



Cornell Cooperative Extension Lake Ontario Fruit Program Quarterly Report April - June 2022

**A partnership between
Cornell University and the
CCE Associations in these five
counties:**

**Monroe, Niagara, Orleans,
Oswego & Wayne**

Overview: The growing season for tree fruit and small fruit started in early April, which, for the “new normal”, was a bit later than usual, but still about 10 days earlier than the average of the last 40-50 years. While April was cold, there were few reports of frost damage. There was a fairly normal progression in phenology in tree fruit from green tip through full bloom. May was quite pleasant, and it looked like we had good pollination conditions in the middle of the month. However, there were reports of over-thinning on Honeycrisp, and this was confirmed by LOF in many Honey crisp blocks across the territory. Overall, May and June were drier than normal, and there were some hailstorms in Wayne and Orleans counties that reduced fruit quality in a significant number of acreage. While there were some hotter temperatures in June, the extreme heat did not last long. Wayne, Oswego and Monroe counties received more rain via thunderstorms, while Niagara and Orleans were abnormally dry. As of mid-July as this report is being written, we are still abnormally dry, and could be in moderate drought conditions if we do not receive significant rainfall soon.

In addition to summer tour planning, the team was engaged in full-fledged field work this quarter. Trapline checks and reporting by Janet and Liz are a staple in the spring and early summer. Applied research projects (mainly ARDP-funded) occupied a lot of Mario, Craig’s, Janet, Liz’, and Jennifer’s time. Most educational programs this quarter continued to be held virtually, mainly via Zoom™, mainly due to convenience and availability of Cornell faculty. The precision crop load management applied research/extension outreach activities that Dr. Terence Robinson, Mario, and Craig have been pushing stakeholder participation in prior years continued into 2022. Janet has been very active with applied research and farm visits. For the third year in a row, fire blight is affecting significant apple acreage in Western NY.

Personnel: It is with great sadness that we lost our longtime Administrative Assistant (over 24 yrs with LOF) Kim Hazel, who resigned in early May to pursue other opportunities. Luckily, we did not miss a beat, as Natalie Mrzywka was promoted from within Orleans CCE. Kim has trained her well in the accounting system and all that is needed to perform the job duties successfully. To date, Natalie has done an excellent job and we are lucky to have her. Kudos to Orleans CCE ED Robert Batt for suggesting we do this and allowing her to work 0.5 FTE with the team! Our Business Management Specialist, Mark Wiltberger, was on medical leave the entire quarter and was finished with the team on June 30. We have just posted the position. We have hired temporary help who will work for us 39 hrs a week from late May through harvest in late October, Jennifer Duerden. She is a hard worker and smart, and has shown initiative. We are happy we found her!



Our new Administrative Assistant, Natalie Mrzywka, who started with us on May 9.



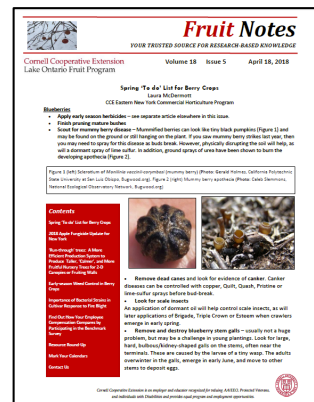
Our temporary field/technical help for the entire growing season, Jennifer Duerden, who started with us on May 23.



QR scan signs are placed on stakes in preparation for Liz Tee to perform scans (counting fruitlets) with Farm Vison, one of the several precision ag companies we are working with.

By the Numbers:

Team Publications:	Editions:	Articles:
Fruit Notes	6	23
Email Blasts	13	N/A
Fruit Facts	25	N/A



Selected Publications by LOF Team	Periodical	Author
<i>LOF Summer Tour, Tuesday, August 9</i>	Fruit Notes, Vol. 22, Issue 10	Kahlke
<i>Now is the Time to Start Thinking How to Promote the Formation of 'Honeycrisp' Flower Buds in 2023</i>	Fruit Notes, Vol. 22, Issue 8	T. Robinson & M. Miranda Sazo
<i>Managing Fire Blight in 2022</i>	Fruit Notes, Vol. 22, Issue 7	Isabella Yannuzzi & Kerik Cox, and van Zoeren
<i>Updated Predicted Green Tip Dates for WNY in 2022 – Your Sprayers Should be Ready Earlier than We Last Predicted!!</i>	Fruit Notes, Vol. 22, Issue 6	Kahlke
<i>Petal Fall Pest Management Review</i>	Fruit Notes, Vol. 22, Issue 8	A. Agnello, M. Rivera, J. van Zoeren, and M. Basedow
<i>Practical Crop Load, Rootstocks, and Nutritional Concepts for 'Honeycrisp' Production</i>	Fruit Notes, Vol. 22, Issue 10	A. Wallis, M. Miranda Sazo, B. Sallato
<i>2022 'Honeycrisp' Fruit Collection for Peel Sap Starts in Early July</i>	Fruit Notes, Vol. 22, Issue 11	M. Miranda Sazo, M. Basedow, C. Kahlke, E. Tee, L. Cheng, and T. Robinson



Poster and promotional materials displays of the CCE Regional Ag Teams at the Professional Development Retreat held June 22-24, 2022 in Geneva.



Mario instructs growers in Monroe County on precision pruning of Honeycrisp at Frank & Hale Burch Farms, Inc. in Hilton on April 20, 2022.

Selected Presentations by LOF Team	Periodical/Meeting:	Presenter:
<i>"How and when flower initiation occurs in 'Honeycrisp' and how it can be improved for the following season".</i>	Premier Spring Spanish Fruit School, June 17, Orleans CCE.	Miranda Sazo
<i>"Biocontrol in the garden: the enemy of my enemy is my friend"</i>	Master Gardeners of Orleans County, May 10. Ten attendees.	van Zoeren
<i>"Packing & Storing Apples in Western NY"</i>	Roy-Hart Student Spring Camp, April 14, Niagara CCE.	Kahlke

Business Consultation

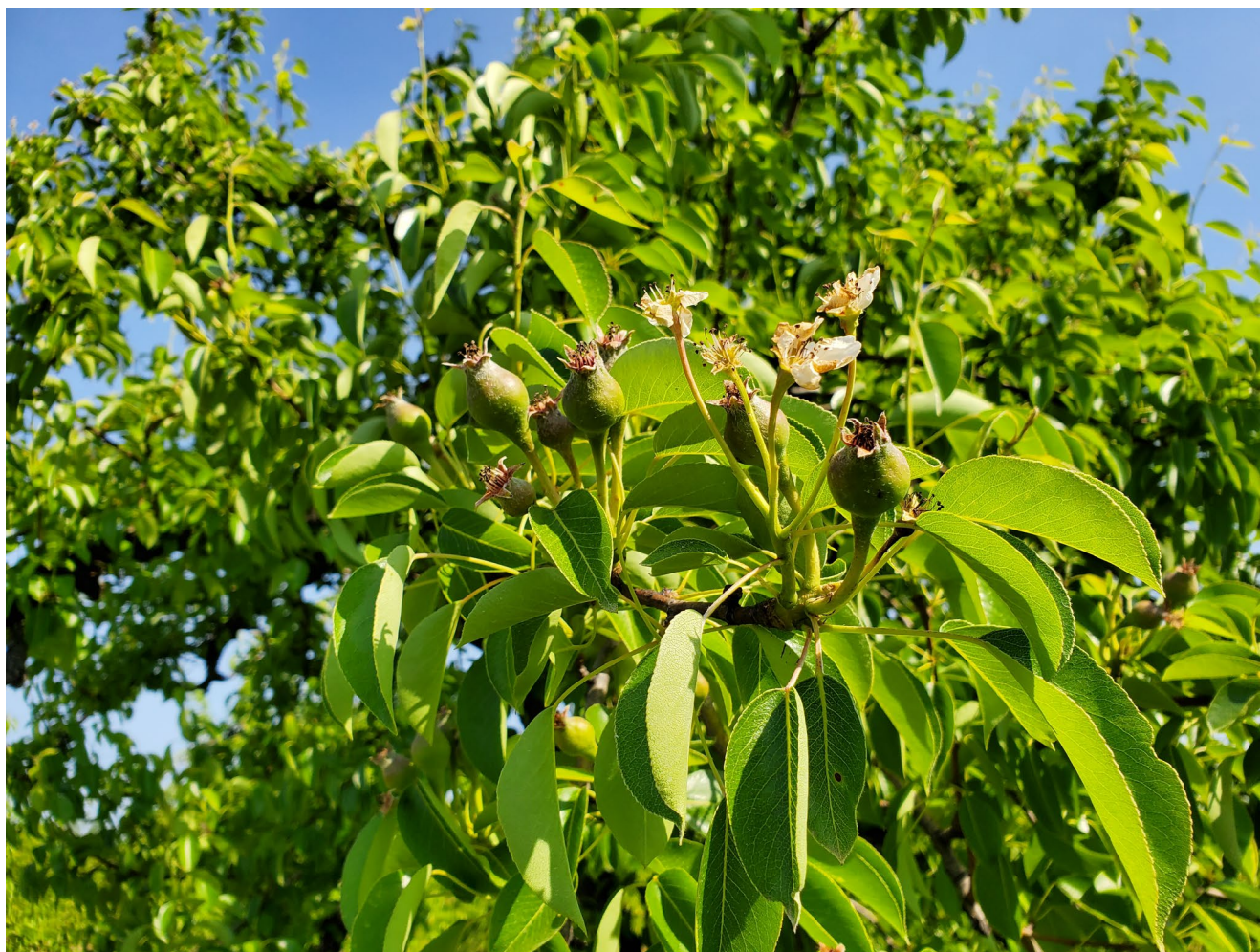
Specialist	Site Visit	Phone/Texts/Emails
Kahlke	13	~190
Miranda Sazo	24	~155
van Zoeren	18	111

Research

Activity/Proposal/Grant	Person(s)	Funded (Y/N) or Unfunded/ Preliminary Research (UPR)
<i>Root Traits and Rapid Apple Decline in High-Density Orchards</i>	van Zoeren (Khan PI)	Yes-NIFA
<i>A Statewide Effort to Manage Crop Load, Nutrient Status and Bitter Pit of Honeycrisp</i>	Miranda Sazo & Kahlke (Robinson PI)	Yes-ARDP
<i>Further Development of Peel Sap Analysis for Managing Bitter Pit Risk in 'Honeycrisp'</i>	Miranda Sazo, Kahlke, Duerden (Cheng, PI)	Yes-ARDP
<i>Precision Orchard Management</i>	Miranda Sazo, Kahlke, Tee (Robinson PI)	Yes-SCRI & ARDP
<i>Black Stem Borer</i>	van Zoeren (Agnello PI)	Yes-ARDP
<i>Optimizing Herbicide Strategies for Weed Control</i>	van Zoeren, Basedow	Yes-ARDP
<i>Testing the Role of Latent Viruses in the Decline of Apple Trees</i>	van Zoeren (Fuchs PI)	Yes-ARDP

Selected Professional Development and Training

Activity	Team Member(s)	Comments:
Attended “NE Berry” conversations led by Laura McDermott and Anya Osatuke (May-June; 4 total).	van Zoeren	Zoom™
Attended, and helped organize, virtual NE IPM “Stupid Question Sessions” on April 1	van Zoeren	Zoom™
Attended and participated in the Produce Safety Alliance’s Annual Executive & Steering Committee Meeting on June 27-28	Kahlke	Zoom™
Attended and participated in Trust Edge workshop at Cornell University on May 19.	Kahlke	
Attended 2022 Regional Ag Teams Professional Development Workshop & Retreat in Geneva on June 22-24	Kahlke, Miranda Sazo, van Zoeren	
Attended 2022 Premier Apple Forum June 20-21 in Syracuse	Kahlke, Miranda Sazo, van Zoeren	
Attended and participated in the 2022 Crunchtime Apple Growers Annual Meeting June 21 in Syracuse	Kahlke	



Young pear fruitlets are growing in an orchard in Niagara County.

Fruit Quality Management – Craig J. Kahlke

Educational Programs/Presentations

- 2022 Virtual Statewide Pink Meeting, April 28th via Zoom™
 - Organized meeting (with CCE-ENY) and worked with Mario, Janet, Mike, Dan, and Terence Robinson to set the agenda
 - Hosted meeting
- 2022 Virtual WNY Petal Fall Thinning Meeting. May 18th via Zoom™
 - Organized meeting and worked with Mario and Terence Robinson to set the agenda
 - Hosted meeting
- 2022 Virtual WNY 10-13mm Thinning Meeting. May 24th via Zoom™
 - Organized meeting and worked with Mario and Terence Robinson to set the agenda
 - Hosted meeting
- In-Depth Planning for our LOF Summer Tour August 9th
 - Secured lunch stops
 - Worked with other specialists to set program
 - Set up sponsorship
 - Advertised in our publications
- Presentation about apple packing and storage to 25 students from Roy-Hart Elementary school who attended Niagara CCE's spring day camp

Publications

Fruit Notes

- Articles Written: Fruit notes newsletter
 - *Updated Predicted Green Tip Dates for WNY in 2022 -Your Sprayers Should be Ready Earlier than We Last Predicted!!*– Volume 22, issue 6.
 - *LOF Summer Tour, Tuesday, August 9* – Volume 22, Issue 10.
 - *Join us on August 9th for LOF's Summer Tour in Orleans County!*
 - *Strawberry Harvest & Storage/Shipping considerations*– Volume 22, Issue 10
- Edited 4 newsletters in the quarter.
- Sorted through numerous announcements about workshops/conferences/meetings/surveys and along with the pertinent on-line registration links, put them in the newsletter.

Email Blasts

- Sorted through numerous announcements about workshops/conferences/meetings/surveys and along with the pertinent on-line registration links, put them in the email blasts.
- Sent out 14 email blasts in the quarter
 - 4/4 – *Updated Predicted Green Tip Dates for WNY in 2022 -Your Sprayers Should be Ready Earlier than We Last Predicted!!!*
 - 4/26 – *Statewide Pink Webinar (Zoom) – this Thursday, 11:30 AM – 12:30 PM*

- 4/27 – Last Bilingual (English & Spanish) Pruning Workshop this Afternoon, 1:30-3:30 PM (Burch Farms). Statewide Pink Webinar (Zoom) tomorrow (Thursday), 11:30 AM-12:30 PM.
- 4/28 – Statewide Pink Webinar (Zoom) today, 11:30 AM-12:30 PM.
- 4/29 – Statewide Pink Webinar meeting now posted on our YouTube Channel
- 5/7 – New LOF YouTube Video – Bloom Thinning Guided by the PTGM – New Release! Registration is Open for the 2022 Virtual Meetups about Labor and AG-Technologies this Summer!
- 5/17 – Petal Fall Meeting via Zoom – Wednesday May 18 at 3:30 PM. New Malusim App Available Now. Senator Ortt Press Conference Friday about the Ag Wage Board & Overtime threshold at Bittner-Singer Farm.
- 5/18 – Petal Fall Meeting via Zoom – Today (Wednesday May 18) at 3:30 PM. Western NY 12 mm Thinning Sprays Meeting (May 24) now available on our YouTube Channel
- 5/19 – Yesterday's Petal Fall Meeting now posted on our YouTube Channel. New Malusim App Available Now. Senator Ortt Press Conference tomorrow 1:30 PM about the Ag Wage Board & Overtime threshold at Bittner-Singer Farm.
- 5/25 – WNY 10-13 mm Thinning Meeting via Zoom – Tomorrow (Thursday May 26) at 3:30 PM
- 5/26 – WNY 10-13 mm Thinning Meeting via Zoom – TODAY at 3:30 PM
- 5/27 - Yesterday's Petal Fall Meeting now posted on our YouTube Channel
- 6/3 – NYS Farm Directory Launching this Month. Rescue Spray Thinning Recommendations for Western NY in 2022 by Dr. Terence Robinson and Mario Miranda Sazo
- 6/16 – Second Nationwide Virtual Meetup about Labor and Ag-Technologies is tonight – You can still register! Tomorrow (Friday) is the Premier Spring Spanish Fruit School – Open Event – No registration required!

Applied Research

- SCRI Project “Precision Orchard Management for Apple” (Robinson PI)
 - Secured two grower blocks at one farm for several experiments
 - Flagged & mapped the trees, measured trunk diameters, counted flower clusters
 - Pruned to different bud loads for SCRI experiment
 - Thinned to 1 fruit/cluster
 - Used the Fruit Scout app for trunk measurement and fruitlet sizing
 - Made manual measurements for ground truthing the Fruit Scout technology.
 - Met with Farm Vision (Zoom™) on 4/27 to outline upcoming field work.
 - With Mario & Liz, set up 5 trees for fruitlet scanning using the scanner from Farm Vision
 - Measured fruitlets at regular intervals for ground truthing the Farm Vision technology.
- ARDP Project “A Statewide Effort to Manage Crop Load, Nutrient Status and Bitter Pit of Honeycrisp” (Robinson PI)
 - Worked with the PI and other cooperators to prepare season's workload and tasks via Zoom on 4/18 & 4/21
 - With Jen, measured trunk circumferences and estimated crop load for research blocks in Orleans & Wayne counties.
- ARDP Project “Further Development of Peel Sap Analysis for Managing Bitter Pit Risk in ‘Honeycrisp’” (Cheng, PI)

- Solicited growers and crop consultants to collect fruitlet samples at 50-60g weights for peel sap analysis in July
- Met via Zoom on 4/25 to enlist Hess Brothers participation
- Valent – PGR Trials with ReTain™ and Harvista™ on Gala and SnapDragon
 - Pulled the last batch (1st pick Gala from 2 farms) from the commercial CA storage. Took to Orleans CCE maturity lab on 5/5.
 - Ran fruit over the Greefa™ line at AgriTech to determine fruit color and size.
 - Evaluated fruit at the Orleans CCE maturity lab on 5/12.
 - Entered all data in Excel and uploaded to shared Box™ folder.
- The Use of Hexanal for bitter bit reduction in ‘Honeycrisp’
 - Contacted Terence Park at Peak Harvest™ to try to evaluate his company’s product
 - They will send product in time for testing

Team and Other Duties

- Team Leader Administrative Duties
 - Approved invoices and vouchers as needed.
 - Attended WNY AMG Meeting May 14 (Zoom™).
 - Reviewed budget and monthly financials.
 - Approved timesheets/vacation/sick leave hours for team members as needed.
 - Disseminated pertinent info to rest of team as needed from:
 - Monthly Team Leader Zoom™ calls
 - Group and other email lists
- Attended Team Leader Check-ins (Zoom™) on 4/21 & 6/2.
- Organized and led weekly team (Zoom™) meetings on April 15, 21, May 13, May 31, June 15, 30.
- Organized and led in-person Team Meetings May 4 at Monroe CCE, and June 10 at Oswego CCE.
 - Both ED’s (Andrea Lista and Paul Forestiere) gave county updates. In addition, Jarmila Jaseler (Monroe CCE) sat in on our meeting and discussed potential areas of interest with our team.
- Attended Tree Fruit & Small Fruit PWT (Zoom™) on 4/13. Gave phenology update for WNY.
- Met with Keurig-Dr. Pepper (KDP) on May 11.
 - Terence gave updates on our research progress with our funded trial with KDP.
 - KDP discussed pollination project possibilities with Janet van Zoeren.
- Attended PACMAN Zoom™ on 6/28. Discussed agenda/format/logistics for the SCRI Advisory Meeting August 8 at AgriTech.
- Attended a meeting (Zoom™) on 6/29 with Dr. Yu Jiang and Mario to discuss standardizing our work with new precision ag tech companies.
- Attended a meeting (Zoom™) on 6/30 with 2 founders of Agerpix™ to outline how CCE-LOF works, and learn about their company’s work. We invited them to our summer tour on August 9.
- Submitted Jan.-Mar. 2022 quarterly report
- Mileage Reporting for funded grants

Professional Development

- Attended and participated in the Trust Edge workshop on campus on May 19.
- Attended the Premier Apple Forum in Syracuse on June 20-21.
- Attended and participated in the 2022 Crunchtime Apple Growers Annual Meeting June 21.

- Attended and participated in the 2022 Regional Ag Team Professional Development Conference & Retreat on June 22-24 in Geneva.
- Attended and participated in the annual meeting of the Produce Safety Alliance's Executive & Steering Committee (Zoom™ on June 27-28).

Stakeholder Contacts

- 13 site visits to assist growers (2 Niagara, 4 Orleans, 1 Monroe, 1 Wayne, 5 Oswego).
- Assisted stakeholders via texts, phone, and email (~190).



A tractor is prepped to string trellis wire in a new apple orchard planting in Niagara County.



Honeycrisp trees are flagged for a precision target bud load experiment in an orchard in Orleans County.

Cultural Practices – Mario Miranda Sazo

Educational Programs/Presentations

Pruning Orchard Workshop(s):

- Conducted the following pruning workshops in the Spanish or English or both (bilingual) languages:
 - Abril 12 at Cherry Lawn Farms, Wayne County (bilingual)
 - April 13 at Rosario Brothers, Orleans County (Spanish)
 - April 20 at Behling Orchards and Simpelaar Fruit Farm (English)
 - April 27 at Burch Farms, Monroe County (English)

Premier Hispanic Fruit School (CCE Orleans County) – June 17

- This Spanish language event brought more than thirty orchard managers and employees together to learn best practices in IPM, orchard, and human resource management
- Talks in the Spanish language were presented by Alejandro Calixto (New York State Integrated Pest Management), Mario Miranda Sazo (CCE Lake Ontario Fruit Program), and Mildred Alvarado (Cornell Small Farms Program).
- Funds for the lunch at the pavilion were provided by CSFP
- A Cornell Hispanic fruit tour is being planned for August 23

2022 Virtual Orchard Meetup Summer Series. Orchard efficiency: Labor and Technology

- This was a spring/early summer collaboration between fruit extension specialists from CCE LOF (Mario), MSU (Anna Wallis), WSU (Bernardita Sallato), PSU (Dan Weber), and OMAFRA-Canada (Kristy Grigg-McGuffin).
- This was the second season of this nationwide extension effort started with ‘Honeycrisp’ topics in June 2021.
- Three orchard meetups were conducted this Q2 on June 2 (77 participants), June 16 (64 participants), and June 30 (59 participants). There is one more meetup scheduled for July 14.
- Meetups showcased growers and other specialists leading the development of several AG-technologies for the US apple industry.

Presentations Given – Conference Presenter/Organizer:

- “How and when flower initiation occurs in ‘Honeycrisp’ and how it can be improved for the following season”. Premier Hispanic Fruit School (talk given in the Spanish language), CCE Orleans County office, June 17, 2022.

Publications

Fruit Notes

CCE LOF Fruit Notes newsletter: Wrote/modified/summarized/requested articles including:

- “Next week is the last pruning workshop to adjust bud load of ‘Honeycrisp’ trees” (M. Miranda Sazo), page 1, Vol. 22, Issue 7, April 21 2022.
- “Nitrogen, potassium, and calcium recommendations for ‘Honeycrisp’ are different than for most other cultivars” (T. Robinson, L. Cheng, and M. Miranda Sazo), pages 1-2, Vol. 22, Issue 7, April 21, 2022.
- “Now is the time to start thinking how to promote the formation of ‘Honeycrisp’ flower buds in 2023” (T. Robinson and M. Miranda Sazo), pages 5-6, Vol. 22, Issue 8, May 14, 2022.
- “Announcing Premier spring Spanish fruit school” (M. Alvarado, N. Waters, M. Miranda Sazo, and A. Calixto), pages 1-3, Vol. 22, Issue 9, May 27, 2022.

- “Announcing the 2022 virtual orchard meetup summer series. Orchard efficiency: Labor and Technology” (M. Miranda Sazo, K. Grigg-McGuffin, B. Sallato, A. Wallis, D. Weber), page 4, Vol. 22, Issue 9, May 27, 2022.
- “Practical crop load, rootstocks, and nutritional concepts for ‘Honeycrisp’ production” (A. Wallis, M. Miranda Sazo, and B. Sallato), pages 2-5, Vol. 22, Issue 10, June 9, 2022.
- “2022 ‘Honeycrisp’ fruit collection for peel sap starts in early July” (M. Miranda Sazo, C. Kahlke, M. Basedow, E. Tee, L. Cheng, and T. Robinson), page 4, Vol. 22, Issue 11, June 3, 2022.

CCE LOF Fruit Facts:

- Announced/conducted several pruning workshops in the Spanish and English languages, provided blossom/chemical thinning information, updated nutritional recommendations, etc.

CE LOF YouTube Videos – Other social media efforts and collaborations

- This quarter Liz Tee posted seven new videos to our YouTube channel:
 - ***Hort-related*** (without including her IPM videos)
 - ‘Statewide pink webinar’ - 269 views
 - ‘Pollen tube growth model and thinning guide for precision crop load management’ - 206 views
 - ‘Precision crop load management in 2022’ – 90 views
 - ‘WNY 10-13 mm thinning meeting’ – 124 views
 - ***2022 Orchard meetup series***
 - Part 1 – Labor, grower experiences – 120 views
 - Part 2 – Labor, Specialists – 64 views
 - Part 3 – Technology, Grower experiences – 105 views

Email Blasts

- One about ‘Honeycrisp’ fruit collection for peel sap

Applied Research Projects/Collaborations

On-farm Rootstock/Training Systems (Motts/Robinson and LOF team)

- A planning meeting was conducted at the CCE office in Monroe County on May 11

Statewide effort to manage crop load, nutrient status, and bitter pit of Honeycrisp (ARDP/Robinson)

- We wrote/submitted a timely newsletter article for the sampling of Honeycrisp fruitlets and sap analysis in 2022

Cornell AgriTech experimental orchard (ARDP/Fuchs, Miranda Sazo, van Zoeren)

- Conducted hand thinning with Janet, Anna, and Jenn in early June

Course: Futuro Financiero (NYS Agriculture and Markets, Yes! Apples, Rangarajan, Miranda Sazo, Waters)

- This course is an improved version of the Master Class training offered through the project titled “*Labor readiness: Pathways for farmworkers to start up and advanced beginners to scale up new farm business*” (USDA-NIFA, 2017-2021, Rangarajan, Miranda Sazo)
 - Conducted a Premier Hispanic fruit school on June 17 to continue delivering ADDITIONAL technical training to past graduates and prospective students

CALS Innovation Project: ‘A Sus Órdenes: Developing and strengthening CALS & CCE capacity for innovative and transformational engagement with Spanish-speaking stakeholders’ (Funds provided by CALS Innovation Fund. Pls: Rangarajan, Miranda Sazo, Waters, and 18 more Cornell staff)

- We held two meetings to review survey results and assign tasks for project objectives
- A final report to CALS is due by the end of August

SCRI – POM project (T. Robinson)

- Attended PACMAN project team meetings as needed
- Helped Craig to conduct pruning, take measurements, transport scanner to/from Cornell AgriTech
- Set up zoom meetings with Vivid, Green Atlas, grower collaborators, and two Cornell faculties (T. Robinson and Y. Jiang)
- Connected Outfield company from the UK with Orchard Dale Fruit Farm in Orleans and got additional funding for LOF tour
- Set up meetings and introduced Y. Jiang/van Zoeren to AgerPix from Spain and Aurea Imaging/Munckhof companies both from the Netherlands
- Conducted ground truth evaluations for a Green Atlas scanning at Cornell AgriTech on June 15
- Started a collaboration with Y. Jiang for a new Cornell DATA Initiative (Digital Agriculture Trials for Adoption Initiative) to be announced at the LOF summer tour on August 9

Ph.D. Related Course/Research Work in Ithaca (SCRI and ARDP/Cheng and Miranda Sazo Cheng)

- Submitted student progress report to Graduate School early this summer
- We are currently conducting the 2022 peel sap analysis
- Next steps for the dissertation writing process:
 - We will be presenting more results at the ASHS meeting in Chicago this summer (July 30- August 3)
 - We are also planning to complete the dissertation writing by the first week in March 2023, take B exam the first week of April 2023, and submit all Ph.D. requirements to Grad School by May 1 2023.

Team and Other Duties

- Attended LOF team meetings and conference calls as needed
- Attended Zoom meetings as needed for the planning of:
 - 2022 ARDP proposals,
 - KDP/Motts collaboration
 - Premier Hispanic school
 - Cornell soil heath initiative in tree fruit perennial systems
 - SCRI POM project

- 2022 orchard virtual meetups
- Met with M. Basedow via Zooms for the planning of a SARE pre-proposal
- Plan/coordinated/conducted several pruning meetings in April
- Plan/coordinated/conducted a Premier spring meeting for Hispanics in June
- Reported fleet mileage as needed during this quarter, changed oil, etc.
- Authored/submitted five articles to LOF newsletter editor
- Submitted Jan-March 2022 quarterly report
- Continued working closely with Basedow, van Zoeren, Aller, and Furber for the SH initiative in tree fruits
- Communicated and strategically worked with Cornell Small Farm Program (mainly with N. Waters and M. Alvarado)
- Started a close working relationship to partner for future educational programming with Alejandro Calixto (Director NYSIPM)
- Developed idea/ assembled project team/led a CALS innovation project

Professional Development

- Attended Regional Ag Team Retreat in Geneva – June 22-24
- Attended Premier Cooperative Apple Forum in Syracuse – June 20

Stakeholder Contacts

- Assisted 20 growers via farm visits, 50-60 emails, 40 phone communications, 60 texts (pics, videos, voice messages, etc.).
- Conducted 4 pruning trainings in Wayne, Oswego, Orleans, and Monroe



A new Honeycrisp strain grafted onto a Geneva rootstock breaks bud in a new apple orchard planting in Niagara County.

Integrated Pest Management – Janet van Zoeren

Publications

Fruit Notes Articles Written:

- Yannuzzi, I, K Cox and J van Zoeren. *Managing Fire Blight in 2022*. Fruit Notes, Volume 22, Issue 7. P 3-7.
- Agnello, A, M Rivera, J van Zoeren and M Basedow. *Petal Fall Pest Management Review*. Fruit Notes, Volume 22, Issue 8. P 1-4.

Fruit Facts Articles Written:

- 25 issues

Tree Fruit News Articles Written:

- Yannuzzi, I, K Cox and J van Zoeren. *Managing Fire Blight in 2022*. Tree Fruit News, Volume 10, Issue 2. P 1-4.

Applied Research Projects/Collaborations

- ARDP funded Project “*Optimizing Herbicide Strategies for Weed Control*” (PI-Mike Basedow)
 - Weed assessments (Apr 8, Apr 25, May 13, May 27, June 19, June 27)
 - Apply herbicide to spring pre-emergent and control treatments (Apr 30)
 - Apple grass-specific herbicide to all plots (June 8)
 - Apply burndown herbicide to control treatment (June 25)
- USDA NIFA funded Project “*Root Traits and Rapid Apple Decline in High-Density Orchards*” (PI-Khan)
 - Decline severity assessment at Morgan Orchard (June 7)
- Unfunded Project “*Testing the role of latent viruses in the decline of apple trees*” (PI-Fuchs)
 - Pruning (Apr 11, May 3)
 - Fruitlet thinning (May 31, June 15)

Grant Submissions, Re-Submissions, Letters of Support, Proposal Meetings

- Wrote letter of support for USDA SCRI grant “*Integrating improved tools and tactics into customized IPM programs for BMSB in select specialty crops*” – PI Nik Wiman
- Wrote letter of support for USDA Planning grant “*Killing them softly: defining the future of insect mating disruption in specialty Crops*” - PI Monique Rivera

Team and Other Duties

- Help organize and coordinate statewide virtual “pink” meeting.
- Help organize and coordinate statewide virtual “petal fall” meeting.

- Editor of Fruit Notes publication (April; 2 total).
- Served on planning committee for 2022 Ag Extension Retreat; let “women in ag extension” discussion group.
- Served as Fruit Program Working Team Co-chair, including planning and facilitating a PWT meeting on Apr 13, and “Ag Inservice” planning meetings.
- Attended team meetings.

Professional Development:

- Attended, and helped organize, virtual NE IPM “Stupid Question Sessions” (virtual, April; 67 attendees).
- Attended “Morning Brew” conversations led by Peter Jentsch, Poma Tech (May-June; 6 total).
- Attended “NE Berry” conversations led by Laura McDermott and Anya Osatuke (May-June; 4 total).
- Attended Spanish-language fruit school (Orleans CCE office, June 17).
- Attended 2022 Ag Extension Retreat (June 22-24).
- Attended “Premier Meeting” (June 20).

Other Area-Wide Education and Advocating

- Weekly insect trapline and orchard scouting (April – June)
- Collaboration with Jason Londo to assess temperature variation and declining tree symptoms in a commercial orchard.
- Conversations and advocating for WNY growers with USDA and DEC regarding European Cherry Fruit Fly quarantine.
- Special Permit Training – grade exams and work with DEC to send out permits.
- Presented to Master Gardeners of Orleans County “Biocontrol in the garden: the enemy of my enemy is my friend” (10 attendees, Orleans CCE office, May 10).

Stakeholder Contacts:

- 18 site visits to assist growers (1 Niagara, 8 Orleans, 2 Monroe, 4 Wayne, 4 Oswego).
- Assisted stakeholders via texts, phone, and email (111).

Production Economics & Business Management – Mark Wiltberger

- Mark was on medical leave this quarter.