

Supplementary tables

Table S1 The relative abundances of the most abundant phyla in different treatments.

	Taxon	Relative abundances (%) in different treatments					
		CK	Low PE	High PE	BC	Low PE+BC	High PE+BC
16S rRNA gene-based bacteria	Proteobacteria	40.44a	39.93a	42.35a	45.10a	38.27a	40.11a
	Chloroflexi	7.95a	9.49a	13.40a	8.28a	7.90a	7.70a
	Actinobacteriota	11.96a	16.29a	8.69a	8.95a	11.34a	13.44a
	Acidobacteriota	7.71bc	8.78bc	7.36c	10.94a	9.35abc	9.81ab
	Gemmatimonadota	9.86a	7.62b	8.10b	8.20b	8.19b	5.88c
	Verrucomicrobiota	5.09a	2.40a	3.40a	2.06a	2.48a	1.88a
	Bacteroidota	3.00a	2.56a	4.18a	5.31a	3.52a	5.84a
	Firmicutes	2.45a	2.17a	1.86a	2.39a	3.75a	2.89a
	Myxococcota	1.86a	2.21a	2.14a	1.88a	1.79a	1.96a
	Patescibacteria	0.24a	0.25a	0.50a	0.50a	0.24a	0.53a
<i>phoD</i> - harboring bacteria	Proteobacteria	81.488ab	84.454a	83.605ab	79.338ab	85.482a	76.150b
	Actinobacteria	11.616a	10.105a	8.268a	11.260a	6.226a	13.762a
	Planctomycetes	0.008b	0.018ab	0.031a	0.027a	0.018ab	0.024ab
	Acidobacteria	0.005b	0.028a	0.019ab	0.018ab	0.010ab	0.011ab
	Firmicutes	0.000a	0.004a	0.002a	0.002a	0.004a	0.000a
	Bacteroidetes	0.000a	0.000a	0.002a	0.000a	0.001a	0.000a
	Cyanobacteria	0.001a	0.000a	0.000a	0.000a	0.000a	0.000a

Different lowercase letters in the same row indicate significant differences among the six treatments ($P<0.05$).

Table S2 The relative abundances of the 10 most abundant genera in different treatments.

	Taxon	Relative abundances (%) in different treatments					
		CK	Low PE	High PE	BC	Low PE+BC	High PE+BC
16S rRNA gene-based bacteria	Pedospaeraceae	4.42a	1.64ab	1.99ab	1.56b	2.00ab	1.09b
	Dongia	1.59a	2.16a	2.80a	2.96a	2.21a	2.45a
	TRA3-20	3.86a	3.00ab	3.43a	3.20ab	2.33b	2.17b
	SC-I-84	2.97a	1.51ab	1.66ab	2.04ab	1.34b	0.70b
	Subgroup_10	1.58c	1.71bc	1.07c	3.27a	2.93ab	2.23ab
	IMCC26256	0.65a	2.03a	2.18a	0.26a	0.64a	1.55a
	Sphingomonas	2.78ab	3.66a	2.29b	2.78ab	2.66ab	2.54ab
	Bacillus	1.46ab	1.06ab	0.59b	0.64b	2.27a	1.17ab
	Ellin6067	2.46ab	1.90bc	2.71a	2.75a	1.40c	1.44c
<i>phoD</i> -harboring bacteria	Pseudomonas	0.68a	0.43a	0.98a	0.47a	0.81a	1.74a
	Amycolatopsis	6.918a	1.606a	2.022a	5.005a	1.679a	2.417a
	Streptomyces	0.560c	2.347a	1.461b	0.300c	0.543c	1.212bc
	Bradyrhizobium	0.598a	0.265a	0.441a	1.884a	0.296a	0.237a
	Sinorhizobium	0.096a	0.161a	0.291a	0.156a	0.267a	0.078a
	Phaeobacter	0.056a	0.100a	0.050a	0.112a	0.110a	0.054a
	Pseudomonas	0.006 a	0.008a	0.018a	0.006a	0.007a	0.008a
	Actinoplanes	0.048a	0.033ab	0.021ab	0.035ab	0.005b	0.037ab
	Frankia	0.018a	0.018a	0.038a	0.013a	0.029a	0.017a
	Saccharopolyspora	0.007ab	0.005ab	0.000b	0.013a	0.001ab	0.004ab
	Stella	0.007bc	0.015abc	0.018ab	0.019a	0.007bc	0.004c

Different lowercase letters in the same row indicate significant differences among the six treatments ($P<0.05$).