

Successful Biological Orcharding



Fascinating biological connections make for a healthy orchard ecosystem. All insect pests and fruit tree disease – whether fungal or bacterial – have launching points and particular timing. Healthy trees address these challenges first and foremost from within. Growers utilizing an ongoing investment in soil nutrition and biodiversity set the stage for gentler organic sprays to grow a successful fruit crop. The challenges you face at your locale will become far more manageable as you build a holistic system that keeps trees and berry plantings healthy from the get-go. We'll wrap up this day with important marketing perspective for selling the good fruit. Our guide for this session will be Michael Phillips of Lost Nation Orchard, author of *The Holistic Orchard*, *The Apple Grower*, and most recently *Mycorrhizal Planet: How Fungi and Plants Work Together to Create Dynamic Soils*.

Time	Topics
9:00	Welcome & Introductions
9:15	<p>Healthy Plant Metabolism: photosynthesis efficiency, protein synthesis, fats energy, resistance metabolites</p> <p>Fungal Duff Management: forest edge ecology, mycorrhizal boon, tree root cycles, ramial wood chips, rechargeable biochar, biological mowing, fungal design notions</p> <p>Orchard Soil Health: Food Web Interaction & Fertility Ratios: compost wisdom, stocking the pantry, nutrient density</p>
10:45	Break
11:00	<p>Ecosystems Connections: understory fertility loop, root space, light space, bridge trees, biodiversity to the nth degree... beneficial mathematics, pollinator habitat, braconid inspiration, spider glory</p> <p>Disease Progression: staging areas, fungal strategies, bacterial opportunists</p>
12:15	Lunch

Time	Topics
1:30	<p>Integrating Holistic Tenets into Orchard Practice: phytochemical pathways, stimulating induced resistance, fatty acid nutrition, competitive colonization, cuticle defense, genetic resistance mechanisms</p> <p>Holistic Alternatives to Fungicides: systemic acquired resistance, mixing pure neem oil, effective microbes, windows of opportunity, stirring the biological stew</p> <p>Insect Challenges: points of vulnerability, nudging into balance, organic tool box, alternate inducements, no year will ever be the same</p>
3:15	Break
3:30	<p>Community Marketplace: fruit shares, apple value add, hard cider prospectus</p> <p>Your Turn: ask those questions please!</p>
4:45	Wrap-up and Evaluation
5:00	Adjourn to Reception in Conservatory

Find more information about Organic Intensives, scholarships, and how to register at moffa.net/oi-2020.html.