BLACK EARTH COMPOST

Spring 2025 Seedling Trial Reports for Compost and Soil Blend

Summary

This report covers seedling trials conducted in January and February 2025 on compost and soil blend batches. The trials measure plant vigor of seedlings grown in Black Earth compost and soil blends against a control and determine whether there is contamination from herbicides or weed seeds present.

Methods

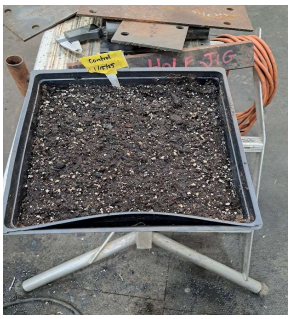
Compost and soil blend samples are collected monthly. Solvita tests and testing of pH and electrical conductivity are done to determine compost maturity. Trials are conducted under grow lights. Each trial condition and the control fill a 10 by 10-inch open tray. Samples are completely saturated with water just before seeding, and are watered throughout the trial as needed. Seedling germination and overall vigor are monitored for a minimum of 14 days. Observations are recorded with photos and seedling counts. Evaluation of performance is based on comparison with a control, for which we use a commercial compost-based potting soil.

January Compost Batch Trial - Solvita Results, pH, EC Before Trial

Sample Name	Start date	End date	# of days	Solvita combined	pH	EC
Manchester 2401	1/21/25	2/28/25	38	5	8.2	1.06
				curing		
Framingham May 2024	1/21/25	2/28/25	38	7	7.3	0.56
				mature		
Groton April 2024	1/21/25	2/28/25	38	7	7.52	0.6
				mature		
Control	1/21/25	2/28/25	38	N/A		

January Compost Batch Trial - Individual Trial Report

Trial Name: Compost Batch Trial 1/25	Sample Names: Manchester 2401, Groton April 2024, Framingham May 2024		
Date and Trial Day # (seeding day is day 0)	Batch photos	Control Photos	Notes, Observations, Methods
Day 0 - 1/21/25			Drenched Seeded 20 each napa cabbage, pea, clover

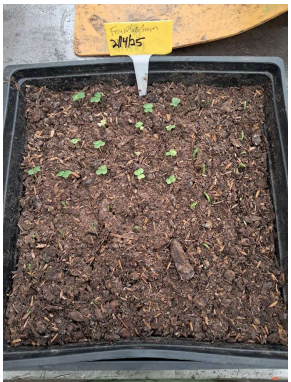
			
Day 3 - 1/24/25			Top watered control and Manchester
Day 7 - 1/28/25			Top watered all Observation #1: 0% germ across all except Groton clover 5% Germination is slow across conditions; temps are low in the room outside the tent
Day 10 - 1/31/25			Top watered all

Day 14 - 2/4/2025			Bottom watered all Observation #2: Control germ: pea 95%, clover 80%, napa 90% Groton germ: pea 95%, clover 80%, napa 55% Manchester germ: pea 25%, clover 45%, napa 50% Framingham germ: pea 40%, clover 10%, napa 0%
Day 17 - 2/7/25			Bottom watered all
Day 21 - 2/11/25			Bottom watered all
Day 23 - 2/13/2025			Observation #3: Control germ: pea 100%, clover 85%, napa 90% Groton germ: pea 100%, clover 95%, napa 60% Manchester germ: pea 55%, clover 55%, napa 55% Framingham germ: pea 85%, clover 65%, napa 60%

			
Day 28 - 2/18/25			Bottom watered all
Day 37 - 2/28/25			Everything desiccated; Manchester was the last holdout

Final Notes and Conclusions	Is further testing or remediation needed?
Growth was slow overall due to low temperatures; no sign of herbicide damage; Manchester batch needs more curing.	No further testing needed, no signs of herbicide damage. Manchester batch needs more curing before labeling as finished.

February Soil Blend Batch Trial - Individual Report

Trial Name: 2/25 Soil Batch Trial	Sample Name: Framingham, Groton		
Date and Trial Day # (seeding day is day 0)	Batch photos	Control Photos	Notes, Observations, Methods
Day 0 - 2/14/2025			Drenched Seeded 20 each napa, pea, clover
Day 4 - 2/18/2025			Top watered all
Day 11 - 2/25/2025	 		Top watered all Observation #1: Control germ: pea 80%, clover 90%, napa 85% Groton germ: pea 5%, clover 0%, napa 5% Framingham germ: pea 65%, clover 45%, napa 85%
Day 18 - 3/4/2025			Bottom watered all

Day 21 - 3/7/2025			Bottom watered all Observation #2: Control germ: pea 100%, clover 95%, napa 90% Groton germ: pea 90%, clover 75%, napa 100% Framingham germ: pea 95%, clover 95%, napa 85%
Day 32 - 3/18/2025			All samples fully dessicated

Final Notes and Conclusions	Is further testing or remediation needed?
Groton seedlings got off to a slower start than Framingham or control, but once they were up showed similar levels of vigor. No weeds germinated, no signs of herbicide damage.	No; samples all performed well.