NCCC-212 Report for 2021 for the University of Wisconsin Madison
Submitted by: Amaya Atucha and Christelle Guédot.

Current projects:

Cranberry:

1) *Cranberry fruit maturity and its relationship to fruit firmness.* USDA NIFA HATCH Formula Funds. 2021-2024.
A. Atucha, University of Wisconsin-Madison.
Objective 3 and Objective 4
Dissemination of results: Results have been shared at statewide and regional grower events.
Plans for next reporting period: Continue to collect field data and disseminate findings at national and international stakeholder meetings.

2) *Attracting wild pollinators with native wildflower plantings to improve pollination services in cranberry*. USDA Wisconsin Specialty Crop Block Grant. 2019-2022.
C. Guedot, University of Wisconsin-Madison.
Objective 2 and Objective 4
Dissemination of results: Results have been shared at statewide and regional grower events.
Plans for next reporting period: Continue disseminate findings at national and international stakeholder meetings.

3) *Evaluation of new products to increase frost tolerance of cranberry buds*. WI Cranberry Board, Cranberry Institute, and Ocean Spray. 2021-2023
A. Atucha, University of Wisconsin-Madison.
Objective 3 and Objective 4
Dissemination of results: Results will be shared at statewide, regional, and national grower and academic meetings.
Plans for next reporting period: Collection of first year of data and extension activities.

4) *VacciniumCAP: Leveraging genetic and genomic resources to enable development of blueberry and cranberry cultivars with improved fruit quality attributes.* USDA NIFA SCRI CAP 2019-2023.
M. Iorizzo, North Carolina State University (NC State), Raleigh, NC; et al. (project team at: https://www.vacciniumcap.org/team).
Objective 1 and Objective 4
Dissemination of results: Results have been shared at statewide, regional, national, and international grower and academic events focusing on blueberry and cranberry.
Plans for next reporting period: Continue marker and trait identification for fruit quality in blueberry and cranberry, breeding improvement, enhancing coordination among the Vaccinium breeding community, and dissemination of findings.

5) *Cranberry Phenotyping and Breeding*. WI Cranberry Board, Cranberry Institute, and Ocean Spray.
J. Zalapa USDA-ARS and A. Atucha, University of Wisconsin-Madison.
Objective 1 and Objective 4
Dissemination of results: Results have been shared at statewide, regional, national, and international grower and academic events for cranberry stakeholders.
Plans for next reporting period: Continue trait identification for fruit quality in cranberry, vaccinium hybrid evaluation, breeding improvement, and dissemination of findings.

6) *Analysis of cold responsive genes in cranberry leaves and buds*. WI Cranberry Board, Cranberry Institute, and Ocean Spray. 2021-2024.
J. Mura USDA-ARS and A. Atucha, University of Wisconsin-Madison.
Objective 2 and Objective 4
Dissemination of results: Results will be shared at statewide, regional, and national grower and academic meetings.
Plans for next reporting period: Collection of first year of data and extension activities.

7) *Raspberry Pi powered digital system for tracking cranberry growth and development*. WI Cranberry Board, Cranberry Institute, and Ocean Spray. 2021-2024.
A. Atucha, University of Wisconsin-Madison and J. Mura USDA-ARS
Objective 2 and Objective 4
Dissemination of results: Results will be shared at statewide, regional, and national grower and academic meetings.
Plans for next reporting period: Collection of first year of data and extension activities.

8) *Effects of ericoid mycorrhizal fungi on performance of V. macrocarpon and V. oxycoccos under abiotic stresses related to climate change.* USDA NC SARE 2020-2022.
A. Atucha and Becca Honeyball, University of Wisconsin-Madison
Objective 2 and Objective 4
Dissemination of results: Results will be shared at statewide, regional, and national grower and academic meetings.
Plans for next reporting period: Collection of first year of data and extension activities.

<u>Grapes:</u>

1) *Assessing Mass Trapping for the Management of Social Wasps in Vineyards.*
USDA Wisconsin Specialty Crop Block Grant. 2021-2023.
C. Guedot, University of Wisconsin-Madison.
Objective 3 and Objective 4
Plans for next reporting period: Continue collecting data and will begin disseminating findings at national and international stakeholder meetings.

2) *Assessing attract-and-kill as a new management strategy for Japanese beetle in vineyards.* USDA Wisconsin Specialty Crop Block Grant. 2021-2023.
C. Guedot, University of Wisconsin-Madison.
Objective 3 and Objective 4
Plans for next reporting period: Collect data and begin disseminating findings at regional and national stakeholder meetings.

3) *Supporting Seedless Table Grape Production in Wisconsin.* USDA Wisconsin Specialty Crop Block Grant. 2021-2023.
A. Atucha, University of Wisconsin-Madison.
Objective 3 and Objective 4
Dissemination of results: Results will be shared at statewide, regional, and national grower and academic meetings.
Plans for next reporting period: Collection of first year of data and extension activities.

Raspberry:

1) *Impact of mulch treatments on managing the devastating pest spotted wing drosophila and on fruit yield and quality.* USDA Wisconsin Specialty Crop Block Grant. 2018-2022.
C. Guédot and A. Atucha. University of Wisconsin-Madison.
Objective 3 and Objective 4
Dissemination of results: Results have been shared at statewide and regional grower events.
Plans for next reporting period: Continue collecting data and disseminating findings at national and international stakeholder meetings.

Strawberry:

1) Transitioning to organic day-neutral strawberry production in the Upper Midwest- A systems approach. USDA NIFA ORG program 2021-2024.
A. Atucha, C. Guedot and L. Holland University of Wisconsin-Madison; M. Roger, E. Hoover, G. DiGiacomo University of Minnesota.
Objective 2 and Objective 4
Dissemination of results: Results will be shared at statewide, regional, and national grower and academic meetings.
Plans for next reporting period: Collection of first year of data and extension activities.

2) Trap cropping to improve tarnished plant bug management in north central strawberry. USDA NC SARE 2020-2022.
C. Guédot, University of Wisconsin-Madison.
Objective 2 and Objective 4
Dissemination of results: Results have been shared at statewide and regional grower events.
Plans for next reporting period: Continue collecting data and disseminating findings at national and international stakeholder meetings.