

# **MFV Expo SCHEDULE**

Minneapolis Foyer

#### WEDNESDAY

5:00 pm - 7:00 pm

Welcome Back Reception on the Trade Show Floor

Registration & Name Badge Pick-Up Begins at 3:00 pm in the Mpls Foyer

#### THURSDAY

7:30 am - 8:30 am	Registration & Continental Breakfast
8:00 am - 8:30 am	First Timers - Mingle with a Mentor
8:30 am - 9:30 am	General Session - Keynote Speaker
9:30 am - 12:00 pm	Trade Show Open
10:30 am - 11:00 am	Education - Vegetable Roundtable Talk
	Education - Fruit Solutions Stage
	Education - Apple Education Session
11:00 am - 11:30 am	Education - Vegetable Education Session
	Education - Fruit Roundtable Talk
	Education - Apple Solutions Stage
11:30 am - 12:00 pm	Education - Vegetable Solutions Stage
	Education - Fruit Education Session
	Education - Apple Roundtable Talk
12:00 pm - 1:30 pm	Lunch & Speaker: Focus on Climate Change
1:30 pm - 4:00 pm	Trade Show Open
	Trade brief open
2:30 pm - 3:00 pm	Education - Vegetable Solutions Stage
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2:30 pm - 3:00 pm 3:00 pm - 3:30 pm	Education - Vegetable Solutions Stage Education - Fruit & Veggie Education Session
	Education - Vegetable Solutions Stage Education - Fruit & Veggie Education Session Education - Apple Roundtable Talk
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3:00 pm - 3:30 pm	Education - Vegetable Solutions Stage Education - Fruit & Veggie Education Session Education - Apple Roundtable Talk Education - Vegetable Roundtable Talk Education - Fruit Solutions Stage Education - Apple Education Session Education - Vegetable Education Session

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### FRIDAY

7:30 am - 8:30 am	<b>Registration &amp; Continental Breakfast</b>
8:00 am - 8:30 am	MFVGA Annual Meeting
8:30 am - 9:00 am	MAGA Annual Meeting
9:00 am - 9:45 am	General Session - Keynote Speaker
9:45 am - 12:00 pm	Trade Show Open
10:30 am - 11:00 am	Education - Vegetable Education Session
	Education - Fruit Solutions Stage
	Education - Apple Roundtable Talk
11:00 am - 11:30 am	Education - Vegetable Solutions Stage
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11:30 am - 12:00 pm	Education - Vegetable Roundtable Talk
	Education - Fruit Education Session
	Education - Apple Solutions Stage
12:00 pm - 1:30 pm	Lunch & Speaker: Focus on Labor Challenges
1:30 pm - 4:00 pm	Trade Show Open
2:30 pm - 3:00 pm	Education - Vegetable Roundtable Talk
	Education - Fruit Solutions Stage
	Education - Apple Education Session
3:00 pm - 3:30 pm	Education - Vegetable Education Session
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	Education - Apple Solutions Stage
3:30 pm - 4:00 pm	Education - Vegetable Solutions Stage
	<b>Education - Fruit Education Session</b>
	Education - Apple Roundtable Talk

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# **MFV ExpoEDUCATION PROGRAM**

#### 10:30 am - 11:00 am

#### Vegetable Roundtable Talk

 Carrots on Heavy Soil: Raised Beds. Population, and Varieties, Charlie Rohwer, University of Minnesota

#### **Fruit Solutions Stage**

• Japanese Beetle Impact on Minnesota Wine Grapes, Dominique Ebbenga, University of Minnesota

#### **Apple Education Session**

• New Tree Fruit Varieties from the University of Minnesota, Jim Luby, University of Minnesota

#### 2:30 pm - 3:00 pm

#### **Vegetable Solutions Stage**

 Backpack Sprayers: How to Set Up and Tips for Using Small Sprayers, Ken Rost, Frost Inc.

#### Fruit/Vegetable Education Session

 IPM Solutions for Healthy Plants, Produce, and People, Rachel Sporer, BioBest

#### Apple Roundtable Talk

• UMN Extension: How to Utilize Resources and an Update on Current Projects, Marissa Schuh, University of MN

#### 11:00 am - 11:30 am

#### Vegetable Education Session

 Sweet Corn: A Look at Corn Ear Worm, Bill Hutchison, University of Minnesota

#### Fruit Roundtable Talk

• Berries: A Year in Review, Kevin Edberg, The Berry Patch

#### **Apple Solutions Stage**

 University of Minnesota Apple Genetics, Sarah Kostick, U of MN

#### 3:00 pm - 3:30 pm

#### Vegetable Roundtable Talk

 High Tunnels: Recent Concerns in High Tunnel Production, Terry Nennich, Ter-Lee Gardens, & Jerry Untiedt, Untiedt's Vegetable Farm

#### **Fruit Solutions Stage**

 Strawberries & Other Small Fruits, Jim Luby, University of MN

#### **Apple Education Session**

 U of MN Cider Trials, Jack Tillman, University of Minnesota

#### 10:30 am - 11:00 am

#### Vegetable Education Session

• High Tunnels, Julie Grossman

#### **Fruit Solutions Stage**

 Invasive Pests & Diseases: Coming Soon to a Field Near You!, Michelle Grabowski & Angie Ambourn, MDA

#### Apple Roundtable Talk

• Farm Marketing & Agri Tourism, Aaron Brand, Troy Heald, Charlie Johnson, MAGA Board Directors

#### 2:30 pm - 3:00 pm

#### Vegetable Roundtable Talk

• Agritourism: Marketing Strategies, Berry Ridge Farm, Country Blossom Farm, & Ida Valley Farm

#### **Fruit Solutions Stage**

 Minnesota Grown, Mallory Forseth

#### **Apple Education Session**

 Introduction to Apple Irrigation, Scott Wicklund, MIDC

#### 11:00 am - 11:30 am

#### **Vegetable Solutions Stage**

 Best Strategies for Employment + an H2A Overview, Jessica Roe, Roe Law Group

#### Fruit Roundtable Talk

• Japanese Beetle on Fall Raspberries: New IPM Research on Yield Impacts & Adult Monitoring, Adam Toniato & Bill Hutchison, University of Minnesota

#### **Apple Education Session**

 Silver Leaf in Apple Production, Leslie Holland, UW Extension

#### 3:00 pm - 3:30 pm

#### Vegetable Education Session

· Connecting with Customers on Social Media, Grant Henry & Emma Tuftin, Brio Marketing

#### Fruit Roundtable Talk

• A Decade of Research Towards a Sustainable Integrated Pest Management of Spotted-Wing Drosophila, Mary Rogers, Matthew Gullickson, University of Minnesota

#### **Apple Solutions Stage**

 An Introduction to Stress Management and Resilience Training, Phillip Brooks, Fresh Potential

#### 11:30 am - 12:00 pm

#### **Vegetable Solutions Stage**

 Drone Technology in Spray Application, Ken Rost, Frost Inc.

#### Fruit Education Session

 Current and future research on strawberry integrated pest management, Matt Gullickson, University of Minnesota

#### **Apple Roundtable Talk**

• Climatology in Minnesota, Kenny Blumenfeld, Minnesota State Climatology Office

#### 3:30 pm - 4:00 pm

#### **Vegetable Education Session**

 Pumpkin Weed Control, Marissa Schuh, University of Minnesota

#### Fruit Roundtable Talk

• Exploring Proposed Changes to the FSMA Produce Safety Water Standards, Alexandra Cortez, MDA, Valerie Gamble, MDA, Annalisa Hultberg, University of Minnesota

#### Apple Solutions Stage

 Use of Hail Netting for Sustainable Apple Pest Management: First Year Results for Codling Moth & Apple Magot, Sally Nelson, Annie Klodd, & Bill Hutchison, University of Minnesota

#### 11:30 am - 12:00 pm

#### Vegetable Roundtable Talk

• CSA Home Delivery, Phil Hannay, **Trumpeter Swan Farm** 

#### **Fruit Education Session**

 Neopestalotiopsis and Fruit Rot in Strawberries, Leslie Holland, UW Extension

#### **Apple Solutions Stage**

• Succession and Having a Harmonious & Successful Family Business in the Fresh Produce Industry, Phillip Brooks, Fresh Potential

#### 3:30 pm - 4:00 pm

#### Vegetable Solutions Stage

• Summer Cover Crops For Multiple Benefits in Vegetable Rotations, Adria Fernandez, U of MN

#### Fruit Education Session

 Making the Most of Your Fertilizer Dollars, Carl Rosen, U of MN

#### **Apple Roundtable Talk**

 Fruit Load Management, Experiences in Thinning, Speaker TBA Page 2

# **FHURSDAY**

# **MFV Expo PRESENTATIONS**

### THURSDAY | VEGETABLE SESSIONS

#### **Roundtable Talks**

Carrots on Heavy Soil: Raised Beds, Population, and Varieties, Charlie Rohwer, University of Minnesota Tips for growing carrots in heavy soils, and effects of raised beds and elevated population on carrot growth and yield.

High Tunnels: Recent Concerns in High Tunnel Production, Terry Nennich, Ter-Lee Gardens, & Jerry Untiedt, Untiedt's Vegetable Farm Minnesota Fruit and Vegetable Growers Association Board Directors Terry Nennich and Jerry Untiedt will discuss the recent concerns in high tunnel production and take your questions.

#### **Education Sessions**

#### Sweet Corn: A look at Corn Ear Worm, Bill Hutchison, University of Minnesota

Bill will review his team's recent work on Corn Earworm (CEW), as the major insect pest of sweet corn in MN. Although CEW cannot overwinter in MN, the adult moths quite readily migrate north every summer/fall, from southern states, as far as Texas and Louisiana. Each year its not a matter of IF, but When they will come! As with many of our highly mobile, polyphagous pests (i.e., feeding on multiple hosts), CEW has the ability to quickly develop resistance to several insecticides (e.g., pyrethroids) and genetically engineered (GE) crops as well, including Bt sweet corn. When moths migrate north to the Midwest region each year, they also bring multiple resistance genes as well. With this talk, we will review our research on pyrethroid resistance, Bt resistance, and what "new tools" we have in the IPM Toolbox for CEW, including: the "MN Moth Flight network" (see: https://vegedge.umn.edu/weekly-moth-flights ), the need for CEW Traps on Your Farm to track flights, and alternatives to pyrethroid insecticides and Bt sweet corn, to be successful.

#### Pumpkin Weed Control, Marissa Schuh, University of Minnesota

The long season and spreading vines of pumpkins can make weed control a challenge. In this session, we will lay out all the weed control tools at a grower's disposal to figure out which might work for your problem weeds, pumpkin varieties, and farm setup. This will include a discussion of both organic and conventional options, as well as how to navigate the complexity of herbicide labels.

#### **Solutions Stage**

#### Drone Technology in Spray Application, Ken Rost, Frost Inc.

On the verge of future technology using a drone sprayer! How Frost Inc is improving the way we take care of our crops. Q&A session for you to get the most information for your future.

#### Backpack Sprayers: How to Set Up and Tips for Using Small Sprayers, Ken Rost, Frost Inc.

How to use a simple backpack sprayer and still get great results. Frost Inc. teaches how to maintain your sprayers for long equipment life and best application, common problems that applicators face, and how to resolve them for the best crop life.

### **Thursday Focused Topic for All: Climate Change**

#### MORNING KEYNOTE SPEAKER:

#### Climate Conditions Update for Minnesota: Observations, Trends, and Outlooks, Dr. Kenneth ("Kenny") Blumenfeld, Minnesota State Climatology Office

This presentation provides an overview of recent and current climate conditions in Minnesota, including the drought of 2021, with a look at seasonal outlooks, longer-term trends, and where the climate may be heading in the decades ahead.

#### LUNCH SPEAKER:

The projected impacts of climate change on life and agriculture in Minnesota, Suzi Clark, PhD, University of Minnesota Climate change, while a global phenomenon, will also affect our lives right here at home. This talk will discuss our most up-to-date projections of climate change impacts on the Midwest and Minnesota and how we can best prepare for the future.

# MFV ExpoPRESENTATIONS

### THURSDAY | FRUIT SESSIONS

#### **Roundtable Talks**

**Berries: A Year in Review, Kevin Edberg** Description not available.

### Exploring proposed changes to the FSMA produce safety water standards, Alexandra Cortez, MDA, Valerie Gamble, MDA, Annalisa Hultberg, University of Minnesota

In December 2021, the Food and Drug Administration (FDA) released a draft update to the agricultural water requirements in the Food Safety Modernization Act (FSMA) Produce Safety Rule. These changes are not finalized; the FDA is accepting feedback on the draft through 4/05/22. Join this roundtable discussion to learn some basics of what the proposed rule says, and discuss the factors to consider as you think through what implementation might look like on your farm. Our goal for this conversation is to get you feeling ready to submit your feedback to the FDA to ensure that your farm can implement the FSMA Produce Safety Rule and protect food safety on your farm.

#### **Education Sessions**

#### Current and future research on strawberry integrated pest management, Matt Gullickson, University of Minnesota

Strawberries are one of the most recognizable and popular fruit crops in Minnesota. The increasing demand for locally-produced strawberries has led to a wider adoption of day-neutral strawberry varieties which produce fruit from late June through October and have substantially greater yields than June-bearing varieties. However, the extended harvest season also lengthens pest management programs. We have been researching and will discuss integrated pest management strategies for extended strawberry seasons with an emphasis on spotted-wing drosophila and tarnished plant bug.

#### For Fruits AND Vegetables: IPM Solutions for Healthy Plants, Produce, and People, Rachel Sporer, BioBest

Do you want to start using beneficial insects, biochemicals, insect traps, and bumblebees but don't know the first steps to take? Join Rachel Sporer, grower-turned-IPM-specialist, to get support with implementing a new pest control or pollination program. This session is for growers who are completely new to bio control, growers who currently use bio controls but want to expand the program, people who are interested in using bumblebees for pollination, and anyone who wants to learn more about the method of using nature to control pests & diseases.

#### **Solutions Stage**

#### Japanese Beetle Impact on Minnesota Wine Grapes, Dominique Ebbenga, University of Minnesota

Japanese beetle (JB), (Popillia japonica), is a highly polyphagous, invasive species, first recorded in Minnesota in the late 1960's. Historically, research on this pest in the Midwest U.S. focused primarily on turf, with little effort focused on adult feeding and subsequent damage to fruit crops. Wine grape producers have become concerned with the substantial increase in defoliation due to the beetles feeding. To address these concerns, studies were conducted during the 2020 and 2021 summers to determine if JB feeding has any impact on a wine grape seasonal growth and yield. Trial set up utilized vines of the wine grape variety, Frontenac at a commercial vineyard. Whole vines were caged within 80-gram mesh netting and infested with JB pressures of 0, 25, 50, and 100 beetles per meter, each with 4 replications; an open plot, allowing for natural infestations, was also included (also 4 reps.). During harvest, data collection included leaf samples for obtaining average percent defoliation, cluster weights, and Brix, Ph, and titratable acidity (TA) were measured from collected grape berry samples. Results from these studies demonstrate that there was no significant difference in yield; and impact seems to be limited to fruit quality.

#### June-bearing Strawberry Variety Trials in Minnesota, Jim Luby, University of Minnesota

A review of results from yield trials of June-bearing strawberry varieties at two Minnesota locations. Adaptation, yield and fruit quality characteristics of new varieties will be reviewed.

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### THURSDAY | APPLE SESSIONS

#### **Roundtable Talks**

#### Climatology in Minnesota, Kenny Blumenfeld, Minnesota State Climatology Office

Kenny Blumenfeld will continue a deeper dive from his keynote address into more climatological information.

#### UMN Extension: How to Utilize Resources and an Update on Current Projects, Marissa Schuh, University of MN

The University of Minnesota is a huge institution, and figuring out who to talk to and what's going on can be a challenge. In this session, we will run down who at the U does what, explore current research, and highlight how to connect with extension for updates and assistance.

#### **Education Sessions**

#### New Tree Fruit Varieties from the University of Minnesota, Jim Luby, University of Minnesota

In 2022, two new tree fruit varieties are available from the University of Minnesota breeding program.

- Triumph® (MN80 cultivar) apple has apple scab resistance from two genetic sources. It has demonstrated excellent scab tolerance. It ripens fruit in late September with good fresh eating qualities and long storage life. This variety may be especially well suited to direct market and organic producers.
- Juicy Jewel® (MN121 cultivar) pear is hardy to zone 4 and has been highly disease resistant. It produces an Asian pear-type fruit that is sweet, crisp, and juicy right off tree when harvested in mid to late August and can be stored for 10-12 weeks. It ripens in mid to late August.

#### University of Minnesota Cider Trials, Jack Tillman, University of Minnesota

This presentation will provide an overview of fermented apple cider research conducted by the University of Minnesota apple breeding program. Topics covered will include recent Minnesota Department of Agriculture Specialty Crop Block Grant funded work on the suitability of regional Minnesota apples for use in fermented cider production, results from trials of Minnesota grown English and French cider apple varieties, and other cider related efforts from the apple breeding program.

#### Solutions Stage

#### University of Minnesota Apple Genetics, Sarah Kostick, University of Minnesota

This presentation will provide a overview of ongoing apple genetics research efforts at the University of Minnesota (UMN). Topics will include understanding the genetics underlying important fruit quality traits (i.e., russet formation, titratable acidity, soluble solids content) in germplasm relevant to the UMN apple breeding program, 2) a description of genomic prediction and its potential utility for targeting apple fruit quality traits, and 3) potential applications of research findings in the UMN apple breeding program.

#### Use of Hail Netting for Sustainable Apple Pest Management: First Year Results for Codling Moth & Apple Maggot, Sally Nelson, Annie Klodd and Bill Hutchison, University of Minnesota

Apple growers in Minnesota contend with several insect pests, primarily Codling moth (Cydia pomonella) and apple maggot (Rhagoletis pomonella), that can lead to major crop losses if poorly managed. Growers continue to seek integrated pest management (IPM) tactics that are more sustainable and economical than traditional pesticide use, while also avoiding increased risk to yields. Physical exclusion of insect pests is a possible tactic that is gaining interest; however, it must be proven effective and economical. Our study includes monitoring for codling moth and apple maggot; and assessing fruit damage at mid-season and harvest. We conducted these studies in both IPM and transitional organic production systems at two commercial orchards, June-August. Our results show that both codling moth and apple maggot trap counts were significantly reduced in the netted treatments (p<.01). A mid-season fruit assessment showed a significant reduction in both exterior and interior fruit damage in the netted treatments (p<.01). However, fruit quality at harvest showed no significant differences between treatments for exterior or interior damage. These findings suggest that: hail netting may prove effective at physical exclusion of key apple pests, which may reduce the need for insecticide use; and, the netting may protect fruit from damage, improving the marketability of the fruit in Minnesota orchards.

# **MFV Expo PRESENTATIONS**

### FRIDAY | VEGETABLE SESSIONS

#### **Roundtable Talks**

#### CSA Home Delivery, Phil Hannay, Trumpeter Swan Farm

An overview of how Trumpeter Swan Farm has gone to a home delivery CSA using re-usable insulated boxes in both summer and winter.

#### Agritourism: Marketing Strategies, Berry Ridge Farm, Country Blossom Farm, & Ida Valley Farm

Whether it's selling at the farmers' market, on your farm or via the internet, finding and keeping customers can be a challenge. Join experienced growers from Berry Ridge Farm, Country Blossom Farm and Ida Valley Farm as they review their marketing strategies, what works for them and what doesn't.

#### **Education Sessions**

Improving High Tunnel Soils Through Cover Crops, Julie Grossman Description not available.

#### Connecting with Customers on Social Media, Grant Henry & Emma Tuftin, Brio Marketing

Social media is not just for the big brands. Any business that wants to connect directly with its customers can be successful with Facebook, Instagram, YouTube, or even TikTok. In this session, we'll break it all down and give you tips to help you increase sales while being active in your online community. Whether you're just getting started or trying to decide what platforms to use or how often to post, we'll make you more confident in your ability to make social media work for you.

#### Solutions Stage

Best Strategies for Employment + an H2A Overview, Jessica Roe, Roe Law Group Description not available.

#### Summer Cover Crops For Multiple Benefits in Vegetable Rotations, Adria Fernandez, University of Minnesota

Vegetable crop rotations offer various timing options for growing cover crops--not just overwinter, but during the main growing season as well. Learn how to fit summer cover crops into a production rotation, and how to select and manage cover crop species to provide multiple benefits, including nitrogen management, soil building, and forage for beneficial insects such as pollinators and pest predators.

### Friday Focused Topics for All: Minnesota Agriculture & Labor

#### MORNING KEYNOTE SPEAKER:

Andrea Vaubel, Deputy Commissioner of Agriculture, Minnesota Department of Agriculture Deputy Commissioner Andrea Vaubel will provide an update on Minnesota agriculture.

#### LUNCH SPEAKER:

# Dramatic Labor Law Changes are Affecting Employers All Across the Country and Certainly in Minnesota, Jessica Roe, Roe Law Group

The speakers will update you on what producers need to know and manage for with regard to overtime, employee policies and handbooks, Department of Labor "visits" and investigations, and other labor and employment pitfalls.

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### FRIDAY | FRUIT SESSIONS

#### **Roundtable Talks**

#### Japanese Beetle on Fall Raspberries: New IPM Research on Yield Impacts & Adult Monitoring, Adam Toniato & Bill Hutchison, University of Minnesota

This work focuses on the impact Japanese Beetles (JB) are having on raspberries in Minnesota. JB populations in recent years have grown to concerning sizes. The rapid aggregation behavior of JB can be startling as they can quickly overtake a field and begin defoliating all crops in site. We looked to determine if JB feeding and aggregation has a negative impact on the crop's health and ability to yield fruit, or if it just a cosmetic nuisance. After determining the field population required to decrease yield, we then created and validated a quick and efficient sequential sampling plan. This sampling method and plan will accurately (d = 0.25) assess the JB population density in a raspberry field. This research also explores the most effective control options. Ranging from high tunnel exclusion to insecticide efficacy and application rates we looked at the yield and defoliation associated with each control option. The goal of this research is to give growers and crop scouts tools to use in their effort to protect and produce fruit in spite of pressures from Japanese Beetles.

#### Making the Most of Your Fertilizer Dollars, Carl Rosen, University of Minnesota

Fertilizer prices have more than doubled over the past year. This presentation will briefly cover practices growers can use to ensure that they are using fertilizer as efficiently as possible to maximize return on investment and minimize any environmental impacts. Topics covered will include interpreting soil test information, making decisions on the best rate and time to apply as well as how fertilizer should be placed. A comparison of fertilizer sources will also be covered.

#### **Education Sessions**

#### Neopestalotiopsis and Fruit Rot in Strawberries, Leslie Holland, UW Extension

Neopestalotiopsis leaf spot and fruit rot is an emerging fungal disease of strawberry in North America. The fungus can infect all parts of the plant and severely impact yield. This talk will cover current research on the biology and management of this disease.

## A Decade of Research Towards a Sustainable Integrated Pest Management of Spotted-Wing Drosophila, Mary Rogers, Matthew Gullickson, University of Minnesota

Spotted-wing drosophila (SWD), an invasive pest of small fruit crops, has been present in Minnesota for ten years. This presentation will summarize research efforts on sustainable management of SWD over the last decade. We will summarize research results from our own research in Minnesota as well as provide an overview on regionally appropriate management practices from other states in the upper Midwest. Recommendations will be relevant to both conventional and organic fruit production systems.

#### Solutions Stage

#### Invasive Pests & Diseases: Coming Soon to a Field Near You!, Michelle Grabowski and Angie Ambourn, MDA

Invasive diseases and insect pests travel by many different pathways to arrive at Minnesota farms. Some move on seed or planting material, others hide out in packages or vehicles, a few can fly on their own, and others hide in soil stuck to tools and equipment. We will take a close look at invasive pests that threaten Minnesota fruit and vegetable production including brown marmorated stink bug, swede midge, and tomato brown rugose fruit virus. Learn how invasive pests are most likely to move into a new area, practical steps to prevent the introduction of invasive pests to your farm, and current monitoring efforts at the Minnesota Department of Agriculture.

#### Meet Minnesota Grown: Marketing Resources & Benefits, Mallory Forseth, Minnesota Grown

Minnesota Grown has promoted products grown & raised in MN for 35 years, and it's even more relevant today than it was when it was created. Join us to meet the new Minnesota Grown Program Manager and for an overview of the marketing resources and opportunities Minnesota Grown offers local growers. From tips for creating a great listing in the online directory to our free marketing materials, cost share opportunities for labeling, and a review of statewide advertising campaigns promoting your products – we'll cover it all in this solutions session.

# $\underbrace{\widetilde{\mathsf{W}}}_{\mathsf{M}} \xrightarrow{\mathsf{MFV}} \mathsf{MFV} \operatorname{Expo} \mathsf{PRESENTATIONS}$

### FRIDAY | APPLE SESSIONS

#### **Roundtable Talks**

#### Farm Marketing & Agri Tourism, Aaron Brand, Troy Heald, Charlie Johnson, MAGA Board Directors

Three Minnesota Apple Growers Association Board Directors will discuss topics in farm marketing and agri tourism and take your questions.

**Fruit Load Management, Experiences in Thinning, Speaker TBA** Description not available.

#### **Education Sessions**

#### Silver Leaf in Apple Production, Leslie Holland, UW Extension

Silver leaf is a fungal disease that affects apple and other fruit trees. The fungus can infect old and young trees, resulting in a silver appearance of the leaves and decay in the wood. This talk will cover the biology of the pathogen and current recommendations for managing silver leaf.

Introduction to Apple Irrigation, Scott Wicklund, MIDC

Description not available.

#### Solutions Stage

Succession and Having a Harmonious & Successful Family Business in the Fresh Produce Industry, Phillip Brooks, Fresh Potential Strategically planning the future of your family business can be challenging. Navigating a major business transition can often seem impossible.Family relationships are challenged, people can feel negatively impacted, future generations may be disinterested in taking over the business, and generation gaps may negatively impact the business today, tomorrow, and beyond.

Discover how to ensure the future success of your family business and how to harmoniously develop a succession plan that secures your legacy. During this informative session, learn how to effectively navigate important conversations within your family business. Discover how to create harmony within the family, ensure everyone is heard, and more easily maneuver difficult business transitions.

#### The Hidden Gems to Lowering Stress and Anxiety Within a Family Business, Phillip Brooks, Fresh Potential

Daily, business owners are being forced to juggle new challenges in technology, the industry, infrastructure, and even their team. The pressure alone can drive even the strongest leaders toward the brink of destruction. They barely have time to breathe, let alone stop and focus on their next move. Leaders and their families shouldn't have to sacrifice their mental, emotional, and physical well-being to be successful. What makes some successful leaders more effective with lower stress and anxiety levels? Resilience.

Join Phil to discover the scientific power of having a resilient mindset and learn simple practices to lower the stress and anxiety within you, your family, and your employees.

# **MFV ExpoSPEAKER BIOS**

#### Angie Ambourn

Alphabetical by last name

Angie is an entomologist for the Minnesota Department of Agriculture in the Pest Detection and Export Certification Unit. She leads a great team of invasive species specialists whose main job is the early detection and tracking of invasive insects and diseases in the state of Minnesota. Early detection gives stakeholders a chance for rapid response and is our best hope for reducing damage caused by invasive species.

#### Dr. Kenneth Blumenfeld

Dr. Kenneth ("Kenny") Blumenfeld is a climate scientist who grew up in Minneapolis with a love for storms, blizzards, and being outside. He works for the Minnesota State Climatology Office (Department of Natural Resources), where he provides the state's agencies, communities, and citizens with up-to-date scientific information about Minnesota's changing and variable climate. Kenny enjoys talking to Minnesotans about their weather, and often does it long after the work day is done.

#### **Phillip Brooks**

For over 40 years Phillip Brooks - President, Fresh Potential LLC - has led, empowered, and grown executive leadership teams in the fresh fruit and vegetable industry. Phil rose through the ranks from floor sweeper to CEO and everything in between, eventually being recognized as one of the top 25 leaders in the produce industry. As a business leader, he understands how difficult it can be for family organizations to adapt to change quickly and efficiently. He understands how family business owners feel daily - as though you've been thrown into a 90 mph race in a 30 mph zone, and not one minute to slow down and refuel. Being forced to manage industry changes, adapt to new technology, and maintain the delicate balance between work and family relationships takes its toll on even the most adept leaders. As a certified leadership coach, resilience trainer, family business and Produce industry expert Phil helps family businesses thrive not just survive. He combines his experience with his expertise to ensure leaders have the tools needed to do their jobs well and have a fulfilling life outside of work.

612-860-3455 | phillip.brooks@freshpotential.com | www.freshpotential.com

#### Suzi Clark

Suzi Clark was born and raised in Southern California, and since moving away in 2014, has moved to increasingly colder places - first Hamburg, Germany, then Boston, and now the Twin Cities. She loves learning about new cultures and their languages, and a life goal is to become a polyglot. When she's not working she loves being outdoors (hiking and running in the summer, skiing in the winter), crocheting yet another blanket, or painting more paint-by-numbers than I know what to do with. In her PhD she studied harmful algal blooms (HABs) in the Gulf of Maine through a combination of observations and computer modeling. Her research focused on potential introduction mechanisms of new HAB species and also the consequences of climate change on HAB dynamics. In her postdoc she is sticking with the climate theme, but moving further away from the ocean. She is working with Professor Heidi Roop to develop the Minnesota Climate Adaptation Partnership, a boundary organization that will connect climate research at the University of Minnesota to non-academic audiences across the state of Minnesota.

#### **Alex Cortez**

Alex Cortes is an Outreach Analyst for the Produce Safety Program at the Minnesota Department of Agriculture (MDA). She works with produce growers to share information, training opportunities, and resources related to the federal Produce Safety Rule. Prior to joining MDA in 2018, Alex ran several farmers markets in Minneapolis.

#### Dominique Ebbenga

Currently, Dominique Ebbenga is a PhD candidate in the Dept. of Entomology, at the University of Minnesota, researching Japanese beetle behavior, and management strategies in wine grapes. Prior to beginning her PhD, Dominique Ebbenga received her MSc at the University of Minnesota Department of Entomology testing the efficacy of exclusion netting applications in vineyards to prevent Spotted wing drosophila from infesting wine grapes. She has been working with this invasive species since the summer of 2016 but started her research with exclusion netting in the spring of 2017. Dominique received her BSc in agricultural education with an emphasis on communication and leadership in spring of 2016. Before graduating with her bachelors, she worked as a crop scout for a canning company who grew various snap bean varieties. After graduation she worked as a lab technician at the University of Minnesota's Department of Entomology assisting Dr. Bill Hutchison and Eric Burkness in monitoring Spotted wing drosophila populations and assisting with various research projects related to various small fruit crops.

#### Kevin Edberg

Kevin Edberg is the owner of The Berry Patch near Forest Lake MN. He has been a producer of small fruits for 45 years; a long-time member of the MN Berry Growers Assn. and MFVGA; and one of four co-founders of the Minnesota Grown program. He holds a BS in Horticulture from the U of M and has been an active grower participant in research work on IPM in strawberries and monitoring/control of spotted wing drosophila and Japanese beetle. He has hosted the Year In Review session at MFVGA conferences for over 25 years.

#### Adria Fernandez

Adria Fernandez is a researcher in the Department of Horticultural Sciences at the UMN. Her work focuses on the influences of cover crops and rotational diversity on soil nutrient cycling.

# **MFV ExpoSPEAKER BIOS**

#### Mallory Forseth

Alphabetical by last name

Mallory Forseth joined the Minnesota Department of Agriculture in November as the Minnesota Grown Program Manager. She brings nine years of experience in marketing, program management, and food systems to the Minnesota Grown team, including 3 years in management of the Midtown Farmers Market in South Minneapolis. Mallory comes from a family of small dairy farmers and is thrilled at the opportunity to promote and support the incredible farmers, growers, and food producers that make up Minnesota Grown's membership. She holds and M.A. in International Development with concentrations in Sustainable Agriculture & Food Security and Program Evaluation from the Josef Korbel School of International Studies at the University of Denver.

#### Valerie Gamble

Valerie Gamble has worked for the Minnesota Department of Agriculture for twelve years, most recently as a manager developing a new statewide program designed to regulate on farm produce safety practices and implement the Produce Safety Rule. Valerie previously worked as an inspector, supervisor, and outreach coordinator for the Food and Feed Safety Division at the MDA, and prior to that worked in California farming and conducting agricultural extensions research in almond and walnut orchards. She has a master's degree in geology with a focus on climate change research.

#### Michelle Grabowski

Dr. Michelle Grabowski is a plant pathologist with the Minnesota Department of Agriculture Plant Protection Division. Her work focuses on prevention and early detection of invasive plant pathogens that threaten crops and native plant communities in Minnesota. Michelle studied plant pathology at the University of Minnesota, North Carolina State University, and Michigan State University. She previously worked for the University of Minnesota Extension and the USDA Cereal Disease Laboratory.

#### Julie Grossman

Julie Grossman is a soil scientist and a faculty member in the Department of Horticultural Science at the University of Minnesota. Her lab's research explores plant-soil-microbe relationships to enhance soil fertility in organic and agroecological farming systems, with particular focus on the use of legume cover crops to provide nitrogen and improve soil health. For the past five years, she led a USDA-OREI project to begin to understand cover crop's role in improving soil health in organically-managed high tunnels.

#### Matthew Gullickson

Matthew is a Ph.D. candidate advised by Dr. Mary Rogers and is studying the chemical ecology of spotted-wing drosophila (Drosophila suzukii) and whether aversive odorants could be used to protect fruit crops in an integrated pest management setting. Matthew attended Gustavus Adolphus College in St. Peter, MN where he graduated with a B.A. degree in biology in 2016. Afterwards, he worked as a research technician for The Nature Conservancy, Ruth Shaw's research group, and the Cariveau Native Bee Lab at the University of Minnesota. In 2020, he completed an MS in Applied Plant Sciences at the University of Minnesota where he studied organic chemical and cultural controls for the invasive insect pest spotted-wing drosophila.

#### Phil Hannay

Phil and Kathy, along with our son Ian, and a crew of employees, farm 40 acres in Buffalo, MN. We raise fruits and vegetables including asparagus, strawberries, summer squash, cucumbers, peas and beans, tomatoes and peppers, sweet corn, and winter squash. We also have brown eggs produced by our never caged, free range chickens. Free-range bees (are there any other kind?) also pollinate our crops and occasionally provide us honey.

#### Leslie Holland

Leslie Holland is an Assistant Professor & Extension Specialist at UW-Madison in the department of Plant Pathology. The focus of her research program is the diagnosis and management of fruit crop diseases for the cranberry, apple, grape, and specialty fruit crop industries in Wisconsin. She specializes in fungal disease biology andmanagement and uses epidemiological field studies and molecular tools to study fruit crop pathogens. Her extension program translates research findings into practical solutions to improve the productivity and sustainability of fruit crop production in Wisconsin.

#### Annalisa Hultberg

Annalisa Hultberg is a statewide Educator in Food Safety at the University of Minnesota Extension where she has coordinated the On-Farm GAPs Education Program since 2011. She leads Extension's educational efforts around the FSMA Produce Safety Rule and Good Agricultural Practices, working with small to large-scale fruit and vegetable farmers, farm to school programs, food hubs and others to help producers understand and implement food safety on the farm and improve the quality and safety of fresh produce

#### **Bill Hutchinson**

Bill has been a Professor & Extension Entomologist, Dept. of Entomology, University of Minnesota, in St. Paul, for the past 32 years. He served as Dept. Head from 2010-2015. An Arizona native, he received his BS degree (Agronomy) from the University of Arizona, and his PhD in Entomology from the University of Wisconsin-Madison. With his Extension appointment, he actively works with growers to implement sustainable Integrated Pest Management (IPM) solutions, to reduce pesticide use yet continue to provide high yields, and marketable produce. His current focus includes a rapid response to invasive pest species (such as Spotted Wing Drosophila, Japanese beetle), and the use of exclusion-netting. He's currently working with sweet corn and several high-value fruit crops (apples, wine grapes, raspberry). During his career he has enjoyed mentoring 20+ graduate students and numerous undergraduates.

# **MFV Expo SPEAKER BIOS**

#### Sarah Kostick

Alphabetical by last name

Sarah Kostick is originally from Minnesota and has been involved in tree fruit research for the last eight years. In 2016, Sarah completed a Master of Science in applied plant sciences at the University of Minnesota. In 2020, Sarah completed her Ph.D. at Washington State University where she focused on understanding the genetics underlying resistance to fire blight in apple. Sarah is currently a postdoctoral associate with the University of Minnesota apple breeding program.

#### Jim Luby

Jim Luby is a Professor in the Department of Horticultural Science at the University of Minnesota where he has directed research in fruit crops breeding and genetics since 1982. The emphasis of this program is to develop new varieties that combine a satisfying eating experience for the consumer with cold hardiness and disease resistance. Under his direction, the University of Minnesota fruit crops breeding program has introduced and commercialized 27 cultivars of apples, wine grapes, blueberries, strawberries, and other fruits.

#### Sally Nelson

Sally Nelson is currently a master's student in the Dept. of Entomology at the University of Minnesota, researching the use of hail-netting for exclusion of apple pests at Pine Tree Apple Orchard. Sally's research began in June of 2021, and includes beneficial and pest insect surveys and fruit quality assessments to determine over-all impact the netting may have on the crop. Sally earned her BA in Biology in 2020 graduating Magna Cum Laude from Concordia College in Moorhead, MN. After graduating, Sally worked at North Dakota State University as a lab technician in a soil sciences lab researching nitrogen volatilization and sequestration. During her time at NDSU, she also worked in a plant sciences lab researching barley breeding and malt quality in spring of 2021.

#### **Terry Nennich**

Terry and his wife Loralee own and operate Ter-Lee Gardens, a fruit and vegetable operation, located near Bagley, Minnesota, which sells its produce pickyour-own, at farmers markets, CSA, and wholesale. Terry is a recently retired University of Minnesota Extension Professor Emeritus, who throughout his career specialized in vegetable and small fruit production, along with marketing. Terry also serves as the Board President for the Minnesota Fruit and Vegetable Growers Association.

#### **Thom Peterson**

Thom Petersen was appointed Commissioner of the Minnesota Department of Agriculture by Governor Tim Walz in 2019. Commissioner Petersen is a long-time resident of Royalton Township near Pine City where he lives on a horse farm. Before being appointed Commissioner, Petersen served as the Director of Government Relations for Minnesota Farmers Union (MFU) since 2002, working on behalf of MFU's farmer-members in both Washington, D.C. and St. Paul. Prior to his work at the Minnesota Farmers Union, Commissioner Petersen spent most of his life working for his family and his own horse and farm business. He has a wide range of experience in state and federal farm policy, and travels to almost every county in Minnesota each year to fully understand how these policies affect farmers' daily lives. He has served on many boards and committees, including the University of Minnesota Extension Citizens Advisory Committee, Farmers Legal Action Group, Citizens Utility Board, Minnesota Ag in the Classroom, Minnesota State Organic Task Force, Minnesota Rural Broadband Coalition, and the Minnesota Fair Plan.

#### Jessica Roe

Jessica's practice focuses on employment advice, employment and commercial litigation and labor law. In the employment arena, she provides strategic advice regarding the establishment of employment policies and procedures and counsels clients on the creation, maintenance and termination of employment relationships, investigations and managing all aspects of the employment relationship. When the employment relationship must end, she assists clients in understanding their obligations with respect to issues such as severance, state and federal employment statutes, and non-competition agreements. If matters cannot be resolved, she is highly experienced in representing clients in federal or state courts across the country on employment and complex civil and commercial disputes. In the labor arena, Jessica has represented companies with the NLRB, labor disputes, arbitrations and contract negotiations. Jessica is a Minnesota State Bar Association Board Certified Labor and Employment Law Specialist. She also is a certified mediator and arbitrator for resolutions outside the court system. Jessica speaks extensively on employment law and litigation topics and leads multiple seminars each year.

#### **Mary Rogers**

Mary Rogers is an Associate Professor in the Dept. of Horticultural Science at the University of Minnesota. Mary's research focuses on integrated pest management of fruit and vegetables for local and organic markets. Mary has been partnering on collaborative research on SWD management since 2014.

#### **Charlie Rohwer**

Charlie is a horticulture scientist at the University of Minnesota SROC in Waseca. He studies processed and fresh-market vegetables, including peas, sweet corn, tomatoes, brassicas, carrots, and others.

**MFV Expo SPEAKER BIOS** 

#### Carl Rosen

Alphabetical by last name

Carl Rosen is a Professor and Extension Soil Scientist in the Department of Soil, Water, & Climate at the University of Minnesota and currently serves as Department Head. He received his MS degree in horticulture from Penn State University and a Ph.D. degree in Soil Science from UC Davis. His research and extension programs in Minnesota have focused on optimizing nutrient management for a variety of crops with particular emphasis on specialty crops and irrigated cropping systems. Efforts in recent years have also focused on water quality issues related to fertilizer use and use of municipal and industrial byproducts as amendments for agricultural soils. He co-teaches a soil fertility class for advanced undergraduates in agricultural and environmental sciences. He has authored or coauthored numerous publications and extension bulletins on several subjects including nutrient management for specialty crops, soil fertility, soil health, plant nutrition, and beneficial use of by-products for crop production.

#### Ken Rost

Ken Rost is the founder of Frost Inc which specializes in spray technology products for agriculture and turf care. He has over 25 years of experience in the spray technology field and has been fitting spray equipment for the last 10 years. Prior to Frost Inc, Ken was the OEM and International Sales manager for Pentair/Hypro specializing in agriculture and turf care markets. Ken earned his undergraduate and Master's degrees in Agricultural Science at University of Minnesota. He currently resides on his farm in Shafer MN. Ken's experience working hands-on with precision farming technologies and the people who use it, brings a realistic approach to the execution of spray applications.

#### Marissa Schuh

Marissa Schuh is a horticulture IPM Extension Educator with University of Minnesota Extension. In this role, she works with produce growers and master gardeners to troubleshoot issues, as well as develop relevant, timely educational content and programming. She has experience working with specialty crop growers on insect, disease, nutritional, weed, food safety, and regulatory issues. She has a master's degree in entomology from Michigan State University.

#### **Rachel Sporer**

Rachel is a grower-turned-Biocontrol-sales specialist from Minneapolis, Minnesota. Growing vegetables, fruits, and cut flowers opened her eyes to Integrated Pest Management before she started working for BioBest Sustainable Crop Management.

#### Jack Tillman

Jack Tillman is a researcher in the apple breeding program in Department of Horticultural Science at the University of Minnesota. He joined the breeding program full time in 2014 following a year longyearlong position in the Horticulture Department researching cold hardy Prunus. Since that time he has been a part of the apple breeding program's genetic research, molecular chemistry, and classical breeding operations. Beginning in 2016 he began looking into the cider potential of apples within the breeding program; research that continues today.

#### Adam Toninato

Adam Toninato is a MS student in the Department of Entomology at University of Minnesota. Before beginning his research with University of Minnesota, Adam worked as a haz-mat clean up specialist for 2 years. It was during this time that Adam decided to follow the path back to research and academia beginning his master's research in 2019. Adam graduated from the University of Minnesota, Duluth with a BSc in Environmental Science. While working towards his BSc Adam worked as an undergraduate lab technician in Dr. Bill Hutchison's lab. His time as a technician is what opened his eyes to the interactions between insects and agriculture and that is where is research focus lies to this day. Adam is currently studying the interaction between Japanese Beetle's and raspberries.

#### Jerry Untiedt

Jerry has been associated with Untiedt's Vegetable Farm, Inc fo over 50 years. Untiedt's engages in the production of small fruits and vegetables as well as commercial production of corn, soybeans, and wheat. Of special interest to Untiedt's is High Tunnel Production of strawberries, tomatoes, and other specialty hand-harvested vegetables. The high tunnel operation has grown to cover a substantial acreage using both in-ground and substrate production. Special production methods have been introduced to amend the soils with farm-produced compost, the use of beneficial insects, beneficial fungi, and other healthy amendments. The Untiedt program has grown to be a model for other Minnesota tunnel producers.

Jerry serves on the Board of the Minnesota Grown Program and works closely with several University of Minnesota departments in the area of disease management. In addition, Jerry is the Treasurer for the Minnesota Fruit and Vegetable Growers Association.







COMPANY	BOOTH #
Ag Resource	33 & 34
Agro-K Corporation	10
All Energy Solar	25
Begin Family Insurance	26
Agency - American	
Family Insurance	
BioSafe Systems	8
Dept of Horticultural Science,	22
Univ. Minnesota -Twin Cities	
Frost Inc	19
Glacial Valley	28
Gowen Seed Co.	2
iSolar	13
Liberty Packaging	Э
<b>MIDC Entrprises</b>	29
Minnesota Farmers Union	5
Minnesota Grown	6 & 7
MN Agricultural Water	15
Quality Certification	
Program	
MN Department of	16
Natural Resources	
Nutrien Ag Solutions	23 & 24
Nutrien Ag Solutions -	11
Big Lake	
Prographics Ent. Inc.	1
Rispen Seeds	27
Rockford Packaging Supply	17
Rupp Seeds	6
Stilwater Greenhouse	4
University of Minnesota	18
Westrock	20

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ept of Horticultur Science U of MN <b>22</b>	Nutrien Ag Solutions Galesville <b>23</b>	Nutrien Ag Solutions Galesville <b>24</b>	All Energy Solar 25

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iSolar 13	iSolar 12	Nutrien Ag Solutions Big Lake	Agro-k Corporation 10
MN	MN	BioSafe	Rupp
Grown	Grown	Systems	Seeds
<b>6</b>	7	<b>8</b>	9

Minnesota	Stillwater	Liberty	Gowan	Prographics
Farmers	Greenhouse	Packaging	Seed Co.	Ent. Inc.
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### How did we do? Online Post-Conference Survey

Thank you for attending the 2022 Minnesota Fruit & Vegetable Expo! We will follow-up after the conference by email to request your feedback on our post-conference survey. Your feedback is confidential and will help us better plan for the 2023 MFV Expo.

- Minnesota Fruit and Vegetable Growers Association

- Minnesota Apple Growers Association