2026 tomato trial

BETHANY FARM · LEESBURG, VA

Three treatments, three beds each: **compost tea** (vermicompost fed humic acid, brewed 30 minutes), a **water-only control**, and **fertilized** beds (3 tbsp Tomato-tone per bed). Each application was 10 gallons from a watering can, working as both a foliar spray and a root drench. Fruit was weighed at 18 harvests, August 16 to September 25.

Yield per plant

Totals: tea 103 lb 12.5 oz · control 90 lb 14 oz · fertilized 118 lb 11.5 oz



Not statistically significant. ANOVA on bed totals p = 0.597; per plant p = 0.640. Fertilized beds had more plants, so they led on total weight and trailed per plant. With three beds per treatment, only a very large effect could have been detected.

Fruit nutrient density

One pooled lab sample per treatment: descriptive only

NUTRIENT ADEQUACY SCORE
0.755 · 0.726 · 0.675
Compost tea · control · fertilized. Higher = closer to nutrient targets.

FRUIT NITRATE (PPM)
42.5 · 28.8 · 96
Compost tea · control · fertilized. Lab desired level: 65 ppm or less.

HEAVY METALS
None detected
All three treatments scored 1.0 on the Heavy Metal Safety Index.

Compost tea fruit was highest of the three in calcium, potassium, magnesium, iron, zinc, sulfur and boron. Fertilized fruit was the only sample over the desired nitrate level.

What we would tell another grower

1. **Pick the feed for the goal.** Molasses for the most beneficial bacteria; humic acid for a tea closest to your compost.
2. **Skip kelp and fish blends.** Never pair molasses with fish hydrolysate.
3. **Keep brews short.** *Enterobacteriaceae* rose from 12 to 24 hours in 10 of 15 fed teas.
4. **Start with good compost.** The unbrewed vermicompost had no detectable *Enterobacteriaceae*.
5. **Check with a plate count now and then.** An occasional *E. coli* test on your usual recipe confirms your method.
6. **Treat tea as one tool.** Use it alongside polyculture, mulch, fertilization and soil cover.

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