IOWA STATE UNIVERSITY.

NCCC-212 Report, October 2020

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Updates:

Tenure-track faculty position in fruit crops.

Constraints imposed on Iowa State University as a result of the global pandemic have caused the search and hiring of a tenure-track fruit crops specialist in the Department of Horticulture to be temporarily postponed. This position will be advertised with the majority of the appointment in Extension and outreach. With the permission of the Dean of the College of Agriculture & Life Sciences, the Department of Horticulture hopes to advertise for this position sometime in 2021. Any inquiries may be directed to Dr. Jeff Iles, Chair and Professor, Department of Horticulture (iles@iastate.edu).

New faculty member in enology.

<u>Dr. Aude Watrelot</u> was hired as Assistant Professor of Enology in the Department of Food Science and Human Nutrition () in August 2019, with activities in the <u>Midwest Grape and</u> <u>Winery Industry Institute</u>.

2020 Derecho in Iowa and the Midwest.

An extraordinary weather event happened on August 10, 2020 – a derecho blew across middle lowa creating significant destruction. Derecho is a weather term used to denote widespread, straight-line winds and is Spanish for "direct", "straight ahead". The 2020 derecho had strong winds ranging from 80 to 140 mph and were ongoing for 40 to 50 minutes in a location; the sustained winds differed from a typical derecho, when winds last for 10 to 20 minutes. Appendix pages have a few photographs showing the event from the National Weather Service and the damage at the Iowa State University Horticulture Research Station's vineyards. Vineyards have been rebuilt.

COVID-19 and outreach activities.

Due to the COVID-19 global pandemic, Iowa field days in person in 2020 were cancelled. Some virtual field days were held.

Objective 2 - Develop practices for small fruit production tailored for climatic and market needs of growers.

Validation of a Florida warning system to control strawberry anthracnose fruit rot, *Colletotrichum acutatum*, for less reliance on fungicide sprays by Midwest strawberry growers.

Evaluation of viticultural practices for 'Marquette' and ' La Crescent' grapevines grown in single- or double-cordon training systems.

Publications – NCCC-212 Objectives 1 and 2:

Strawberry:

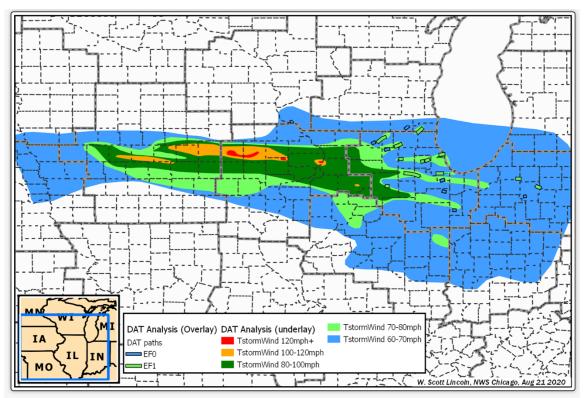
Zhang, X., Batzer, J.C., Peres, N.A., and Gleason, M.L. 2019. Validation of a Florida strawberry anthracnose fruit rot warning system in Iowa. Plant Disease. 103:28-33. doi: <u>https://doi.org/10.1094/PDIS-11-17-1762-RE</u>

Grape:

- Nonnecke G. R. and J. Schrader. 2020. Impact of minimum winter temperatures on the growth of winegrape cultivars and advanced selections. Iowa State University Research and Demonstration Farms Progress Reports 2019-36, p. 23-24. RFR-A1928: Available online: <u>https://www.iastatedigitalpress.com/farmreports/article/id/11321/</u>
- Schrader, J.A., D.R. Cochran, P.A. Domoto, and G.R. Nonnecke. 2020. Yield and berry composition of cold-climate grape cultivars and advanced selections in Iowa climate. HortTechnology. 30(2):193-203. doi: <u>https://doi.org/10.21273/HORTTECH04557-19</u>
- Schrader, J.A. D.R. Cochran, P.A. Domoto, and G.R. Nonnecke. 2019 (Dec.). Phenology and Winter Hardiness of Cold-climate Grape Cultivars and Advanced Selections in Iowa Climate. HortTechnology. 29(6):906-922. doi: https://doi.org/10.21273/HORTTECH04475-19
- Ghuffar, S., G. Irshad, A.S. Gondal, R. Ahmad, H. Rosli, X. Zhang, H.M.U. Aslam, M.A. Iqbal, and M.L. Gleason. 2019. First report of *Rhizopus stolonifer* causing Rhizopus bunch rot of grapes in Pakistan. International Journal of Phytopathology. 8:29-30. Available online: <u>https://esciencepress.net/journals/index.php/phytopath/article/view/2776</u>
- Watrelot A.A. and E. Norton. 2020. Chemistry and reactivity of tannins in *Vitis* spp.: A Review. Molecules. 25(9):2110. doi: 10.3390/molecules25092110

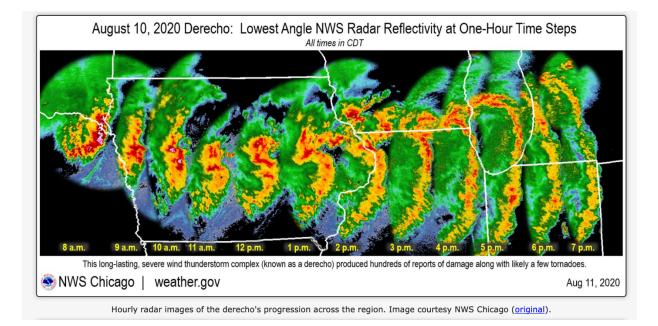
Appendix

- A. Derecho images from the National Weather Service, August 10, 2020: https://www.weather.gov/dmx/2020derecho
- B. Photographs of the ISU Horticulture Research Station's vineyards.



Appendix A: National Weather Service, August 10, 2020.

Preliminary map above shows the estimated wind speeds of the August 10, 2020 derecho across the region as of August 21, 2020. This is a collaborative effort between weather forecast offices Des Moines, IA Sioux Falls, SD Omaha, NE, Quad Cities, IA/IL, La Crosse, WI, Milwaukee, WI, Chicago, IL, central Illinois, IL, northern Indiana, IN, Indianapolis, IN, northern Indiana, IN, and Grand Rapids, MI. Thanks to Scott Lincoln, WFO Chicago for working with numerous offices to gather and refine this regional map.



Appendix B. Iowa State University, Horticulture Research Station's Vineyards.



August 12, 2020. Derecho damage to vineyard trellises.



October 12, 2020. Replacement of damaged vineyard posts and trellis system.