



EFFECT OF VARIABLE-FEEDSTOCK COMPOSTS ON SOIL VERTICILLIUM DAHLIAE LOAD

IN BELL PEPPERS: Dairy manure, mixed plant waste, olive pomace/dairy manure, and grape pomace composts were evaluated for their potential to suppress *Verticillium* load in a bell pepper field trial. Plant based composts suppressed pathogen load while manure based composts did not.

EXPERIMENTAL SETUP

- Composts evaluated: Dairy manure, mixed plant waste, olive pomace/dairy manure and grape pomace.
- Composts were applied in mid June and an untreated control was maintained.
- Crop planted 2 days after compost application.
- Soil samples collected every 40 days and colony forming units (CFU, AKA microsclerotia) per gram of soil counted



KEY FINDINGS

- Verticillium loads in manure compost were comparable to control
- Plant based composts showed reduced loads compared to control (up to 60%) lasting for 14 weeks
- Reductions in verticillium load disappeared in September
- The mixed plant compost showed the smallest load rebound

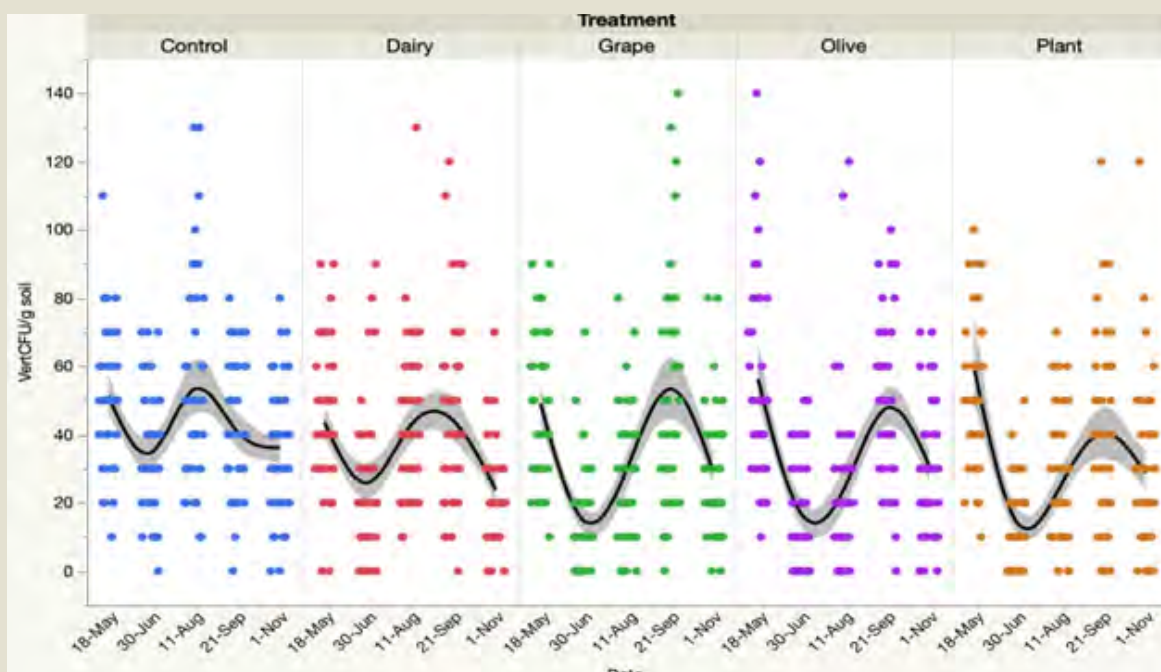


Fig. 1. Effect of composts and control on soil verticillium load over 4 months

**Plant based composts
may provide
suppression of
Verticillium**

Tubeileh A.M., Stephenson G.T., 2020.
Current Plant Biology 22, 100148.

For more publications
from Dr. Tubeileh's lab

