Lake Erie Regional Grape Program

A cooperative program between Cornell and Penn State Universities, Cornell Cooperative Extension Associations in Chautauqua, Cattaraugus, Erie and Niagara Counties, Penn State Extension – Erie County, NYS IPM Program, National Grape Cooperative, Constellation Brands, Walker's Fruit Basket and growers of the Lake Erie Grape Industry

Lake Erie Regional Grape Program

LERGP Home Pages: http://lergp.cce.cornell.edu; http://lergp.com Phone: 716.792.2800

January - March 2018

Efficient Vineyard - Technology Adoption and Outreach

On March 8-9, 2018, a team meeting for the Efficient Vineyard SCRI project was held at Carnegie Mellon University Robotics Institute in Pittsburgh, PA. Members of the team came from New York, Pennsylvania, California and England to reflect on the project as it has been progressing, and to collaborate and set common goals as we proceed further into the project. The goal for the meeting was to come out with a work plan for 2018. The group worked diligently through the two meeting days to come up with a workable plan, which includes California and New York trips for the CMU team to complete imaging, as well as ground truthing from the crews at the sites. Our team here at CLEREL has another season of imaging, sensing and thinning ahead of us. We finished the meetings with a tour through their robotics lab. The current crown jewel of the team there is a robot that will be able to do autonomous sensing in the vineyards.



efficient vineyard

2017-2018 Season 70 21 Concord (1) - Portland Tmax & Tmin (^oF) 20 40 40 15.5 10 4.5 -1 30 -6.5 Critical Temperatures (⁰F) -12 -18.5 0 -23 -29 -30

Grapevine Bud Hardiness

The LERGP team continued to participate in a statewide bud hardiness project led by Tim Martinson, Statewide viticulture extension specialist. Canes are collected every two weeks from CLEREL vineyards and include four varieties; Concord, Niagara, Riesling, and Seyval. Collections start after the first of the year and continue until the end of March. Samples are sent to a technician in Geneva who isolates the buds from the canes and puts the buds through a freezing process that records their hardiness. Right before a bud freezes it will release a spike of energy which is then recorded. The hardiness is graphed with maximum and minimum temperatures to show if the minimum temperature reached the point of freeze damage to the buds. Bud mortality is valued at 10% bud loss, 50% bud loss, and 90% bud loss. This information is another tool growers can use to determine the need for more extensive examination of buds to determine damage levels in their vineyards.

Increasing Accessibility of LERGP Web Resources

During this past quarter the team made great strides at making our web based media more accessible. The largest effort put forth thus far has been to ensure the accuracy of the closed captioning on all of our podcasts http://lergp.com/podcasts. These podcasts are produced weekly and uploaded each Wednesday throughout the year. There are currently 62 podcasts on the site with accurate closed captioning. In addition, one of our team members attended a zoom meeting about making websites more accessible. With this training, we hope to keep the needs of all members of our audience in the forefront as we post information in a more accessible fashion.





NEWA - Network for Environment and Weather Applications

Grape growers in the Lake Erie Region and across NYS participated in a survey after the 2017 growing season to determine their use of NEWA resources. Of the 88 responses, 68% indicated they used weather and pest model information found on NEWA http://newa.cornell.edu. Of those who used NEWA, 60% of participants reported that they improved profitability by implementing the information found on the NEWA website. New for 2018, weather data from two NYS Mesonet sites, Fredonia and Burt, NY, became available to run through the weather and grape pest models on NEWA. Working with the Lake Erie Regional Grape Research and Extension Program, Inc. (National Grape Cooperative, Constellation Brand and Walker's Fruit Basket) nine Rainwise instruments were purchased to expand the coverage of NEWA in the Lake Erie region.

LERGP Growers' Conference

The Lake Erie Regional Grape Program held their Growers' Conference on March 14, 2018 at the Williams Center of Fredonia State University, Fredonia, NY. Ninety-three participants had the opportunity to hear 12 presentations on everything from *Climate Influences on Concord Grape Phenology*, to an *Update on Changes in the Worker Protection Standards (WPS) Regulations*. Growers also had the chance to visit a tradeshow featuring 23 vendors. NYS DEC pesticide applicator recertification credits were available to those attending an afternoon IPM breakouts session. Kevin Martin presented *Change Your Name, Make More Money*, illustrating how tax policy can affect succession planning and business organization. Jackie Dresser gave a presentation on *The Evolution of Mechanization in Viticulture* during the afternoon breakout session, including an open discussion on the future implementation of mechanization in Lake Erie vineyards.



In 2018

Publications - Lake Erie Vineyard Notes Newsletter (1) and LERGP Crop Update (9)

Podcasts - 63 weekly podcasts available on http://lergp.com/podcasts/

Web resources - http://lergp.cce.cornell.edu, http://lergp.com and https://www.efficientvineyard.com

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