

Table S1. Growth inhibitory activity of ten potential competitive exclusion microorganisms against *E. coli* O157:H7 in nutrient broth and compost under laboratory conditions

Isolate identification based on 16S rRNA	<i>E. coli</i> O157:H7 log reduction/ml or g	
	Liquid (TYP)	Compost (stored in laboratory conditions)
<i>Comamonadaceae</i> (unclassified)	2.45±0.15	2.14 ±0.25
<i>Enterobacteriaceae</i> (unclassified)	1.63±0.47	1.06 ±0.33
<i>Comamonas</i> (genus)	1.38 ±0.26	1.44 ±0.28
<i>Kluyvera</i> (genus)	3.92 ±0.38	3.72 ±0.41
<i>Raoultella</i> (genus)	1.89 ±0.19	1.77 ±0.32
<i>Citrobacter</i> spp.	1.13 ±0.29	1.15 ±0.47
<i>Enterobacter</i> #1(genus)	1.75 ±0.34	1.44 ±0.35
<i>Comamonas testosteroni</i> CNB-2	1.75 ±0.17	0.89 ±0.05
<i>Nannocystaceae</i> (family) uncultured <i>proteobacterium</i>	1.97 ±0.28	2.36 ±0.44
<i>Enterobacter</i> #2(genus)	2.15 ±0.51	1.93 ±0.27

Table S2. *E. coli* O157:H7 growth in compost with different moisture levels in the absence and presence of CE cultures at 22 and 30°C

Tem p (°C)	Moistur e (%)	CE	log CFU <i>E. coli</i> O157/g on days of incubation			
			0	1	2	3
22	20	C	A 2.30 ± 0.00 a **	B 4.69 ± 0.01 a	B 4.52 ± 0.00 a	B 5.00 ± 0.10 a
		Trt	A 2.30 ± 0.00 a	A 3.64 ± 0.09 a	A 3.55 ± 0.17 a	A 3.95 ± 0.19 a
	30	C	A 2.30 ± 0.00 a	B 7.13 ± 0.17 c	B 8.43 ± 0.04 b	B 8.46 ± 0.03 b
		Trt	A 2.30 ± 0.00 a	A 5.40 ± 0.04 b	A 5.73 ± 0.11 c	A 5.87 ± 0.09 c
	40	C	A 2.30 ± 0.00 a	B 6.67 ± 0.17 b	B 8.52 ± 0.00 b	B 8.50 ± 0.07 b
		Trt	A 2.30 ± 0.00 a	A 5.46 ± 0.07 b	A 5.15 ± 0.11 b	A 5.14 ± 0.14 b
30	20	C	A 2.30 ± 0.00 a	B 5.98 ± 0.09 a	B 6.84 ± 0.02 a	B 6.54 ± 0.10 a
		Trt	A 2.30 ± 0.00 a	A 4.42 ± 0.19 a	A 4.50 ± 0.02 a	A 4.42 ± 0.06 a
	30	C	A 2.30 ± 0.00 a	B 8.28 ± 0.09 b	B 8.43 ± 0.03 b	B 8.50 ± 0.09 b
		Trt	A 2.30 ± 0.00 a	A 5.90 ± 0.07 b	A 5.90 ± 0.12 b	A 6.25 ± 0.11 c
	40	C	A 2.30 ± 0.00 a	B 8.72 ± 0.24 c	B 8.52 ± 0.00 b	B 8.48 ± 0.05 b
		Trt	A 2.30 ± 0.00 a	A 6.29 ± 0.18 c	A 6.17 ± 0.03 b	A 5.91 ± 0.04 b

*Means with different uppercase letter in a column at the same temperature and moisture content are significantly different ($P < 0.05$).

**Means with different lowercase letter in a column at the same temperature and same treatment are significantly different ($P < 0.05$).