

VINE CONNECT FIELD DAY

Guide & Lookbook



Sept 17,
2025

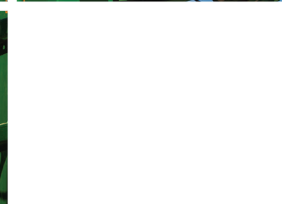
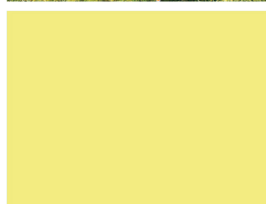
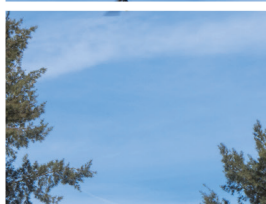
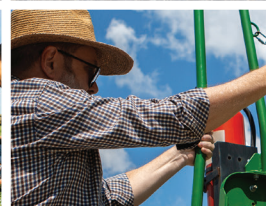
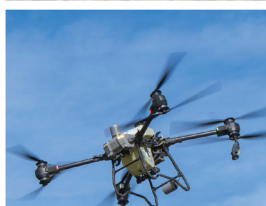
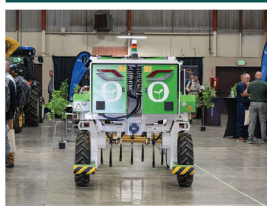
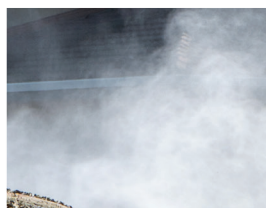


UC Merced
Experimental Smart Farm

Sponsored by



F3 FARMS
FOOD
FUTURE
LOCAL



About the Organizers

UC ANR Innovate, the innovation arm of UC Agriculture and Natural Resources, brings together people, resources, and ideas to accelerate agricultural, food, and biotech innovation in California. We develop practical technologies, generate research and policy insights, prepare a future-ready workforce, and build the ecosystems and partnerships that make innovation possible: locally, regionally, and globally. ucanr.edu

Farmhand Ventures is an agtech venture firm backing startups transforming the future of work in agriculture. We invest in pre-seed and seed stage startups, and we partner strategically to support the development of agtech ecosystems that provide sustainable solutions for American farmers and farmworkers. farmhandventures.com

University of California, Merced is the first American research university of the 21st Century. Now in our 20th academic year, we lead the nation in enhancing social mobility. We serve 9,000 undergraduate students through 60 academic programs, many of which have applications to agriculture. 900 graduate students conduct field research in 18 graduate programs that serve the Valley. And 20% of our 400 full-time faculty members work in agriculture-related fields. A top-100 research university and the fastest-growing public university in the nation, UC Merced is on the cutting edge of sustainability, technology and agriculture. UCMerced.edu

Valley Institute for Sustainability, Technology & Agriculture (VISTA) at UC Merced serves as a hub for active research, innovation, and engagement to build creative solutions for agriculture, natural resources, and long-term economic and environmental sustainability. VISTA creates opportunities across the university system, training students in hands-on experiences, and supporting faculty and entrepreneurs in bringing their ideas into practice. vista.ucmerced.edu

Farms, Food, Future innovation initiative (F3) is a regional initiative dedicated to advancing sustainable agriculture in California's Central Valley through technology, research, innovation and education. Research and development led by Fresno State, UCANR, and UC Merced, F3 connects experts, students, and farmers to develop adaptable solutions for food systems. F3 Local serves small farmers and food purveyors. And F3 AgTEC trains the next generation of the agricultural workforce through competency-based education. A dedicated non-profit organization supports commercialization. There's a place for everyone at the F3 table. f3initiative.org // f3.ucmerced.edu

The UC Merced Experimental Smart Farm (ESF) is an Agricultural Experiment Station and research facility advancing innovation, sustainability, and climate resilience in California's San Joaquin Valley. ESF uses and tests emerging technologies, such as precision irrigation, IoT, robotics, drones, and AI and relies on sustainable farming practices to address critical challenges in food, energy, and water systems. This living lab enables scientists, students, and industry partners to create solutions for drought resilience, soil health, automation, water management, and small-farm technology. The farm delivers data-driven, practical solutions that support both local communities and global food security. aes.ucmerced.edu/farm

Event agenda

8:30 am

Welcome remarks:

Joshua Viers, Associate Vice Chancellor for Interdisciplinary Research
and Strategic Initiatives, UC Merced;
Hannah Johnson, UCANR Innovate

8:50 am

Break into groups and board bus

9:00 am

Technology demonstrations

Group A

V-Grid*
Good Agriculture*
Almondry*
Spornado
Aigen
Senseen
Bonsai

Group B

Spornado
Aigen
Senseen
Bonsai
V-Grid*
Good Agriculture*
Almondry*

12:00 pm

Buffet Lunch + Discussion on Ag Waste Management Strategies

1:00 pm

Questions and networking with demonstrating companies

* Indoor Presentation



AIGEN

- **Core Business:** Solar-powered autonomous weeding robots that mechanically remove weeds without herbicides.
- **Demo:** Element robots weeding in cotton.
- **Crop System:** Broadacre and row crops where mechanical weeding is an alternative to herbicides.

Founded:
2020

Headquarters:
Redmond, Washington

Unit Cost:
\$50,000

Contact:
Sandra Phillips
sandra.phillips@aigen.io

aigen.io



- **Core Business:** Vision-based autonomy systems for orchard equipment, enabling robotic spraying, harvesting, and sweeping without GPS.
- **Demo:** Amiga, a modular electric robot that performs tasks like hauling, weeding, and data collection in pumpkins.
- **Crop System:** Orchards, vineyards, vegetables, and other specialty crops.

Founded:

2022

Headquarters:

San Jose, California

Unit Cost / Number Sold:

\$25,000 / 325

Contact:

Arav Gupta

Arav.gupta@bonsairobotics.ai

www.bonsairobotics.ai



- **Core Business:** Easy platform that helps farmers manage bookkeeping, grants, loans, and data gathering.
- **Presenting:** Indoor demo of funding, financial management, and Digital Farm Hand products.
- **Crop System:** Broadly applicable across crops; especially valuable for organic and diversified farms.

Founded:

2022

Headquarters:

Atlanta, Georgia

Unit Cost:

\$75.00

Contact:

Kirsten Simmons

kirsten@goodagriculture.com

goodagriculture.com



SENSEEN

- **Core Business:** Nutriscope, a handheld device that provides instant nutrient and stress diagnostics for plants using spectroscopy and AI.
- **Demo:** Leaf scanning in corn, showing real-time data.
- **Crop System:** Grapes, tomatoes, and a wide range of specialty crops where nutrient and stress monitoring is critical.

Founded:

2021

Headquarters:

San Francisco, California (US)

Valbonne, France (Global HQ)

Unit Cost / Number Sold:

\$3,000 / 150+

*Special promo for VINE Connect:

\$500 discount + 1yr subscription free

Contact:

Olivier Ceberio,

olivier.ceberio@senseen.io

senseen.io



SPORNADO

- **Core Business:** Early-warning systems for airborne crop diseases using passive spore samplers and DNA analysis to detect pathogens before symptoms appear.
- **Demo:** Spore trap system with explanation of early-warning value for managing fungal disease in tomatoes.
- **Crop System:** Leafy greens, grapes, strawberries, tomatoes, cucurbits, and other crops vulnerable to fungal pathogens.

Founded:

2017

Headquarters:

Toronto, Ontario

Unit Cost:

Contact for pricing

Contact:

Michael Saleh

msaleh@spornadosampler.com

www.spornadosampler.com



- **Core Business:** Biomass gasification systems that convert farm waste into renewable energy, biochar, and plant biostimulants.
- **Presenting:** Indoor demo of bioserver technology with samples of biochar and liquid biostimulant.
- **Crop System:** Orchard and vineyard operations, along with farms producing woody residues or biomass byproducts.

Founded:

2015

Headquarters:

Camarillo, California

Unit Cost:

Contact for pricing

Contact:

Jeff Norton

jeff.norton@vgridenergy.com

vgridenergy.com



- **Core Business:** Research project developing an on-farm almond drying system to reduce harvest dust and improve efficiency by shifting drying into controlled stockpiles with aeration
- **Presenting:** Videos and photos of the stockpile aeration system operating during harvest.
- **Crop System:** Almonds, with potential application to other crops that require post-harvest drying.

Founded:

N/A (Project started in 2022)

Headquarters:

Merced, CA

Unit Cost:

N/A — Contact for details

Contact:

Stefano Foresti

Stefano.Foresti@UCMerced.edu

[https://i2g.ucmerced.edu/
past-projects/](https://i2g.ucmerced.edu/past-projects/)

Map of Demo Zone





THE VINE



UC ANR Innovate
University of California
Agriculture & Natural Resources



**Farmhand
Ventures**

thevine.ucanrinnovate.io



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