

# **Calling All Organic Ag Researchers!**

The Organic Research Forum at the 2025 Marbleseed Organic Farming Conference, Feb. 20-22, includes a poster session presenting data and ongoing research projects in organic agriculture. Posters are expected to present a body of data rather than an outline of planned activities. Field research **must be** performed on certified organic land. Researchers, academic faculty and staff, graduate/undergraduate students and farmer researchers may submit poster proposals related to the following topics:

- 1. Organic fruit, vegetable and row crop production (including bio-fuels & fibers)
- 2. Organic dairy production
- 3. Economic and marketing research of organic products
- 4. Organic livestock production (other than dairy) and crop-livestock integration
- 5. Organic insect and disease management
- 6. Nutritional quality of organic foods
- 7. Consumer and market trends for organic products

All accepted poster presenters receive full conference admission. Poster presenters are responsible for all lodging and travel costs. This is a juried poster session with awards for 1<sup>st</sup> through 3<sup>rd</sup> place.

#### What to submit:

Name, Affiliation, Email, Phone number

#### <u>Title of Research Project</u>

<u>Organic Research Statement</u>: This statement is to verify that your research project was conducted on Organic certified land and/or using Organic management standards. *If all or any aspect of your research was not conducted on Organic certified land, or using Organic management standards please provide justification for why your research is relevant to present to organic farmers at the Marbleseed Organic Farming Conference.* 

<u>Two-sentence summary of research</u> (under 40 words, to be included in 2025 Conference program if you are selected)

Research abstract/summary (under 300 words) covering:

- Study's purpose
- Experimental methods used
- Results obtained
- Significance of findings
- Conclusions and implications

How to submit: Send poster abstract submission as a PDF attachment to: research@marbleseed.org

Please use the file naming format: Lastname\_Firstname\_Research Title.pdf

The deadline for submission is Wednesday, November 15 at 11:59pm. Any submissions after this time will be disqualified. We will notify you by December 20 if your poster is selected.

For more information go to <a href="https://marbleseed.org/organic-research-forum">https://marbleseed.org/organic-research-forum</a>

<sup>\*</sup>Focus on the implications of the research and less on methodology.

### **Example Abstract Submission**

#### Wren Alger

wren.alger@university.edu

Organic Academic University

555-555-5555

#### **Title of Research Project**

Hydromulch as a Weed Control Alternative to Plastic Mulches for Organic Horticulture

### **Organic Research Statement:**

This research was funded by the Organic Research and Extension Initiative (USDA-NIFA).

The research was conducted on certified organic land using inputs that were approved by a certifying agency.

The research was conceived specifically to address unique problems encountered by organic growers.

## Summary of Research (40 words)

This study is focused on development and application of plant-based biodegradable hydromulches designed to control weeds and enhance crop yield for day-neutral strawberry, blueberry, and onion crops. The objective is to provide an environmentally friendly alternative to plastic mulches.

#### Abstract (300 words)

Our objective was to test liquid-applied biodegradable mulches ('hydromulches') as alternatives to polyethylene (PE) mulch in organic strawberry, blueberry, and onion. Hydromulches (HMs) consisted of newsprint, water, and guar gum (GG), psyllium husk (PH), or camelina meal (CM) tackifiers. In strawberry at Washington (WA) and North Dakota (ND), GG and PH (2% and 6%) HMs applied at 4,535 kg dry matter (DM) hectare-1 were evaluated against black PE and paper-only HM. At ND during 2023 in onion, GG and CM (3% and 6%) HMs applied at rate of 5765 kg TDM hectare-1 were evaluated against white-on-black PE film and a weedy check (WC). At WA during 2023, HMs were compared to woven PE mulch ('weedmat') in blueberry. HM treatments included recycled paper with or without 4% GG and a pre-mixed paper slurry with 4%GG. For all studies, PE mulch was associated with zero weeds at peak weed emergence (PWE) and peak weed vegetative growth (PWVG). In strawberry at PWE, 2 and 6% GG performed better than other HMs, with 6 and 4 weeds m-2. Strawberry yield did not differ among mulches at WA but yield was greater in 6% GG (87 g plant-1) compared to plastic mulch (4 g plant-1) in ND. In onion, 6% GG controlled weeds best at PWE (10 weeds m-2) and PWVG (12 weeds m-2). Weed biomass was reduced most in 6% GG (118 g m-2) compared to WC (748 g m-2). Onion yield was greatest for PE (56,129 kg hectare-1) but was statistically similar to 6% GG (33,540 kg hectare-1). In blueberry, weed suppression varied by treatment, with weedmat providing nearly full suppression of all weeds. Tackifier added to recycled paper improved dicot suppression. None of the hydromulch treatments effectively suppressed monocots (mostly nutsedge). Yields were the same across all treatments.