

Feedback from Meet & Greet Events

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Sonoma, Marin, and Napa Counties

December 2023

As one component of my Needs Assessment, I hosted Meet & Greet events from August to December 2023 in Sonoma, Marin, and Napa counties. At these meetings, I shared a short program update, educational resources on growers' key topics of interest, and raffled off some field tools and local items. I gathered the following feedback from growers about their key field topics of interest, focusing on soil, water, and pest management. Attendees were primarily commercial vegetable and orchard crop growers with a total of 47 attendees across all three counties. Grower input guides the North Bay Specialty Crop program and helps determine future areas for educational outreach and applied research. Thank you to everyone who attended!

Sonoma County Topics

- Soil & Nutrients
 - Collecting representative soil samples
 - Understanding how to choose sampling locations to compare field areas
 - Soil test interpretation and applying results in practice
 - Frequency of soil testing, considering cost
 - Soil health practices: innovative strategies, recycling nutrients on site, understanding when importing amendments/fertilizer is needed
 - Thinking through benefits and tradeoffs of no-till vs. tillage: rodent pressure, labor, soil temperature, compaction, weeds, salinity
 - Access to reliable, consistent compost
 - Understanding how to balance nutrients, cations in particular
 - How to assess plant nutrient status
 - Soil microbial analyses options
 - Understanding soil organic carbon assessment options in the context of building soil organic matter levels
- Water
 - Dry farming suitability: what crops are best suited, which soils, etc.
 - When to start dry farming in orchards, management strategies, and how to monitor water status of trees and soil
 - Deficit irrigation: how much is too much?
 - Water monitoring tools
 - Understanding ET
 - Merits and tradeoffs of different types of irrigation such as drip, micro, flood
 - Drought preparedness
 - Cost of irrigation
 - Water storage options

- Understanding water quantity needed and assessing quality (including boron levels) for agricultural use
- Impacts of recycled water on soil salinity and boron
- Surface water vs. ground water use
- Irrigation timing
- Pulse irrigation: high frequency, short duration
- How to best match the irrigated wetted zone to the rootzone
- Pond water testing for biologicals
- Pests
 - Gophers, moles, voles: trapping timing, finding your preferred type of trap, encouraging natural predators
 - Symphylans: preventing spread, understanding damage levels, thresholds, is it a deal-breaker?
 - Cucumber beetles: organic IPM options, could encouraging bluebirds help provide some level of control?
 - Trips
 - Whiteflies
 - Flea beetles
 - Aphids
 - Black scale on olives
 - Olive fruit fly
 - Understanding which nematodes harm plants, which are beneficial
 - Trap plant insectaries
 - Understanding Integrated Pest Management (IPM)
 - Efficacy of biocontrol options: quantifying effects, is it worth it?
 - Pest-specific sticky traps, for instance, for thrips
- Other
 - Small scale equipment for seeding
 - Cover crop equipment: crop termination via roller crimping or flail mowing
 - No-till equipment
 - Specialized harvesters for specific crops
 - Access to peer-reviewed research findings, updates, links to research-based resources, how-to resources
 - Interest in farmer networks and events, webinars

Marin County Topics

- Soil & Nutrients
 - Soil testing: where, when, how often
 - How to assess and track soil biology over time
 - How to interpret soil fertility tests
 - Understanding nutrients in the soil and the plant: mobility, roles, functions
 - Understanding visual symptoms of nutrient deficiencies
 - Understanding CEC of different soil types
 - Understanding how tillage influences soil biology

- Assessing concrete effects of no-till
- How to do no-till bed prep for direct seeded crops like carrots
- Understanding available nitrogen from organic sources: breakdown of organic matter, optimal timing, sources, soil contact
- Effects of large applications of wood chip mulch on nitrogen availability
- Fertigation equipment
- How to ensure sufficient and available nutrients for incoming crop after crimping cover crop
- Water
 - Dry farming: crop selection such as potatoes
 - Overhead irrigation can lead to mildew
 - User-friendly soil moisture sensor options during drought conditions
 - Understanding different irrigation set up options: overhead, piping, drip
 - How to set up irrigation, demo videos, calculations and formulas for pipe diameters, pump pressure, etc.
 - Best strategies for cleaning out drip lines, unclogging emitters
 - Best strategies to monitor for and address irrigation leaks
 - Cost of water
 - Pond management to improve water quality
- Pests
 - Gophers: IPM, Gophinator traps, black box traps, cost-effectiveness of different strategies, encouraging natural predators, response to flooding
 - Aphids in brassicas, nutrient applications can increase aphid populations
 - Whiteflies in brassicas
 - Cucumber beetles
 - Flea beetles
 - Corn earworms
 - Stinkbugs
 - Slugs
 - Leafminer
 - Plant disease diagnosis
 - Black spot on squash
 - Mildew
 - Corky root
 - Clubroot
 - Bird pests: ½" netting seems to work best but need to rotate to prevent mice populations from building up, scare tape seems to work OK
 - Weeds: bindweed, trumpet weed, thistle, purslane, mallow
 - Best equipment for organic weed management, considering tillage, tarping, effects of irrigation
 - IPM strategies such as insect netting, trap crops, physical barriers, mineral oils
 - How will climate change affect pest pressures in our region?
 - Interest in IPM focus groups
- Other

- Specialized harvest equipment is needed for certain low-water use crops like beans and potatoes
- Thinking through crop diversity vs. focusing on a small number of crops: often depends on the needs of the sales outlet
- Climate adaptation: severe weather can damage greenhouses & high tunnels
- Interest in field days on farms on key topics such as organic weed management and cultivation equipment, bringing in ANR Specialists

Napa County Topics

- Soil & Nutrients
 - Soil health building practices: cover crops, no-till, compost
 - Which soil tests are most helpful for organic production?
 - How to test for soil microbial life and effects on plants
 - Soil prep to minimize soil-borne pathogens: debris removal, equipment sanitation
 - Thinking through whether to sacrifice SOM and good soil structure for tillage to control symphylans
 - Assessing concrete effects of compost teas, gathering data to track effects on soil microbes
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- Water
 - Strong interest in learning more about dry farming: site suitability, crop suitability, quality improvement for tomatoes
 - Deficit irrigation in orchards to conserve water and improve flavor
 - Assessing soil water status: how do I tell if I've watered enough?
 - Understanding water dynamics
 - Assessing water status in rootzone, across different soil types
 - Pulse irrigation: seems to work well in sandy soil to provide water and cool off plants on hot days, can use a loop timer
 - Water capture
- Pests
 - Gophers, voles, ground squirrels
 - Spider mites on many crop types
 - Aphids
 - Which plants to consider for trap cropping
 - Symphylans
 - Strong avoidance of organic pesticide use: interest in IPM options for control that do not have off-target effects, unsure of safety precautions
 - Soil drenches for symphylans: it seems to be the most effective IPM strategy, but concern about runoff and off-target effects
 - Effects of systemic fungicides on pollinators: fungicide origins above/belowground, off-target effects, environmental concerns
- Other
 - Resources for thinking through crop rotation choices, order, rationale, how to factor in intercropping

- Thinking through crop diversity vs. simplicity