

Supplemental Material

Article title: Food-based composts provide more soil fertility benefits than cow manure-based composts in sandy soils

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Table S1 Soil N-NH₄⁺ concentrations (mg N kg⁻¹) during the incubation study.

Soil	Temperature	Amendment	Weeks of incubation						
			0	1	2	3	4	6	8
Lake	24	Black Kow	2.0	0.2	0.6	0.3	0.8	0.2	1.3
		Composted dairy manure solids	1.3	1.2	1.2	1.1	1.8	1.6	3.4
		Vermicompost	0.5	0.2	0.8	1.0	1.2	0.2	2.1
		Ecocraps	2.6	0.0	0.4	0.4	0.9	1.3	1.4
		Food waste compost	4.7	0.5	0.8	0.6	0.9	0.2	1.3
		Soil Control	2.2	0.0	0.4	0.5	0.5	0.0	0.7
	30	Black Kow	2.0	1.3	1.5	0.3	0.9	0.0	1.0
		Composted dairy manure solids	1.3	9.7	3.1	3.4	9.7	3.9	5.6
		Vermicompost	0.5	0.6	0.8	1.2	2.2	0.0	1.4
		Ecocraps	2.6	0.1	0.5	0.2	0.6	0.4	0.9
		Food waste compost	4.7	1.1	1.2	0.5	1.1	0.1	1.0
		Soil Control	2.2	0.3	0.6	0.5	0.4	0.0	0.6
Millhopper	24	Black Kow	1.1	0.0	0.1	0.0	0.2	0.1	0.2
		Composted dairy manure solids	1.9	1.0	0.9	1.4	1.7	1.4	2.2
		Vermicompost	2.1	0.3	0.5	0.4	2.3	0.6	0.9
		Ecocraps	2.2	0.2	0.3	0.4	0.5	0.1	0.3
		Food waste compost	1.2	0.4	0.6	0.5	0.9	0.3	1.1
		Soil Control	0.7	0.0	0.2	0.0	0.0	0.0	0.0
	30	Black Kow	1.1	0.1	0.0	0.0	0.2	0.0	0.3
		Composted dairy manure solids	1.9	5.1	1.3	1.3	2.0	1.4	3.3
		Vermicompost	2.1	0.3	0.5	0.9	1.7	1.3	2.3
		Ecocraps	2.2	0.1	0.3	0.4	0.4	0.1	0.3
		Food waste compost	1.2	0.2	0.2	0.6	0.8	0.3	0.4
		Soil Control	0.7	0.0	0.1	0.0	0.1	0.0	0.0

Figure S2 Soil pH during the incubation study.

Soil	Temperature	Amendment	Weeks of incubation						
			1	2	3	4	5	6	7
Lake	24	Composted dairy manure solids	7.0	6.9	6.6	6.8	6.9	6.8	6.9
		Vermicompost	7.0	7.3	7.2	7.3	6.2	7.4	7.3
		Food waste compost	7.6	7.5	7.3	7.3	7.2	7.4	7.3
		Soil control	6.8	6.9	6.8	6.9	6.9	6.8	7.0
	30	Composted dairy manure solids	7.2	7.3	7.0	6.8	6.8	6.7	6.9
		Vermicompost	7.1	7.2	7.1	7.3	7.2	7.1	7.1
		Food waste compost	7.7	7.5	7.2	7.2	7.2	7.3	7.2
		Soil Control	6.7	6.8	6.7	6.9	6.8	6.6	6.9
Millhopper	24	Black Kow	7.7	7.2	7.5	7.7	7.6	7.6	7.5
		Composted dairy manure solids	7.6	7.4	7.6	7.5	7.5	7.7	7.7
		Vermicompost	7.7	7.6	7.6	7.7	7.8	7.6	7.8
		Ecocraps	7.0	6.9	7.3	7.5	7.6	7.4	6.9
		Food waste compost	8.2	7.9	8.0	7.8	7.9	8.0	7.8
		Soil Control	7.6	7.5	7.5	7.6	7.5	7.5	7.3
	30	Black Kow	7.7	7.3	7.4	7.5	7.5	7.6	7.4
		Composted dairy manure solids	7.6	7.3	7.5	7.6	7.6	7.6	7.6
		Vermicompost	7.7	7.6	6.7	7.8	7.7	7.7	7.4
		Ecocraps	7.4	7.1	7.4	6.7	7.5	7.4	6.9
		Food waste compost	8.1	7.8	7.8	7.8	7.7	7.7	7.5
		Soil Control	7.5	7.4	7.3	7.5	7.4	7.4	7.2