

Apple Horticulture and Postharvest Research Review

Confluence Technology Center, Wenatchee January 24, 2024

Host: WA Tree Fruit Research Commission (WTFRC)

Chairs: Matt Miles & Anne Morrell

Time	Presenter	Title^	Status#	Year(s)
8:45		Registration		
9:00	Chair	Matt Miles & Anne Morrell: Welcome		
	Tory	Meeting Etiquette & Housekeeping & General Introduction		
Project Reports				
		Horticulture		
9:15	Kalcsits	Retraction of Netting Near Harvest: Risks vs. Rewards	NCE/FINAL	21-22
9:25	Khot	Efficient Heat Stress Management for Improved Apple Fruit Quality	FINAL	21-23
9:40	Schmidt	Apple Crop Load Management	FINAL	21-23
9:55	Kalcsits	Measuring the Impact of Leaf Removal on Spur and Tree Health	CONT	22-24
10:05	Kalcsits	Measuring Storage Reserves to Assess Severity of Biennial Bearing	NCE/CONT	23
10:15	Mendoza	Phase 3 Evaluations of WSU Apple Breeding Selections	CONT	23-25
		Postharvest Biology, Technology & Food Safety		
10:25	Honaas*	Towards Next Generation Maturity Indices: Apple Biomarker Discovery	CONT	22-24
10:35	Thoma	Life Cycle Assessment for Pacific Northwest Apple Production	CONT	23-25
Break 10:45 – 11:15				
	Murphy	Tree Fruit Microbial Quality Under CA Storage (<i>out of cycle – no report</i>)	FINAL	23
11:15	Amiri	Evaluation of an Alternative Postharvest Fungicide Applicator	NCE/CONT	21-23
11:30	Amiri*	Understand and Mitigate Fungicide Resistance in <i>Penicillium</i> spp.	NCE/FINAL	20-22
11:40	Zhu	Fate of <i>Listeria</i> on Apples at Ozone and Controlled Atmosphere Storage	NCE/FINAL	18-20
11:50	Zhu*	Interaction of Microbiome and <i>Listeria</i> on Apples During Storage	NCE/CONT	20-22
12:00	Rudell*	Reducing CO ₂ -Related Disorders During Honeycrisp Rapid CA Treatment	CONT	22-24
	Amiri*	Genomic Approaches to Understand the Etiology of Postharvest Decays	CONT	23-24
Lunch Break 12:10 – 1:30 pm				
1:30	Zhu*	Fate of <i>Listeria</i> on Fresh Apples as Affected by Commercial Apple Waxes	NCE/CONT	20-22
	Zhu*	Efficacies of Biocontrol Agents Against Postharvest Decay in Apples	CONT	23-24
	Zhu*	Ozone Nanobubble to Control <i>Listeria</i> and Decay in Organic Apples	CONT	23-25
		Cosmic Crisp®		
1:40	Sallato	WA38 Applied Research and Demonstration Block	FINAL	21-23
1:55	Musacchi	WA38: SOP From Planting to Cropping	FINAL	21-23
	Musacchi	Peel Surf. Properties Linked w. Green Spot of WA38 (<i>out of cycle-no report</i>)	CONT	24
	Mendoza*	Improving Apple Fruit Quality & postharvest Performance	CONT	23-25
2:10	Torres	Mitigating WA38 Greasiness and Related Quality Defects	CONT	22-24
Break 2:20 – 2:50				
2:50	Schmidt	Pacman: SCRI update		
		Nutrient Management		
3:00	Sallato	Managing Ca ²⁺ related disorders in high vigor conditions	FINAL	21-23
3:15	Kalcsits	N, Mg, K Guidelines to Control Disorders for Honeycrisp & WA38	NCE/FINAL	20-22
Adjourn at 3:30				

* Altered report timeline of projects due to postharvest project: delayed reporting timelines to allow scientists to collect storage data, newly funded projects.....; ^Titles: some titles have been abbreviated to fit into table, see project reports for full titles; #CONT = continuing project report (10 min), FINAL = final project report (15 min), NCE: no-cost-extension (10 min or 15 min)

All reports are available for download approximately two weeks prior to the research review from www.treefruitresearch.org. The ZOOM link will be posted prior to the meeting on the website. Final reports will be permanently added to the searchable database (<https://treefruitresearch.org/advanced-search/>) within three months of the research review. Additional inquiries may be addressed to Mackenzie Perrault (Mackenziep@treefruitresearch.com).