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Supplementary tables

Supplementary tables

Supplementary table 1 Composition (%) of *chiA* coding bacterial community in genus level from buried nylon bags containing pure sand amended with different chitin resources. Bags were buried in grassland soil or forest soil. (CHI: crystal chitin; MUC: *Mucor hiemalis* cell wall; ASP: *Aspergillus niger* cell wall; MEA: mealworm cuticle). Identification is based on 16S rDNA sequences (ENA accession number: PRJEB9706).

Family	Grassland soil								Forest soil							
	First harvest				Second harvest				First harvest				Second harvest			
	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA
Actinomycetaceae	2	0	8	3	11	1	5	3	23	1	1	1	40	1	7	22
Armatimonadaceae	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Bacteroidaceae	39	28	3	8	12	14	4	4	0	13	0	0	0	0	0	0
Chlamydiae	0	0	0	1	1	0	1	2	0	0	0	0	0	0	0	0
Opitutaceae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unclassified Spartobacteria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acidobacteriaceae	0	1	0	0	0	0	0	0	2	4	6	3	21	25	66	8
Planococcaceae	0	0	0	10	0	0	0	17	0	0	0	12	1	0	0	33
Peptostreptococcaceae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gemmatimonadaceae	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
Planctomycetaceae	0	0	0	0	3	3	0	3	0	0	0	0	0	0	0	0
Caulobacteraceae	1	7	0	1	2	14	4	3	2	6	1	4	1	29	1	1
Bradyrhizobiaceae	4	1	0	1	1	2	1	1	0	0	0	0	0	0	0	0
Brucellaceae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyphomicrobiaceae	0	0	0	1	2	2	1	4	0	0	0	0	0	0	0	0

Supplementary tables

[illegible]

Supplementary tables

Family	Grassland soil								Forest soil							
	First harvest				Second harvest				First harvest				Second harvest			
	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA
Legionellaceae	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Pseudomonadaceae	33	46	20	35	20	28	15	22	56	58	9	47	18	9	1	8
Thiotrichales	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sinobacteraceae	0	3	0	13	3	4	1	17	1	8	1	8	4	26	6	14
Xanthomonadaceae	1	0	54	10	1	2	36	4	1	1	1	2	12	2	7	10
Thermoproteaceae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Supplementary tables

Supplementary table 2 Number of chitinolytic bacteria isolated from buried nylon bags containing pure sand amended with different chitin resources. Bags were buried in grassland soil or forest soil. (CHI: crystal chitin; MUC: *Mucor hiemalis* cell wall; ASP: *Aspergillus niger* cell wall; MEA: mealworm cuticle). Identification is based on 16S rDNA sequences (Genbank: KT005619-KT005773).

Genus	Grassland soil								Forest soil							
	First harvest				Second harvest				First harvest				Second harvest			
	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA
<i>Flavobacterium</i>	4	3	2	3	8	5	0	0	0	0	0	0	0	0	0	0
<i>Chitinophaga</i>	3	1	0	3	0	1	0	0	0	0	0	0	0	0	0	0
<i>Pseudomonas</i>	3	0	1	1	3	2	0	4	0	0	0	1	0	0	0	1
Unclassified <i>Oxalobacteraceae</i>	0	0	1	0	2	0	0	3	0	0	0	0	0	0	0	0
<i>Stenotrophomonas</i>	0	0	1	0	1	0	2	1	0	0	0	0	0	0	0	0
<i>Rhizobium</i>	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
<i>Variovorax</i>	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
<i>Burkholderia</i>	0	0	0	1	3	0	0	1	1	0	0	0	0	0	0	0
<i>Paenibacillus</i>	0	0	0	0	1	1	0	5	4	0	0	0	8	5	0	23
<i>Janthinobacterium</i>	0	0	0	0	4	1	0	6	5	2	0	0	0	0	0	1
<i>Serratia</i>	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0
<i>Luteibacter</i>	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
<i>Collimonas</i>	0	0	0	0	0	0	0	0	0	3	0	1	1	0	0	0
<i>Dyella</i>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
<i>Bacillus</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4
<i>Leifsonia</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<i>Pedobacter</i>	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
<i>Herbaspirillum</i>	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Total number	10	4	5	10	24	11	4	20	11	7	0	3	10	6	0	30

Supplementary tables

Supplementary table 3 Composition (%) of *chiA* coding bacterial community in genus level from buried nylon bags containing pure sand amended with different chitin resources. Bags were buried in grassland soil or forest soil. (CHI: crystal chitin; MUC: *Mucor hiemalis* cell wall; ASP: *Aspergillus niger* cell wall; MEA: mealworm cuticle). Identification is based on 16S rDNA sequences (ENA accession number: PRJEB9708).

Genus	Grassland soil								Forest soil							
	First harvest				Second harvest				First harvest				Second harvest			
	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA	CHI	MUC	ASP	MEA
Janthinobacterium sp.	78	71	24	63	72	38	0	80	14	25	0	7	11	2	0	5
Stenotrophomonas	1	21	56	28	6	16	0	11	24	35	0	62	23	51	0	14
Panibacillus	0	0	0	2	4	3	0	3	0	0	0	0	48	14	0	19
Streptomyces	5	4	15	4	3	24	0	2	57	0	0	10	10	12	0	45
Rhodanobacter	0	0	0	0	0	0	0	0	0	32	0	10	1	8	0	4
Serretia	0	0	3	0	0	0	0	1	0	3	0	6	0	0	0	2
Kitasatospora	1	0	0	0	0	0	0	0	0	0	0	1	0	6	0	5
Burkholderia	9	2	0	0	5	10	0	0	4	2	0	2	1	0	0	3
Kutzneria	2	0	0	0	1	0	0	0	0	1	0	0	0	6	0	0
Bacillus	0	0	0	0	0	0	0	0	1	0	0	1	4	0	0	2
Cellvibrio	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0
Arthrobacter	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Acidobacteriaceae	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Amycolatopsis	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Chondromyces	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Chromobacterium	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

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Yani Bai

2015.10

Curriculum Vitae

Yani Bai was born at April 16th 1983 at Yijun, China. In 2010, she received her master degree at Northwest Agriculture and Forest University, Yangling, Shaanxi Province, China. During her master study, her major was on Resource and Environmental Biology, specifically environmental microbiology; the title of her master thesis was “A Study of bacterial community on Amendment of Saline-alkali Soil by Addition of Sulfur”. In her master thesis she focused on bacteria that can utilize sulfur to decrease the pH of saline-alkaline soils in northwest China. Since September 2010, she started her PhD project at Netherlands Institute of Ecology (NIOO-KNAW), under supervision of Prof. Dr. Hans van Veen and Prof. Wietse de Boer. The results of her research are described in this thesis.