

Supplementary data

Table S1. Saturated and unsaturated infiltration rates and time to initial drainage for the soil mixes (across compost treatments) for pre-plant and post-harvest.

Soil mix	Pre plant Sat rate	Pre plant Unsat rate	Drain time	Post harvest Sat rate	Post harvest Unsat rate	Drain time
	cm/h	cm/h	min	cm/h	cm/h	min
Storden	3.1a	2.1a	87a	5.3a	5.6a	17a
Sac	1.5a	2.1a	71a	4.1a	4.4a	27a
Killduff	2.8a	3.9a	67a	4.2a	4.9a	20a
Harps	1.7a	5.4a	49a	4.5a	5.1a	23a

Treatments followed by the same letter in a column were not significantly different at $p = 0.05$.

Table S2. Saturated and unsaturated infiltration rates and time to initial drainage for the compost treatments (across soils) for pre-plant and post-harvest.

Compost blanket	Pre plant Sat rate	Pre plant Unsat rate	Drain time	Post harvest Sat rate	Post harvest Unsat rate	Drain time
	cm/h	cm/h	min	cm/h	cm/h	min
No	2.8a	5.5a	52b	4.8a	5.5a	20a
Yes	1.8a	1.2b	95a	4.2a	4.5a	24a

Treatments followed by the same letter in a column were not significantly different at $p = 0.05$.

Table S3. Mass of grass and clover, surface bulk density, and root depth for the soil mixes averaged across those with and without compost blankets.

Soil mix	Grass	Clover	Bulk density	Root depth
	g	g	Mg m ⁻³	m
Storden	1.3a	7.2a	1.68a	0.26a
Sac	0.9a	7.8a	1.64a	0.28a
Killduff	1.0a	7.4a	1.65a	0.27a
Harps	1.0a	7.3a	1.66a	0.28a

Treatments followed by the same letter in a column were not significantly different at $p = 0.05$.

Table S4. Nitrate in saturated and unsaturated effluent of compost blanket treatment (across soils), before planting and after harvest. Also calculated total phosphorus load in preplant and post-harvest effluent, based on outflow volumes for saturated and unsaturated effluent.

Compost blanket	Pre NO ₃ sat	Pre NO ₃ unsat	Pre NO ₃ load	Post NO ₃ sat	Post NO ₃ unsat	Post NO ₃ load
	mg/L	mg/L	mg	mg/L	mg/L	mg
No	56a	34a	59a	192a	86a	214a
Yes	39a	26a	36a	187a	59b	207a

Table S5. Total phosphorus in saturated and unsaturated effluent of compost blanket treatment (across soils), before planting and after harvest. Also calculated total phosphorus load in preplant and post-harvest effluent, based on outflow volumes for saturated and unsaturated effluent.

Compost blanket	Pre plant TPsat	Pre plant TPunsat	Pre plant P load	Post harvest TPsat	Post harvest TPunsat	Post harvest P load
	mg/L	mg/L	mg	mg/L	mg/L	mg
No	0.17a	0.34a	0.35a	0.16a	0.15a	0.22a
Yes	0.10a	0.32a	0.21a	0.17a	0.13a	0.22a