one another	Fully systemic - xylem and phloem mobile (amphimobile)
P07	Low	Phosphonates. Mono- and di- potassium salts of phosphorus acid	Alude, Reliant, K-Phite 7LP (newer label)	See each label. Generally, soil drench minimum reapplication interval is 30d and foliar applications, less than. Do not apply group P07 and copper-based fungicides within 14d of one another	Fully systemic - xylem and phloem mobile (amphimobile)
40	Low to Medium	Dimethomorph, Mandipropamid	Stature SC, Micora	See each label. Foliar, drench, soil directed, and chemigation applications.	Translaminar systemic - local translocation
40 + 45*	Medium + High*	Dimethomorph + ametoctradin*	Orvego	See label. Foliar, drench, soil directed, and chemigation applications.	Translaminar systemic - local translocation
21	Medium to High	Cyazofamid	Segway-O, Celoxid SC	See each label. Minimum reapplication interval 14 - 21d. No more than 2 applications per crop cycle. Applied as drench or soil directed.	Protectant - no systemic activity
49	Medium to High	Oxathiapiprolin	Segovis	See label for use restrictions and tank-mix compatibility.	Xylem mobile systemic - translocation upwards (acropetal)
11	High	Fenamidone	Fenstop	See label: Currently only labeled for greenhouses. Field use label is forthcoming. Reapplication interval is 28d	Xylem mobile systemic - translocation upwards (acropetal)
43	Medium	Fluopicolide	Adorn	See label. Foliar, drench, and chemigation applications. No more than 2 applications per crop cycle. Minimum reapplication interval - 14d.	Xylem mobile systemic - translocation upwards (acropetal)
BM02	Unknown (likely low)	Biologicals	Rhapsody (bacteria), Root Sheild Plus (fungi)	See each label. Reapplication interval typically very rapid at 3-10d.	Antagonistic - hinders pathogen colonization of host tissues
-	-	Quaternary ammoniums	KleenGrow, Uptake, Physan 20, Green Shield	See each label. Typically used in sanitation efforts, irrigation maintenance (biofilms), and	Direct contact -
-	-	Hydrogen dioxides	Zerotol, Oxidate	some labels allow for application to plant surfaces. Phytotoxicity concerns are rate and label specific. Generally considered broad spectrum fungi/bacteria/oomycete pesticides.	varying residual activity, no systemic activity

Disclaimer - Materials represent examples and do not cover all possible control scenarios. Tradenames listed do not imply endorsement and are used as examples only. You must personally refer to, and strictly follow the label for each compound prior to use - Rutgers is not responsible for misused materials or damages thereof. The label is the law. Labels will provide detailed information on where and how the material can be legally used. Additionally, application intervals, compatibility, surfactant use, and other key information is described in detail. Always discuss treatments with your local agents.

Understanding your materials – Compounds used to control Oomycetes (Phytophthora, Pythium, Phytopythium) are called Oomycides and are fundamentally different than those used for needlecast (fungi, fungicides). Within available materials there are three main groups, which describe where they will work on the plant given the application technique. Phytophthora management focuses around treating the roots, or providing materials that reach the roots. **Protectants** – **are non-mobile**, meaning they stay exactly where applied, must be root applied. **Xylem mobile systemic** – move upwards, and the roots must be treated. **Translaminar systemics** – move very short distances into tissues, again meaning the roots must be targeted. Finally, the **Amphimobile/Fully systemics** – can move upwards to needles (xylem) and down to the roots (phloem) meaning foliage or roots can be targeted. These are the **P07**.

<u>Be mindful of water –</u> Fast drying soils (sandy loam) are less conducive to Phytophthora development than those that are wet or waterlogged (such as clay heavy). Phytophthora (and other root pathogens) often require water for dispersal of their propagules or swimming zoospores and subsequent infection of plant material. This means paying keen attention to not overwatering, mindful of how long tree roots are staying wet, standing water, and locations of water movement or runoff zones. If you are growing more susceptible species, such as true firs (and Douglas Fir), it is important to make sure the field is well-drained in that location. Planting on a gentle slope or mound is preferable in both field and container areas, as this promotes better drainage, evaporation, and airflow. Avoid tightly spaced plants, overgrowth, and high weed densities as this does not allow for adequate air movement (which increase humidity and decreases evaporation). Avoid over irrigation, especially during spring/fall.

<u>Start clean – stay clean –</u> Segregation or quarantine of incoming plants is an often-underutilized production practice. This practice alone could stop a pathogen infestation before it ever gets going and should be taken seriously, especially if plants are headed into a field to replace cut trees. Only purchase seedlings from reputable nurseries and make sure to carefully inspect the plants upon delivery. Pay careful attention to the roots and crowns of the seedlings and do not plant any material that is suspicious. It is worth rejecting a few plants than dealing with a perpetual root issue. Keep track of all crop inputs, especially seedling areas. Phytophthora and other fungi can be spread via both above and below ground. *Regular maintenance of equipment, especially used in diseased areas, is critically important.* Cleaning *then* sanitizing is critical as many sanitizing agents break down rapidly when in contact with organic matter, such plant debris. Consider all non-sterile inputs as potential points of contamination or vectors for disease spread. This is especially true for areas with known histories of Oomycete disease presence.

Frequent monitoring is critical to addressing potential issues before they become uncontrollable problems. Scout the fields regularly and train your employees on what they should be looking for, especially in susceptible hosts. Encourage them to report any signs or symptoms that might indicate declining plant health. **Plant health should always be addressed in disease management. Call us!**

Rutgers, The State University of New Jersey Prepared by Dr. Timothy Waller Email: <u>twaller@njaes.Rutgers.edu</u> Phone: 856-451-2800 EXT. 1



Please take this quick, 5-question survey (We really need this for our Phytophthora project)





COUNTY OF CUMBERLAND DEPARTMENT OF PLANNING, TOURISM & COMMUNITY AFFAIRS 164 WEST BROAD STREET, BRIDGETON, NEW JERSEY 08302

Matthew E. Pisarski, AICP, PP, Department Head & Planning Director

6 April 2023

Re: Cumberland County Inaugural Farmers' Market Cumberland Mall, City of Vineland

The Cumberland County Tourism Advisory Council, the Cumberland Mall and the City of Vineland are happy to announce a collaborative initiative to establish a countywide Farmers' Market in a premiere location within Cumberland Mall, launching in May 2023.

The Cumberland County Farmers' Market will be open each Saturday and Sunday from 11AM to 5PM starting on Saturday, May 6, 2023 and running through Sunday, October 29, 2023. Attached is a floorplan of the market space as well as a location map of the mall showing where the market will be located. Market space is being reserved on a first-come, first-served basis and interested vendors may request specific locations by the number references on the floorplan. Locations numbered 1 through 16 are available for \$250 for the season. Locations numbered 17 through 20 are premiere kiosks (image attached) and are available for \$400 for the season.

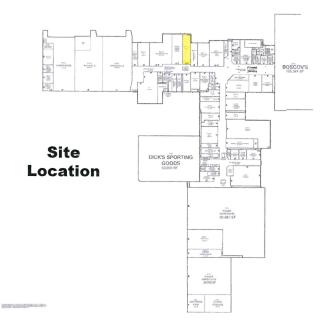
Interested vendors must be a registered business or commercial farm operation whose primary commodity is agriculturally-based. The business or farm must be headquartered and grow their product within Cumberland County. Vendors should contact Matthew Pisarski with the Cumberland County Department of Planning, Tourism & Community Affairs at (856) 453-2175 or mattpi@cumberlandCountyNJ.gov. The market provides direct rear delivery access with associated dedicated delivery truck parking within close proximity. The storefront includes restroom facilities not open to the public but available to vendors and market staff.

The Cumberland Mall provides private security and maintenance services and the benefits of locating at the Cumberland Mall do not end there. Ample customer parking, fully air-conditioned interiors, a concentration of retail stores attracting a large customer base, free marketing and a centralized location at the highly trafficked intersection of RTS 47 & 55 in Vineland – who could ask for more?

Reach out now to secure your spot and join us as we launch this exciting new way to promote the diverse farm to fresh products grown right here in Cumberland County!

Respectfully, Offrn Lin berman, Lynn Timberman, Chair Cumberland County Tourism Advisory Council

Enclosures LT/mep



Cumberland County Farmers' Market 2023 Floorplan



Spaces 1 through 16 are 10 feet x 10 feet and include a table and one chair.

The kiosks numbered 17 through 20 are 4 feet x 7 feet (image to left).

