

Table S1. Comparison of Gower distance of *E. coli* isolates based on all analyzed traits by isolate source and phylotype using permuted MANOVA. Bolded values indicate significant differences ($p < 0.05$).

MANOVA		
<i>Variable</i>	<i>Pseudo-F</i>	<i>P(perm)</i>
Isolate Source	4.2451	0.012
Isolate Phylotype	2.6019	0.011
Source x Phylotype	2.0158	0.016
MANOVA Pairwise Tests- Isolate Source		
<i>Groups</i>	<i>t</i>	<i>P(perm)</i>
Clinical, Environmental	2.8048	0.002
Clinical, Manure	2.7558	0.004
Environmental, Manure	0.41641	0.82
MANOVA Pairwise Tests- Phylotype B2		
<i>Groups</i>	<i>t</i>	<i>P(perm)</i>
Clinical, Environmental	1.6119	0.087
Clinical, Manure	2.3328	0.042
Environmental, Manure	3.351	0.14
MANOVA Pairwise Tests- Phylotype D		
<i>Groups</i>	<i>t</i>	<i>P(perm)</i>
Clinical, Environmental	0.83976	0.595
Clinical, Manure	1.6258	0.056
Environmental, Manure	1.043	0.5216
MANOVA Pairwise Tests- Phylotype E		
<i>Groups</i>	<i>t</i>	<i>P(perm)</i>
Clinical, Environmental	2.0077	0.177
MANOVA Pairwise Tests-Phylotype B1		
<i>Groups</i>	<i>t</i>	<i>P(perm)</i>
Clinical, Environmental	0.55627	0.676
Clinical, Manure	1.8977	0.095
Environmental, Manure	1.7169	0.089
MANOVA Pairwise Tests- Phylotype A		
<i>Groups</i>	<i>t</i>	<i>P(perm)</i>
Clinical, Environmental	1.2185	0.215
Clinical, Manure	0.28313	1
Environmental, Manure	0.66569	0.88

MANOVA Pairwise Tests- Phylotype F		
<i>Groups</i>	<i>t</i>	<i>P(perm)</i>
Clinical, Environmental	1.5916	0.104
Clinical, Manure	1.6472	0.128
Environmental, Manure	1.3304	0.214
MANOVA Pairwise Tests- Phylotype C		
<i>Groups</i>	<i>t</i>	<i>P(perm)</i>
Clinical, Environmental	0.44721	1
Environmental, Manure	0.66667	1
MANOVA Pairwise Tests- Phylotype Clade 1/2		
<i>Groups</i>	<i>t</i>	<i>P(perm)</i>
Environmental, Manure	1.1345	0.583