

16S rRNA metagenomic profiling of red amaranth grown organically with different composts and soil

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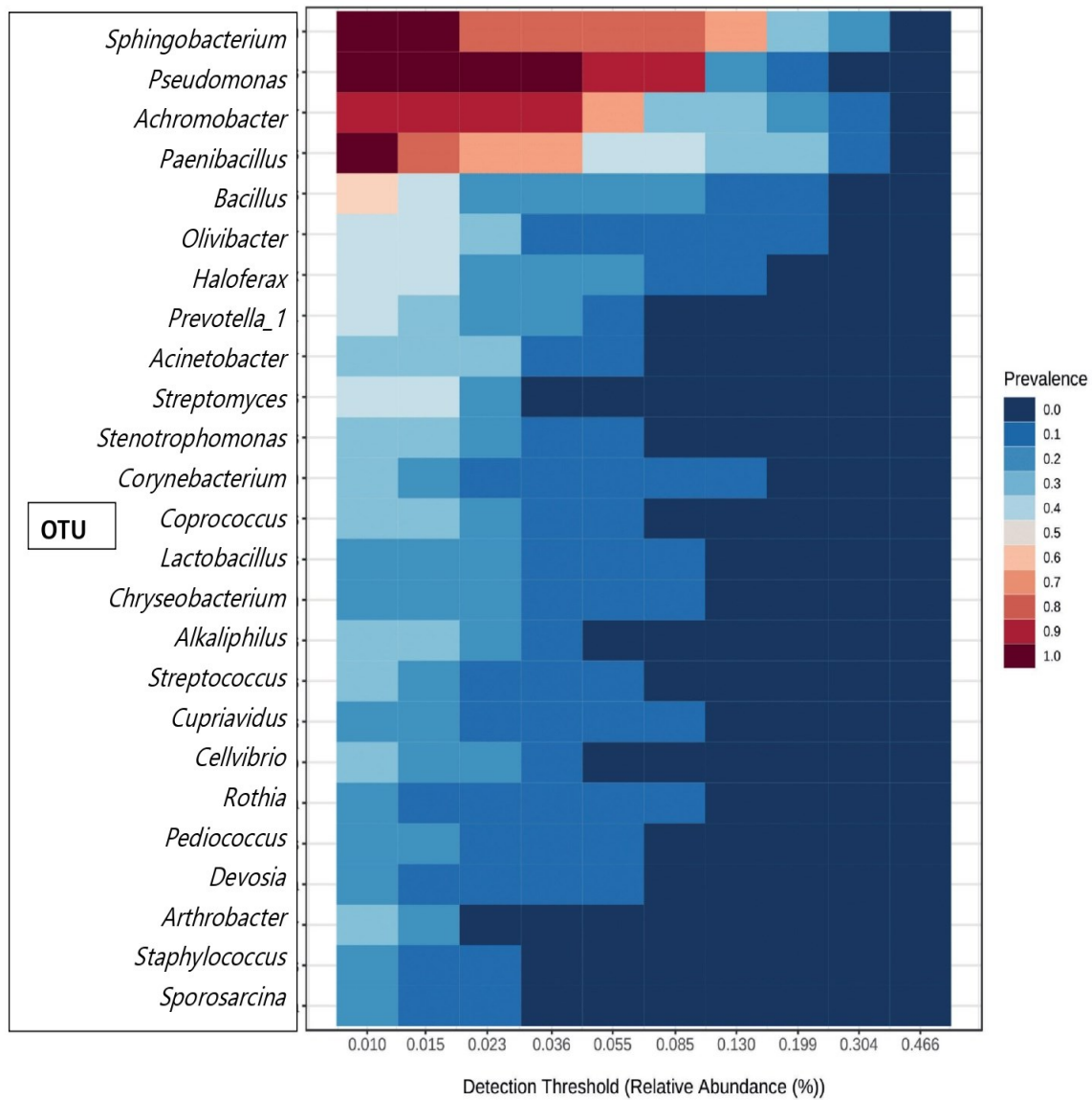
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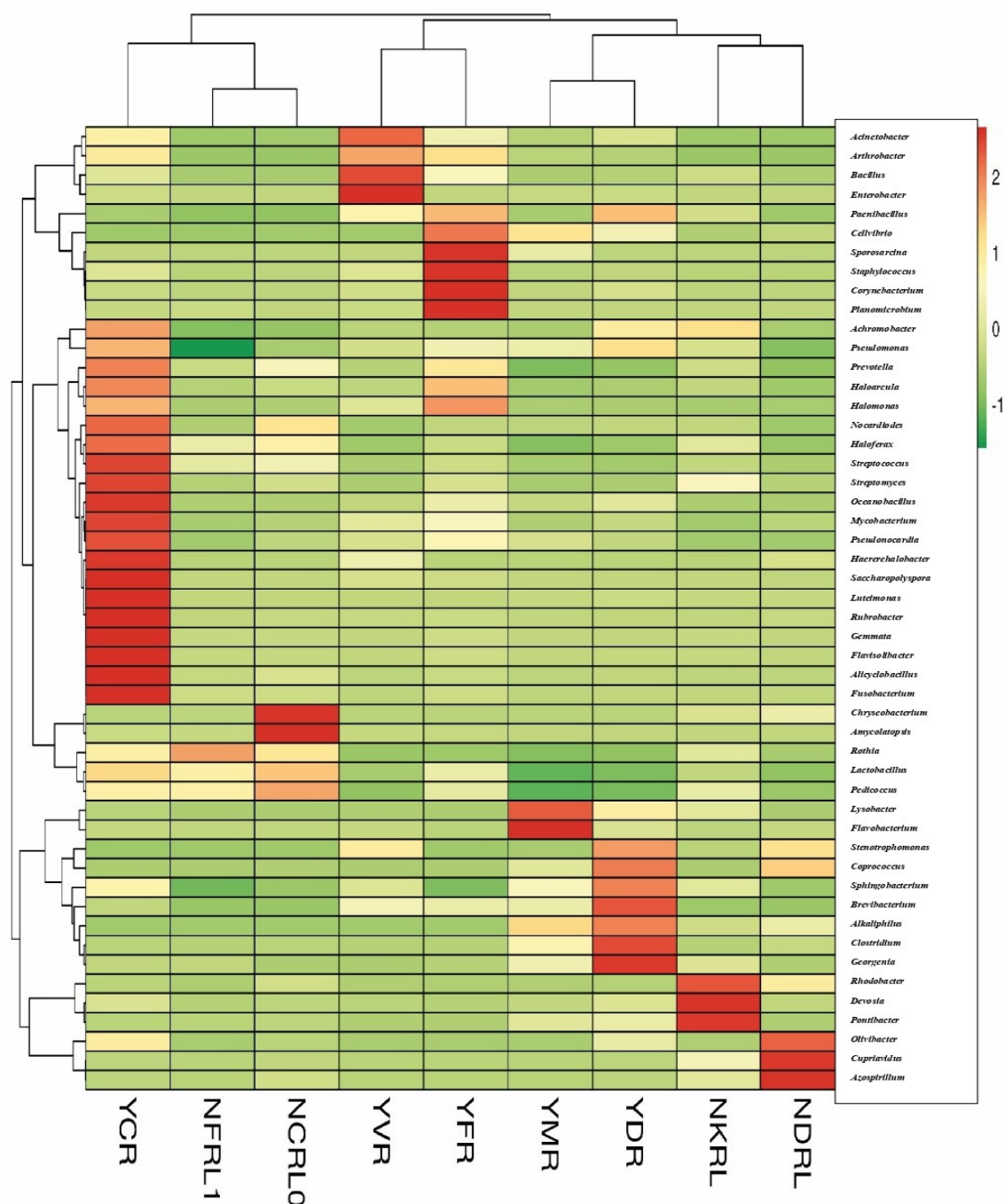
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Supplementary figures

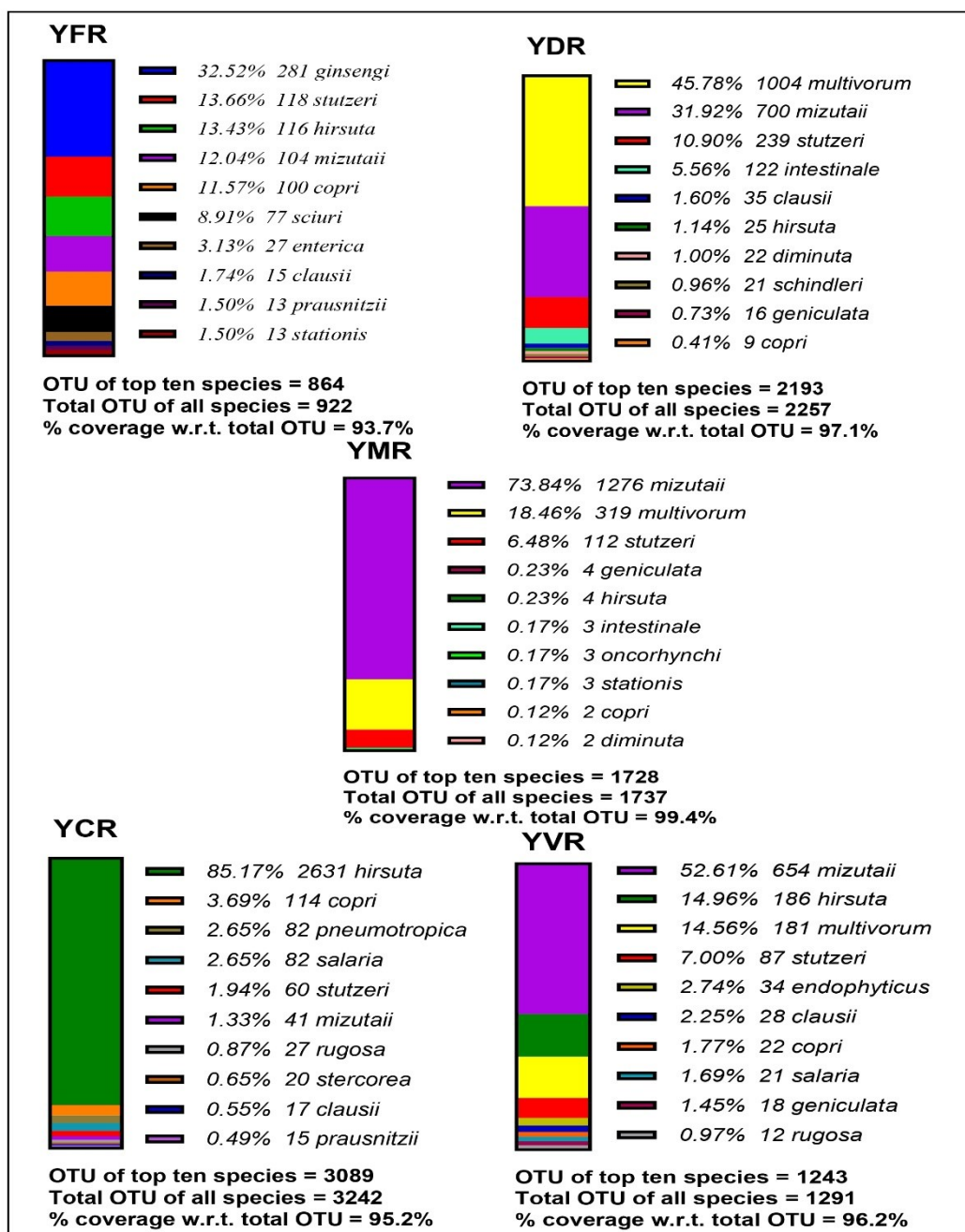


Supplementary Figure S1. Core Microbiome: The core microbiome detected in different produce:

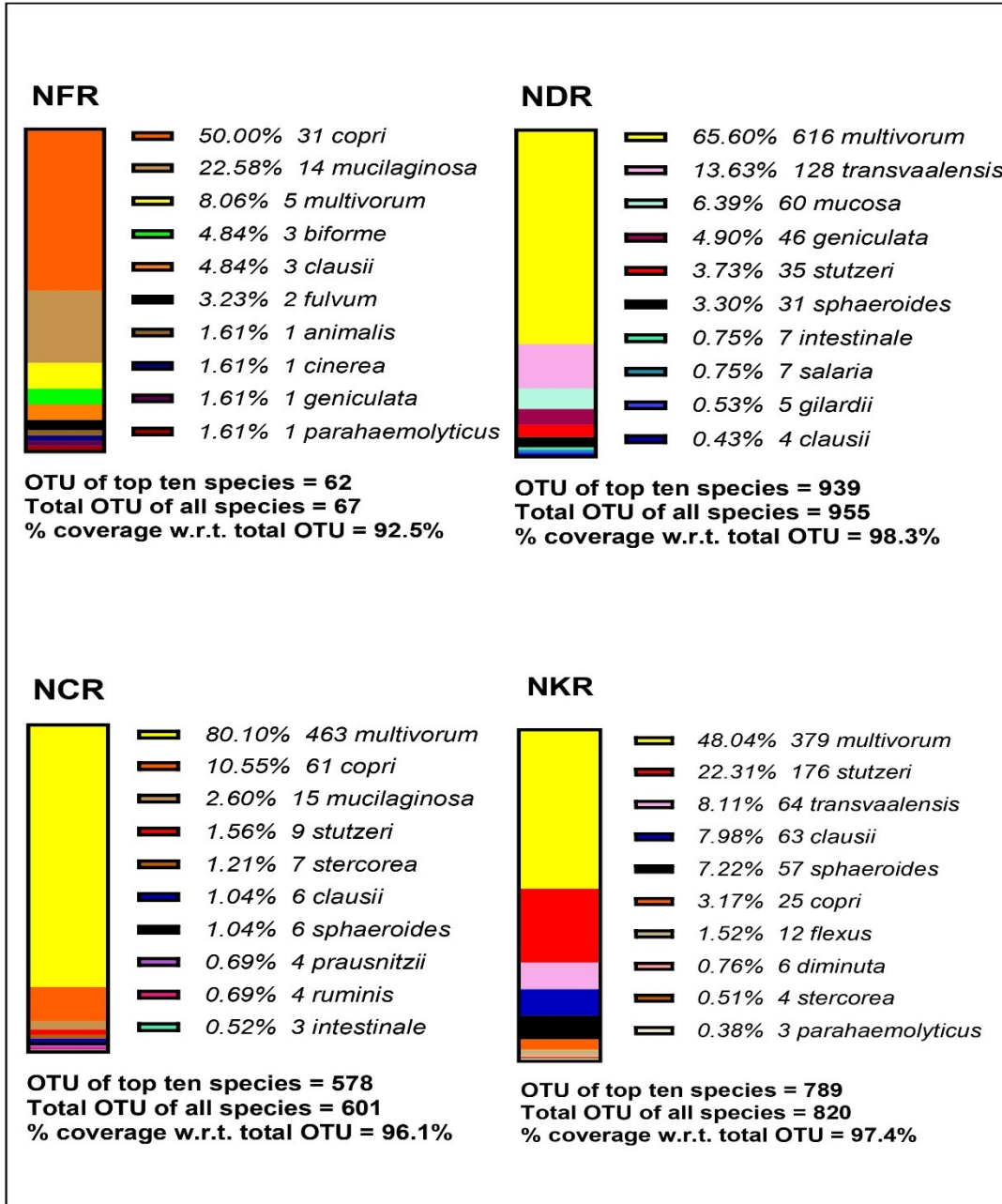
The core microbiome is the set of taxa detected in a high fraction of the population above a given abundance threshold. The count data is transformed to compositional (relative) abundance to perform such analysis.



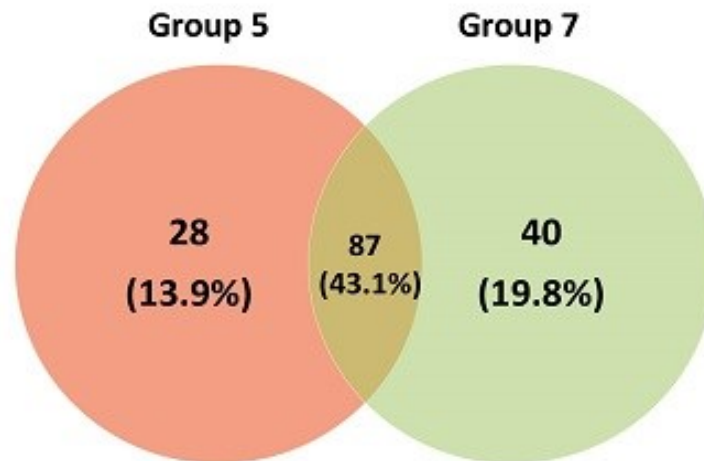
Supplementary Figure S2. Heat Map: The heat map representing the generic diversity among different produce (YFR: Soil A fertilizer produce, YDR: Soil A leaf waste compost produce, YMR: Soil A municipal waste compost produce, YCR: Soil A cow dung manure produce, YVR: Soil A vermicompost produce, NFRL1: Soil B fertilizer produce NDRL: Soil B leaf waste compost produce, NCRL0: Soil B cow dung compost NKRL: Soil B kitchen waste compost produce)



Supplementary Figure S3. Top ten species in the produce of River flood plains soil: This figure shows total OTU of top ten species for each sample and % coverage of these top ten species with respect to the total OTU of each sample (YFR: Soil A fertilizer produce, YDR: Soil A leaf waste compost produce, YMR: Soil A municipal waste compost produce, YCR: Soil A cow dung manure produce, YVR: Soil A vermicompost produce)



Supplementary Figure S4. Top ten species in the produce of residential soil: This figure shows total OTU of top ten species for each sample and % coverage of these top ten species with respect to the total OTU of each sample (NFR1: Soil B fertilizer produce NDR1: Soil B leaf waste compost produce, NCR0: Soil B cow dung compost NKRL: Soil B kitchen waste compost produce)



Supplementary Figure S5. Venn Diagram: This Venn diagram compares the overall diversity of bacterial genera across the produces grown in the two soils, soil A (Group 5) and soil B (Group 7)

Supplementary table

Unique genera in Group 5	Unique genera in Group 7	Common genera in Group 5 and 7
<i>Aerococcus</i>	<i>Actinobacillus</i>	<i>Acetobacter</i>
<i>Aeromicrobium</i>	<i>Azospirillum</i>	<i>Actinomyces</i>
<i>Ardenscatena</i>	<i>Bdellovibrio</i>	<i>Agromyces</i>
<i>Arthrobacter</i>	<i>Burkholderia</i>	<i>Alkaliphilus</i>
<i>Brachybacterium</i>	<i>Candidatus Portiera</i>	<i>Amycolatopsis</i>
<i>Bradyrhizobium</i>	<i>Capnocytophaga</i>	<i>Coprococcus</i>
<i>Janibacter</i>	<i>Fructobacillus</i>	<i>Enterobacter</i>
<i>Lysobacter</i>	<i>Kineococcus</i>	<i>Erwinia</i>
<i>Parvimonas</i>	<i>Nocardia</i>	<i>Geodermatophilus</i>
<i>Pigmentiphaga</i>	<i>Novispirillum</i>	<i>Georgenia</i>
<i>Planifilum</i>	<i>Opitutus</i>	<i>Gluconobacter</i>
<i>Planomicrobium</i>	<i>Pimelobacter</i>	<i>Glycomyces</i>
<i>Prauserella</i>	<i>Polaribacter</i>	<i>Granulicatella</i>
<i>Prostheobacter</i>	<i>Pseudochrobactrum</i>	<i>Halococcus</i>
<i>Saccharomonospora</i>	<i>Roseomonas</i>	<i>Halogeometricum</i>
<i>Saccharopolyspora</i>	<i>Saccharothrix</i>	<i>Halogranum</i>
<i>Salmonella</i>	<i>Saccharothrix</i>	<i>Halorubrum</i>
<i>Steroidobacter</i>	<i>Sedimentibacter</i>	<i>Kaistobacter</i>
<i>Tetrathibacter</i>	<i>Sinorhizobium</i>	<i>Kocuria</i>
<i>Truepera</i>	<i>Turicibacter</i>	<i>Leuconostoc</i>
<i>A17</i>	<i>Vibrio</i>	<i>Luteimonas</i>
<i>Brevibacterium</i>	<i>[Eubacterium]</i>	<i>Lysinibacillus</i>
<i>Dietzia</i>	<i>Bifidobacterium</i>	<i>Olivibacter</i>
<i>Enterococcus</i>	<i>Candidatus</i>	<i>Paracoccus</i>
<i>Prauseria</i>	<i>Solibacter</i>	<i>Pediococcus</i>
<i>Rhodoplanes</i>	<i>Chryseobacterium</i>	<i>Promicromonospora</i>
<i>Sporosarcina</i>	<i>Collinsella</i>	<i>Rhodobacter</i>
<i>Symbiobacterium</i>	<i>Deinococcus</i>	<i>Skermanella</i>
	<i>Dyadobacter</i>	<i>Succinivibrio</i>
	<i>Gemmata</i>	<i>Xylanimicrobium</i>
	<i>Haloterrigena</i>	<i>[Prevotella]</i>
	<i>Inquilinus</i>	<i>Achromobacter</i>
	<i>Lachnospira</i>	<i>Acinetobacter</i>
	<i>Lactococcus</i>	<i>Agrobacterium</i>
	<i>Mycoplana</i>	<i>Alicyclobacillus</i>
	<i>Neisseria</i>	<i>Anaerolinea</i>
	<i>Novosphingobium</i>	<i>Bacillus</i>
	<i>Oscillospira</i>	<i>Bacteroides</i>
	<i>Porphyromonas</i>	<i>Balneimonas</i>
	<i>Sphingobium</i>	<i>Brevibacillus</i>
	<i>Sutterella</i>	<i>Brevundimonas</i>
	<i>Trueperella</i>	<i>Catenibacterium</i>
		<i>Cellvibrio</i>
		<i>Clostridium</i>
		<i>Corynebacterium</i>
		<i>Cupriavidus</i>
		<i>Devosia</i>
		<i>Dialister</i>
		<i>Exiguobacterium</i>
		<i>Faecalibacterium</i>
		<i>Flavisolibacter</i>
		<i>Flavobacterium</i>
		<i>Fusobacterium</i>
		<i>Gordonia</i>

		<i>Haemophilus</i>
		<i>Haloarcula</i>
		<i>Haloferax</i>
		<i>Halomonas</i>
		<i>Klebsiella</i>
		<i>Lactobacillus</i>
		<i>Leptotrichia</i>
		<i>Megasphaera</i>
		<i>Methanobrevibacter</i>
		<i>Methylobacterium</i>
		<i>Microbacterium</i>
		<i>Mycobacterium</i>
		<i>Nocardioidea</i>
		<i>Oceanobacillus</i>
		<i>Ochrobactrum</i>
		<i>Paenibacillus</i>
		<i>Phascolarctobacterium</i>
		<i>Planctomyces</i>
		<i>Pontibacter</i>
		<i>Prevotella</i>
		<i>Pseudomonas</i>
		<i>Pseudonocardia</i>
		<i>Rhodococcus</i>
		<i>Rothia</i>
		<i>Rubrobacter</i>
		<i>Ruminococcus</i>
		<i>Sphingobacterium</i>
		<i>Sphingomonas</i>
		<i>Staphylococcus</i>
		<i>Stenotrophomonas</i>
		<i>Streptococcus</i>
		<i>Streptomyces</i>
		<i>Veillonella</i>

Supplementary Table S1. Comparative analysis of the microbiome: This table shows the unique and common microbial genera of soil A and soil B produce (Group 5 and Group 7 respectively). The Venn diagram was created on the basis of this comparative analysis.