

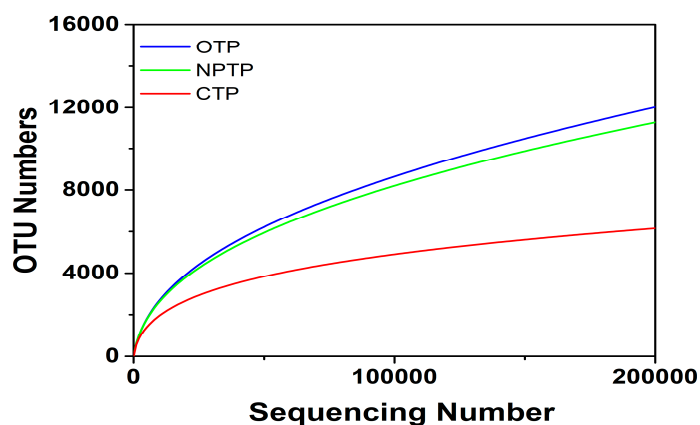


Figure S1. Rarefaction curves of soil bacteria from different tea plantations.

Table S1. Dissimilarity test of bacterial community structure in tea plantation soils under different management practices based on Bray-Curtis distance

Comparison	Anosim		Permanova	
	R ²	P	R ²	P
OTP vs. NPTP	0.3042	0.013*	2.3962	0.001***
OTP vs. CTP	0.9708	0.001***	8.0543	0.001***
NPTP vs. CTP	0.6639	0.001***	5.2134	0.001**

*Difference is significant at 0.05 level; **Difference is significant at 0.01 level; ***Difference is significant at 0.001 level.

Table S2. Relative abundance of dominant phylum in tea plantation soil bacterial community under different management practices.

Domain phyla	Relative abundance in tea plantation soil bacterial community		
	CTP	NPTP	OTP
<i>Proteobacteria</i>	16.78b	33.2 5a	27.66a
<i>Acidobacteria</i>	21.00a	21.26a	23.14a
<i>Chloroflexi</i>	17.60a	6.08b	6.37b
<i>Unclassified</i>	11.36a	9.71a	8.36a
<i>actinobacteria</i>	7.02a	8.05a	5.68a
<i>Thaumarchaeota</i>	10.36a	3.77b	5.42ab
<i>Firmicutes</i>	5.84a	4.08a	4.62a
<i>Verrucomicrobia</i>	1.97c	3.34b	8.66a
<i>Bacteroidetes</i>	1.67b	2.49ab	3.19a
<i>Planctomycetes</i>	1.06b	0.98b	2.92a
<i>Nitrospirae</i>	0.07b	2.30a	0.82ab

<i>candidate division WPS-2</i>	2.33a	0.14b	0.16b
<i>Woesearchaeota</i>	0.00b	2.06a	0.01b
Domain genera			
<i>Actinoallomurus</i>	1.56a	0.65b	0.91b
<i>Arthrobacter</i>	0.20b	0.36b	1.03a
<i>Bradyrhizobium</i>	0.94b	1.47a	0.98b
<i>Burkholderia</i>	1.01a	1.49a	1.64a
<i>Gaiella</i>	0.58b	1.3a	0.74b
<i>Gemmata</i>	0.47b	1.03a	0.33b
<i>Gp1</i>	6.11a	6.68a	4.71a
<i>Gp2</i>	7.31a	6.58a	6.15a
<i>Gp3</i>	2.97a	3.44a	2.77a
<i>Gp5</i>	0.00b	0.48ab	1.00a
<i>Gp6</i>	0.34b	1.76a	0.85b
<i>Ktedonobacter</i>	8.7a	3.78b	1.67b
<i>Nitrososphaera</i>	10.36a	5.42ab	3.57b
<i>Nitrospira</i>	0.07b	0.82ab	2.30a
<i>Pseudolabrys</i>	0.14b	1.29a	0.60ab
<i>Rhizomicrobium</i>	0.28b	0.73ab	1.07a
<i>Spartobacteria</i> genera			
<i>incertae sedis</i>	0.28c	3.71a	0.89b
<i>Subdivision3</i> genera <i>incertae</i>			
<i>sedis</i>	1.43b	4.65a	2.3b
<i>Unclassified</i>	40.3ab	35.89b	44.65a
<i>Woesearchaeota</i> <i>Incertainae</i>			
<i>Sedis AR15</i>	0.00b	0.00b	1.38a
<i>WPS-2</i> genera <i>incertae sedis</i>	2.33a	0.16b	0.14b
<i>Others</i>	14.61b	18.32ab	20.35a

Different letters in the table represent significant difference ($p < 0.05$), similarly hereinafter.

Table S3. The topological properties of networks in microbial communities of tea plantation soils under different management practices

Empirical networks						Random networks					
Sampl es	Similarit y threshold	Total node s	Total links	Averag e degree (avgK)	Averag e path distan ce (GD)	Average clusterin g R ² coefficient (avgCC)	Modularit y:(Module ·No)	Average clustering coefficient (avgCC)	Modularity (Module·N o)	Average path distance (GD)	
OTP	0.91	493	756	3.067	6.803	0.177	0.88	0.749 (22)	0.008±0.003	0.618±0.006	5.031 ± 0.066
NPTP	0.91	387	637	3.292	6.042	0.208	0.90	0.724 (17)	0.014±0.004	0.575±0.006	4.492 ± 0.069

CTP	0.91	210	452	4.305	7.126	0.333	0.85	0.666 (9)	0.035±0.008	0.456±.008	3.643 ± 0.054
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