2021 Publications:

Books and Book Chapters


Refereed Journal Articles


Thesis

Poster Presentations

Graziano, J., Baker, J., Weber, D., and Farcuh, M. Maturity at harvest and its effects on fruit quality of Gala and Honeycrisp apple cultivars grown in the Mid-Atlantic. Mid-Atlantic fruit and vegetable convention, Hershey, PA, USA. Feb. 8-11, 2021


Claudia Baldassi presented a poster titled “Evaluating different rootstock crop load combinations to control biennial bearing and fruit quality of ‘Honeycrisp’ in Washington State” at the ISHS International conference XII Orchard Systems held virtually on July 26-30, 2021.


Technical Reports/Commercial Industry Reports


Extension Fact Sheet Publications


Popular Articles

Crassweller, R. 2021 Growing Fruit Plants from Seed. https://extension.psu.edu/growing-fruitplants-from-seed


Schupp, J. 2021. Amid-Thin W® is now labelled for thinning apples at full bloom. https://extension.psu.edu/amid-thin-w-is-now-labeled-for-thinning-apples-at-fullbloom


Scientific Oral Presentations


Outreach Oral Presentations


Minas IS. “The impact of the environment & genotype on peach cold hardiness & damage”, Mid-Atlantic Fruit & Vegetable Convention, Jan 2020, Hershey, PA.

Minas IS. “Pre- & postharvest factors affecting peach fruit quality”, Mid-Atlantic Fruit & Vegetable Convention, Jan 2020, Hershey, PA.

Minas IS. “The peach industry in USA: challenges & opportunities for CO peaches”, Western Colorado Horticultural Society Annual Conference, Jan 2020, Grand Junction, CO.

Anthony BM, Minas IS. “Influence of Thinning Severity on Peach Productivity and Fruit Quality”, Western Colorado Horticultural Society Annual Conference, Jan 2020, Grand Junction, CO.

Pieper J, Minas IS. “Rootstock and canopy position effect on peach fruit quality”, Western Colorado Horticultural Society Annual Conference, Jan 2020, Grand Junction, CO.

Sterle DG, Minas IS. “Peach Cold Hardiness in Western Colorado”, Western Colorado Horticultural Society Annual Conference, Jan 2020, Grand Junction, CO.

Sterle DG, Minas IS. Peach Hardiness in Western Colorado. Roger’s Mesa Brown Bag Talk
Minas IS. “Peach Cold Hardiness & Rootstock Research Update” 2019 Michigan Spring Peach Meeting, Michigan Peach Sponsors & Michigan Horticultural Society, SW Michigan Research and Extension Center, Michigan State University, Mar 2019, Benton Harbor, MI.

Minas IS. “Environmental bases for cold hardiness & damage in peach”, Indiana Horticultural Congress & Trade Show, Department of Horticulture and Landscape Architecture, Purdue University & Purdue Cooperative Extension Service, Feb 2019, Indianapolis, IN.

Minas IS. “Pre- & postharvest factors affecting peach fruit quality”, Indiana Horticultural Congress & Trade Show, Department of Horticulture and Landscape Architecture, Purdue University & Purdue Cooperative Extension Service, Feb 2019, Indianapolis, IN.

Minas IS. “Environmental Bases for Cold Hardiness and Damage in Peach”, Western Colorado Horticultural Society Annual Conference, Jan 2019, Grand Junction, CO.

Minas IS. “CSU Pomology Research Program Update”, Western Colorado Horticultural Society Annual Conference, Jan 2019, Grand Junction, CO.

Minas IS. “Fruit growth & thinning-Harvest & postharvest handling", Lecture within the frame of the 2nd Principles of Tree-Fruit Production: beginner growers’ edition workshop (30 tree fruit growers participants), Organized under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 20, 2020, Grand Junction, CO.

Minas IS. “Pruning peach and cherry trees under different canopy architectures in the CSU’s experimental orchard", Demonstration in the field within the frame of the 2nd Principles of Tree-Fruit CO-2020 State Report NC-140 Production: beginner growers’ edition workshop (30 tree fruit growers participants), Organized under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 20, 2020, Grand Junction, CO.

Minas IS. “Tree pruning, training & cropping systems”, Lecture within the frame of the 2nd Principles of Tree-Fruit Production: beginner growers’ edition workshop (30 tree fruit growers participants), Organized under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 20, 2020, Grand Junction, CO.

Minas IS. “Bearing habits of fruit trees-Flowering & pollination-Dormancy, rest breaking, cold hardiness & frost protection”, Lecture within the frame of the 2nd Principles of Tree-Fruit Production: beginner growers’ edition workshop (30 tree fruit growers participants), Organized under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 20, 2020, Grand Junction, CO.

Minas IS. “Climate & Tree Fruits-Cultivars & Rootstocks selection-Orchard establishment”, Lecture within the frame of the 2nd Principles of Tree-Fruit Production: beginner growers’ edition workshop (30 tree fruit growers participants), Organized under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 20, 2020, Grand Junction, CO.

Minas IS. “Pruning & training sweet cherry trees on TSA, Super Slender Axe (SSA), Kym Green Bush (KGB), Bi-axe and Bi-UFO for high density plantings", Demonstration in the field within the frame of the 1st Pruning & Training: Peaches & Cherries under different training systems workshop (30 tree fruit growers participants), Organized under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 14, 2019, Grand Junction, CO.

Minas IS. “Pruning & training peach trees on Perpendicular-V, Bi-axe (V in the row) as well as tall spindle axe (TSA) for high density plantings”, Demonstration in the field within the frame of the 1st Pruning & Training: Peaches & Cherries under different training systems workshop (30 tree fruit growers participants), Organized under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 14, 2019, Grand Junction, CO.
Minas IS. “Pruning & Cytospora Management”, Lecture within the frame of the 1st Pruning & Training: Peaches & Cherries under different training systems workshop (30 tree fruit growers participants), Organized under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 14, 2019, Grand Junction, CO.

Minas IS. “Peach & cherry training systems”, Lecture within the frame of the 1st Pruning & Training: Peaches & Cherries under different training systems workshop (30 tree fruit growers participants), Organized under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 14, 2019, Grand Junction, CO.

Minas IS. “Tree pruning & training responses”, Lecture within the frame of the 1st Pruning & Training: Peaches & Cherries under different training systems workshop (30 tree fruit growers participants), Organized under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 14, 2019, Grand Junction, CO.

Minas IS. “Bearing habits of fruit trees”, Lecture within the frame of the 1st Pruning & Training: Peaches & Cherries under different training systems workshop (30 tree fruit growers participants), Organized CO-2020 State Report NC-140 under the frame of Western Colorado Horticulture Society (WCHS) Annual meeting, WCRC-OM, Colorado State University, January 14, 2019, Grand Junction, CO.


Farcuh, M. Evaluating the Use of Reflective Groundcovers on Fruit Quality of Honeycrisp and Fuji Apple Cultivars in the Mid-Atlantic. Young Grower Alliance Session. Mid-Atlantic fruit and vegetable convention, Hershey, PA, USA. February 9, 2021

Farcuh, M. Effect of Apple Maturity and Storage Temperatures on Fruit Quality. Bay Area Fruit School, Queenstown, MD, February 10, 2021


Hilltop Orchards, York Springs, PA, July 22, 2021 Shenot Farm, Wexford, PA, July 28, 2021
Black, B. “Research Update: rootstocks, models and HD cherries” Utah State Horticulture Association annual conference (virtual) meeting. 21 Jan 2021 (attendance unavailable, typically 90+).
Black, B. “Micro-scale Fruit Farming,” Micro-scale farming session, Utah Urban and Small Farms Conference. Virtual Meeting 1 March 2021 (205 participants).
Bradshaw, T. All about crabapples. Friends of the UVM Horticulture Farm Workshop.3/20/2021
Bradshaw, T. Tree Row Volume: What it is, why it matters, and how to use it. New England Winter Fruit Seminar Series. 3/23/2021
Bradshaw, T. Apples. Vermont Agriculture and Food System Strategic Plan presentation to the House & Senate Agriculture Committee. 2/11/2021
Bradshaw, T. Cider apples in 2021: Where do we Stand? New England Winter Fruit Seminar Series. 2/09/2021
Casagrande Biasuz, E., Lee Kalcsits. Rootstocks Affect the Hydraulic System in Malus domestica Borkh. with Downstream Consequences to Gas Exchange, Isotope Composition, and Growth.
Griffin A. (Advisor Prof. Stefano Musacchi) presented his seminar titled “Apple Rootstocks: Tools for Orchard Management (A rootstock review) and graduated in M.S. in Agriculture on August 12th 2021.

Videos

Youtube video: https://www.youtube.com/watch?v=N47sGkVgeqA&t=6s

Webinars


Bradshaw, T. Adding Tree Fruit to a Diversified Farm. Vermont Vegetable and Berry Grower Webinar Series. 12/9/2020.
Musacchi, S. Honeycrisp Virtual Meetup #1 - Crop Load Management Part 2 (Stefano Musacchi, 6/12/2021)
https://mediaspace.msu.edu/media/Honeycrisp+Virtual+Meetup+1+-+Crop+Load+Management+Part+2+%28Stefano+Musacchi%29/1_cwn2k793.

**Fund leveraging**


Coneva, E. Assessing Size Controlling Rootstocks for Enhanced Efficiency of Peach Production Systems. Alabama Agricultural Experiment Station Production Agriculture Research Program Grants, Awarded $50,000.


Chavez, D.J. 2021. Training systems trial in peach. GA Commodity Commission for Peaches. Funding: $4,000.00

Gasic, K., et al., D.J. Chavez. 2020-2024. Solutions to the Armillaria Root Rot Affecting the U.S. Stone Fruit Industry. USDA-SCRI. Total Funding: $4,972,730.00. UGA Funding: $223,243.00

Villanueva, Raul (PI), R. Bessin, Z. Viloria, W. Dunwell 2019-2022. Developing Management Strategies Against Invasive Ambrosia Beetles Affecting Apples and Nurseries in Kentucky. Kentucky Specialty Crop Block Grant. About $500 from this grant is being used to cover the cost of Ambrosia beetle research on trees that were previously a part of the 2010 NC-140 apple rootstock trial.


Orchard management systems for improved yield and fruit quality – Sponsored by NY Apple Research and Development Program ($50,000).

Designer apple rootstocks – Sponsored by NY Farm Viability Institute. ($90,000).

Miller, D and A. Kirk. $5,000 Gift from Ohio Fruit Growers Marketing Association in support of NC-140 Hard Cider Rootstock trial.


Wiepz, E. Wisconsin Cherry Board funding for maintenance of the 2020 NC140 Tart Cherry High Density Rootstock and Irrigation Trials. $2,500


Einhorn, T. 2021 Optimizing tree quality for early orchard establishment, Michigan Apple Committee (MAC)- $14,914.

Einhorn, T., Musacchi, S., Chang, Y., Galimba, K. 2021-2023. Field evaluation and propagation of novel cold hardy quince rootstocks, WTFRC-NW Pear, $270,000.


