

Purdue Mint Research Field Day

When: June 22, 2021
Registration: 09:30 am – 10:00 am CST
Field day: 10:00 am – 12:00 pm CST
Where: Gregg Kanne, 10502 W State Road 14, Fair Oaks, Indiana 47943

We would like to invite all Indiana mint growers and other stakeholders to the Purdue Mint Research Field Day, hosted by the Department of Horticulture and Landscape Architecture, Purdue Extension, North Central SARE, and the Indiana Mint Market Development & Research Council.

Biological Approaches to Verticillium wilt management – Pat Stutz, Lori Hoagland & Petrus Langenhoven

Location: 41°00'46.7"N 87°14'32.7"W

Verticillium wilt is a vascular disease caused by *Verticillium dahliae*, a highly prolific soil-borne fungal pathogen that negatively affects mint. There are some chemical fumigants that can control this disease, but they can negatively impact beneficial soil organisms. Biological fumigation using anaerobic soil disinfestation (ASD) is an alternative approach that has been successfully used to control *V. dahliae* in other crops like strawberry. During the ASD process, a labile carbon amendment is applied to the field and then the soil is saturated with water and covered with a fumigation tarp for about 4 weeks. The goal of this study is to determine whether ASD can control Verticillium wilt in mint using local carbon substrates to make it economically feasible. The carbon substrates chosen for the study included: chicken litter, dried distiller's grain from corn, soybean meal and a Brassica cover crop. The study was initiated during summer 2020. Soil samples were collected pre and post ASD treatment and quantification of changes in *V. dahliae* populations are under way. Other soil health metrics including pH, active soil carbon, mineralizable nitrogen, and microbial activity are also being quantified to determine whether the ASD process could provide other benefits. Finally, the incidence and severity of Verticillium wilt is being monitored in the experimental plots and changes in the biomass and amount of essential oil will be quantified at harvest. Farmers attending this field day will learn more about how ASD can improve the health and sustainability of mint systems.

Multi-State Weed Science Research Trial - Stephen Meyers

Location: 41°00'08.9"N 87°15'40.0"W

At this stop attendees will observe peppermint tolerance and weed control from herbicides being evaluated for possible registration. Herbicides include Zidua (pyroxasulfone), Sharpen (saflufenacil), Reviton (tiafenacil), and Starane Ultra (fluroxypyr).

If you have any questions, please reach out to Bryan Overstreet, 219-866-4962 or boverstreet@purdue.edu