2025 Lake Erie Regional Grape Program Winter Grower Conference

March 20, 2025, from 8 AM to 4:30 PM at:
WILLIAM'S CENTER
280 CENTRAL AVE. SUNY FREDONIA CAMPUS
FREDONIA, NY 14063

6:45 AM – Vendor set up

7:15 AM – Grower Check In/Registration begins

8:00 – 8:30 AM – Welcome by Jennifer Phillips Russo and LERGP Overview

8:30 – 9:00 AM – Andrew Holden, Penn State University Business Management Specialist, Lake Erie Regional Grape Program – Introduction and Survey

Andrew comes to The Lake Erie Regional Grape Program with a Bachelor of Science in Agribusiness and Applied Economics and a Master of Science in Agricultural Communication, Education, and Leadership (ACEL), from Ohio State University. His areas of specialization include, but are not limited to, Farm Business Management, Enology and Viticulture, and Ag/Farm Safety. Sixty percent of Andrew's job description is to provide leadership for planning, implementing and evaluating educational programs that addresses producer identified needs and opportunities.

While vineyards in challenging regions like the eastern US must constantly adapt to shifting conditions - from unpredictable weather patterns to evolving market demands – working through cashflow dynamics is not a straightforward choice. Andrew will guide growers through the critical financial, agricultural, and strategic factors that should inform financial decisions to help weather tumultuous times. The emphasis is on business management for commercial growers and small winery operations. This program will include but not be limited to 1) record keeping and business analysis; 2) economics of production practices; 3) financial management, forms of business organization and taxation; 4) labor management and 5) marketing.

9:00 – 9:15 AM – Kyle Bekelja, New York State IPM Grape Coordinator – Introduction

Kyle is the successful candidate for the NYS Grape IPM Coordinator. He will work with faculty and Cornell Cooperative Extension colleagues to help shape New York's thriving $6 billion grape industry by expanding knowledge and access to sustainable pest management practices in grape agroecosystems and inspiring and working with diverse audiences and stakeholder communities to address the key issues impacting the state's grape production systems. Kyle's mission is to establish NYSIPM as a trusted authority on pest management strategies that reduce personal and environmental and economic risk for grape growers and producers through program development, implementation, evaluation and applied research.

9:15–9:45 AM – Jennifer Phillips Russo, Extension Associate with Cornell's Lake Erie Regional Grape Program – Spotted Lanternfly Mechanized Harvest Pilot Study

The Penn State and Cornell lanternfly research team/ working group has been working to identify potential risks that will be created in the highly mechanized grape production industry of the Erie region prior to Spotted Lanternfly (SLF) arrival and establishment. A potential risk identified was whether mechanical harvesters would "harvest" SLF present on the vines with the grapes, thus contaminating the harvested crop. In the Southeast region of Pennsylvania, wine grapes are predominately harvested by hand, into small totes, which are then pressed in small batches. Despite

SLF being present in high numbers in the vineyards, hand harvesting and multiple points of contact prior to pressing allow for multiple points of SLF removal from the crop. The Lake Erie region of Pennsylvania and New York (approximately 32,000 acres) are predominately harvested utilizing mechanical harvesters. With most mechanically harvested grapes, no human hands touch the crop from the time of harvest through delivery to the processors, eliminating the possibility of SLF removal if SLF were to establish in our region. In general, juice grape growers do not apply insecticides during the fall harvest season as frequently as wine grape growers do, if at all. Jennifer will be presenting information on the data collected in the Spotted Lanternfly Mechanized Harvest Pilot Study that LERGP and PSU conducted in October 2024.

9:45-10:15 AM – Break and Vendor Show

10:15 – 11:15 AM – Dr. Terry Bates, Director of the Lake Erie Research and Extension Laboratory in Portland, NY, Cornell University – Grapevine Management Thinning Research

The objective of Terry's research program is to help the New York grape juice industry reach their goal of producing maximum sustainable yield of high-quality fruit through viticulture research and education. We work closely with producers and processors to identify research questions that are applicable to the industry. His team supports the grape industries of western New York and Pennsylvania through Precision Viticulture, Vineyard Mechanization, and Optimized Nutrient Management. Our region is very fortunate to have Dr. Bates conducting research to benefit our growers and improve their operations, but his contribution to our industry does not have borders. Terry's work is being adopted globally with positive impacts.

The term "alternate bearing" or "biennial bearing", refers to the phenomenon where a grapevine (or other fruit-bearing plants) produces a heavy crop in one year, followed by a reduced crop the following year. This cycle can be influenced by various factors, including environmental conditions and the plant's energy reserves. Due to the large frost event in the 2024 growing season and subsequent low yields for most of our eastern grape growing region, it can be anticipated that the rested vines may have a heavy crop this growing season. Canopy management is necessary for crop balance and the grower must apply viticultural practices to guide the vine and fruit into balance, with the result being perfectly mature fruit. Canopy/fruit management goals make us more consistently successful in our pursuit of efficient production of economically viable yields of grapes over the long term. Dr. Terry Bates will discuss research in both canopy and fruit management to help make informed decisions for this coming growing season.

11:15 – 11:55 AM – Dr. Katie Gold, Assistant Professor and Susan Eckert Lynch Faculty Fellow, School of Integrative Plant Science, Plant Pathology and Plant-Microbe Biology Section, Cornell AgriTech

Dr. Kaitlin (Katie) Gold is an Assistant Professor of Grape Pathology in the Plant Pathology and Plant-Microbe Biology Section of the School of Integrative Plant Science at Cornell University where she holds primary research and extension responsibilities for grape disease management in New York State. Dr. Gold's Grape Sensing, Pathology, and Extension Lab at Cornell (GrapeSPEC) studies the fundamental and applied science of plant disease and plant-microbe interaction sensing to improve integrated grape disease management. The Gold Lab specializes in the use of in situ and imaging spectroscopy (also known as hyperspectral imaging) deployed at a range of spatial scales, from proximal, autonomous rovers to spacecraft, to characterize asymptomatic disease physiology and the impacts of management intervention on early grape disease detection.

Katie holds primary responsibility for grape disease management outreach and education in New York state via her 40% extension appointment. Learn how she is working Office of Pesticide Programs, Environmental Protection Agency, to ensure our concerns with the loss of Mancozeb would be detrimental to our industry. New York is the third largest producer of wine and juice grapes in the US, consisting of ~1400 farms spread across almost 40,000ac in four major production zones. Katie will give us an introduction into the work that her lab carries out and connect personally to our industry to listen to our needs and how we can direct research to continue sustainability into the future.

11:55 – 12:10 – Kim Knappenberger, Cornell Extension Support Specialist, Lake Erie Regional Grape Program

Kim Knappenberger will present on the NEWA | Network for Environment and Weather Applications updates, how this resource can help inform your management decisions, and how our team supports this effort to provide support to our growers. Weather stations, primarily located on farms, deliver data to the NEWA website, which automatically calculates and displays weather data summaries, crop production tools, and IPM forecasts. Pest Forecast Models, in 2007, users reported that they can save, on average, $19,500 per year in spray costs and prevent, on average, $264,000 per year in crop loss as a direct result of using NEWA pest forecast models.

12:15 – 1:45 PM – Lunch and Vendor Show

1:45 - 2:30 PM – Dave Combs, Cornell Research Support Specialist in Dr. Katie Gold's Lab

Dave Combs is responsible for anything and everything related to the Cornell's 4 acres of pathology vineyards, including our annual fungicide efficacy studies for grapevine powdery mildew, downy mildew, black rot, and Botrytis bunch rot. Dave has vast field experience gained over his 26 years working for Cornell managing applied field programs ranging from tree fruit insecticide trials to vineyard fungicide trials. He is responsible for all applications, scouting, data collection, analysis and reports in the annual efficacy testing experiments. Dave is the 'jack of all trades' in the lab and pitches in where he is needed. This also includes precise image annotation for training the autonomous robot, lab ordering and inventory, greenhouse duties and field equipment maintenance and operation. Dave has robust background in viticulture and previously taught Integrated Pest Management at Finger Lakes Community College. Dave's presentation is on disease identification and management strategies.

The most important step in making sure that you are able to control a disease is to make sure that you are using the correct material/technique for that particular pathogen. Proper identification will be key in making sure that you are using the correct tool for the job. Dave's presentation will walk us through grapevine diseases and pathogens that move from early to late season, what is active when different stages of the disease as it advances, and he will demonstrate comparisons of diseases that can appear similar. It is our intentions to have attendees leave this presentation confident in disease identification for strategic management.

2:30 - 3:00 PM – Megan Luke, Penn State University's Extension Educator in Viticulture and Small Fruits, Lake Erie Regional Grape Program – Back to Basics for Pesticide Application

Megan Luke holds a M.S. in Interdisciplinary Studies: IPM and Agroecology from California State University, Chico. Her areas of expertise include the implementation of IPM principles in perennial crop systems, orchard, and vineyard management practices, pesticide application strategies including

variable rate mapping and equipment calibration, entomology including identification and trapping methodologies of agricultural pests, invasive species management, weed science, and PPE training. She holds a public pesticide applicator license in PA (#103136) in Category 18.

Megan will present on how Lake Erie Regional Grape Growers can remain confident in their pesticide application strategies and remain in compliance with changing pesticide label regulations. Megan will discuss best practices for record-keeping, including new Endangered Species Act mitigation measures and Bulletins, weather documentation, and equipment calibration. She will review the components of an IPM plan and discuss how recording day-to-day farm practices can aid growers during normal compliance checks.

3:00 – 3:15 PM – Break and Vendor Show

3:15 – 3:50 PM – Bryan Hed, Penn State University Research Pathologist at Lake Erie Research Laboratory, North East, PA – What does the future of disease control in grapes look like?

Bryan will present on the potential future in grape disease management with the loss of chemicals and resistance. He will present options and evoke inquiry about new and old chemical classes and their potential to fill gaps in current programs. Brian will also present on his spray management program for disease on Riesling that he concluded.

3:55 – 4:30 PM – Greg Loeb**,** Cornell University Professor, Department of Entomology, Cornell AgriTech

The overall goal of Greg's research program is to understand the principal forces that influence the population dynamics and species interactions of herbivores in agricultural and natural ecosystems and use this information to devise and implement multi-tactic pest management programs. His areas of research expertise include plant-arthropod interactions, biological control, chemical ecology and integrated pest management. Greg's more basic research is focused on how host plant traits and other environmental factors influence interactions between plants and their herbivores, and herbivores and natural enemies. His more applied research program focuses on the ecology and integrated control of specific arthropod pests of grapes and small fruit crops.

Greg's goal in extension is to translate and transfer results of applied research on pest biology and control to our grower clientele so that they will be better informed and better able to make sound pest management decisions. Educating growers and pest control advisors as to the proper and effective use of pesticides is an important aspect of my responsibilities. In addition, however, I include other approaches to pest control such as the use of predators and parasites, manipulation of pest behavior, cultural techniques and host plant resistance. Greg's presentation will speak about management of Spotted Lanternfly with focus on insecticides. And he will update us on research with drosophila and sour rot.

4:30 PM - Close