

# **Microbial community composition in the rhizosphere of *Larix decidua* under different light regimes with additional focus on methane cycling microorganisms**

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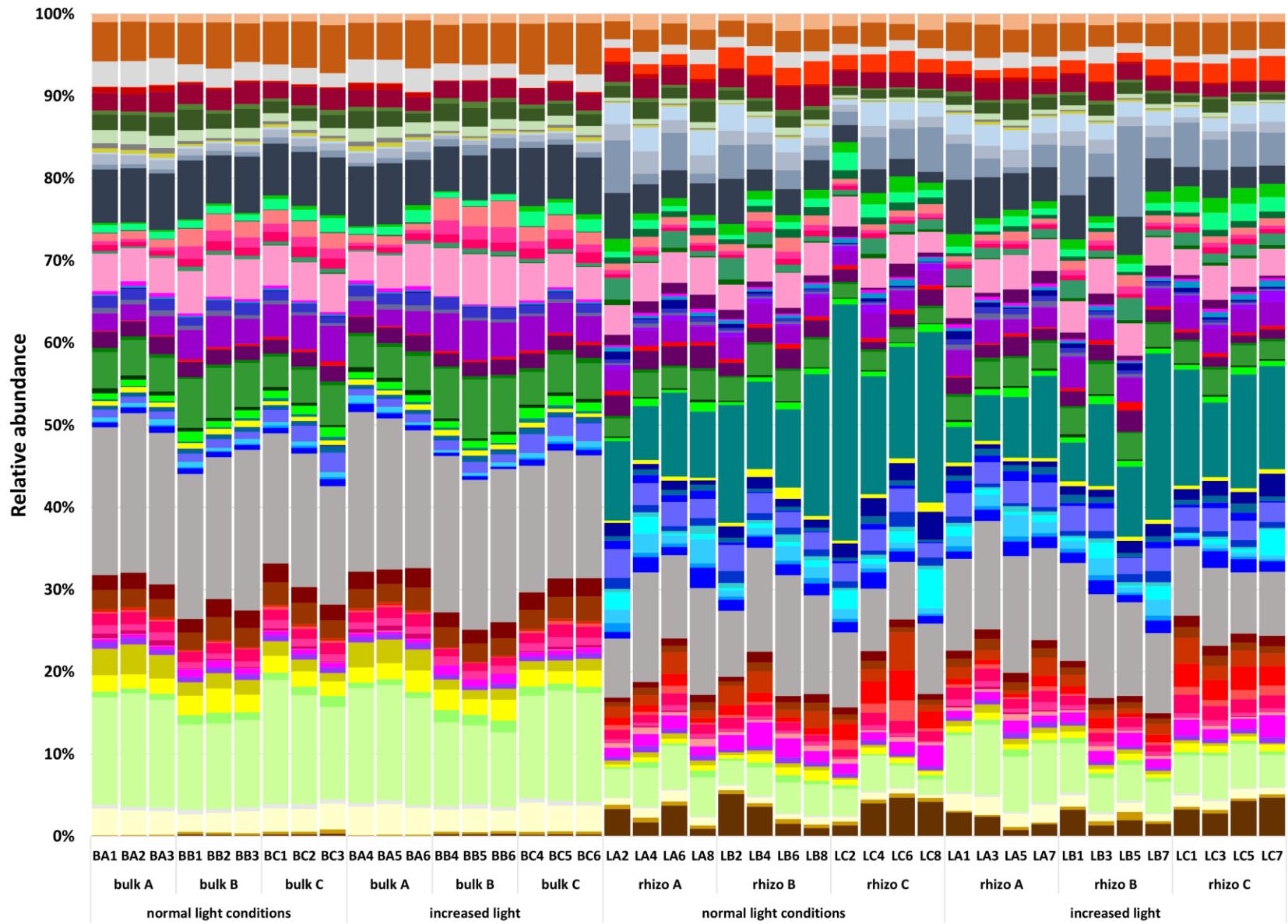
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**Supplementary Information**

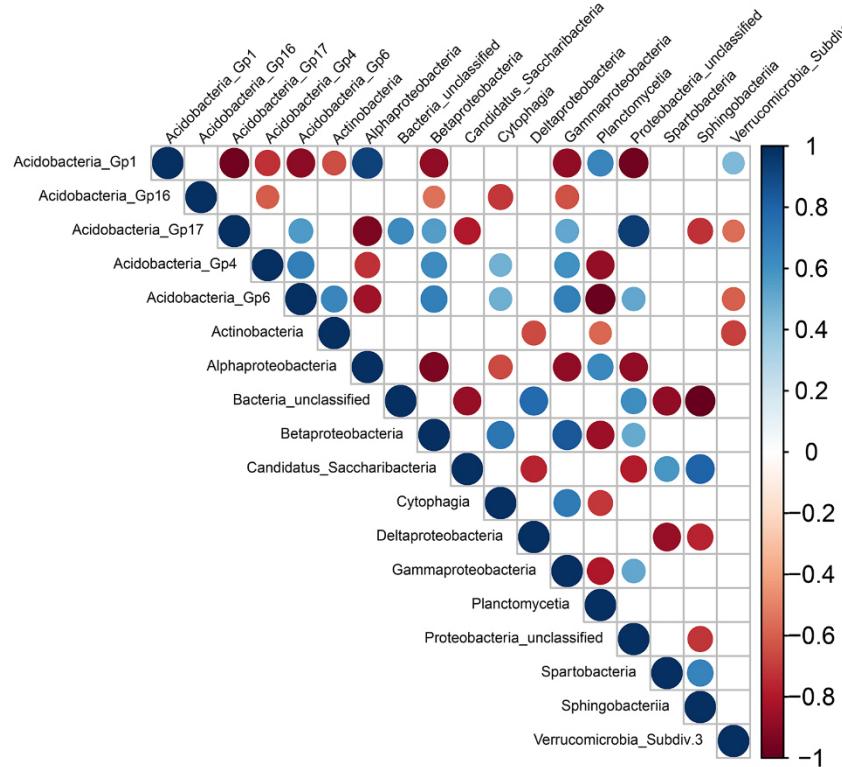
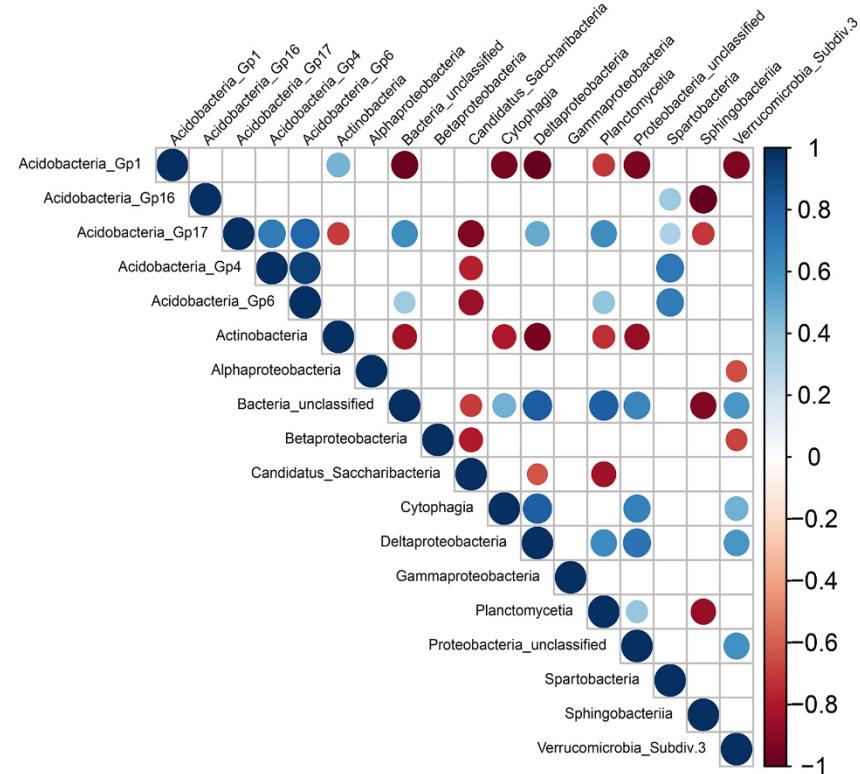
**Supplementary Information Fig. S1-S7**

**Supplementary Information Table S1+S2**

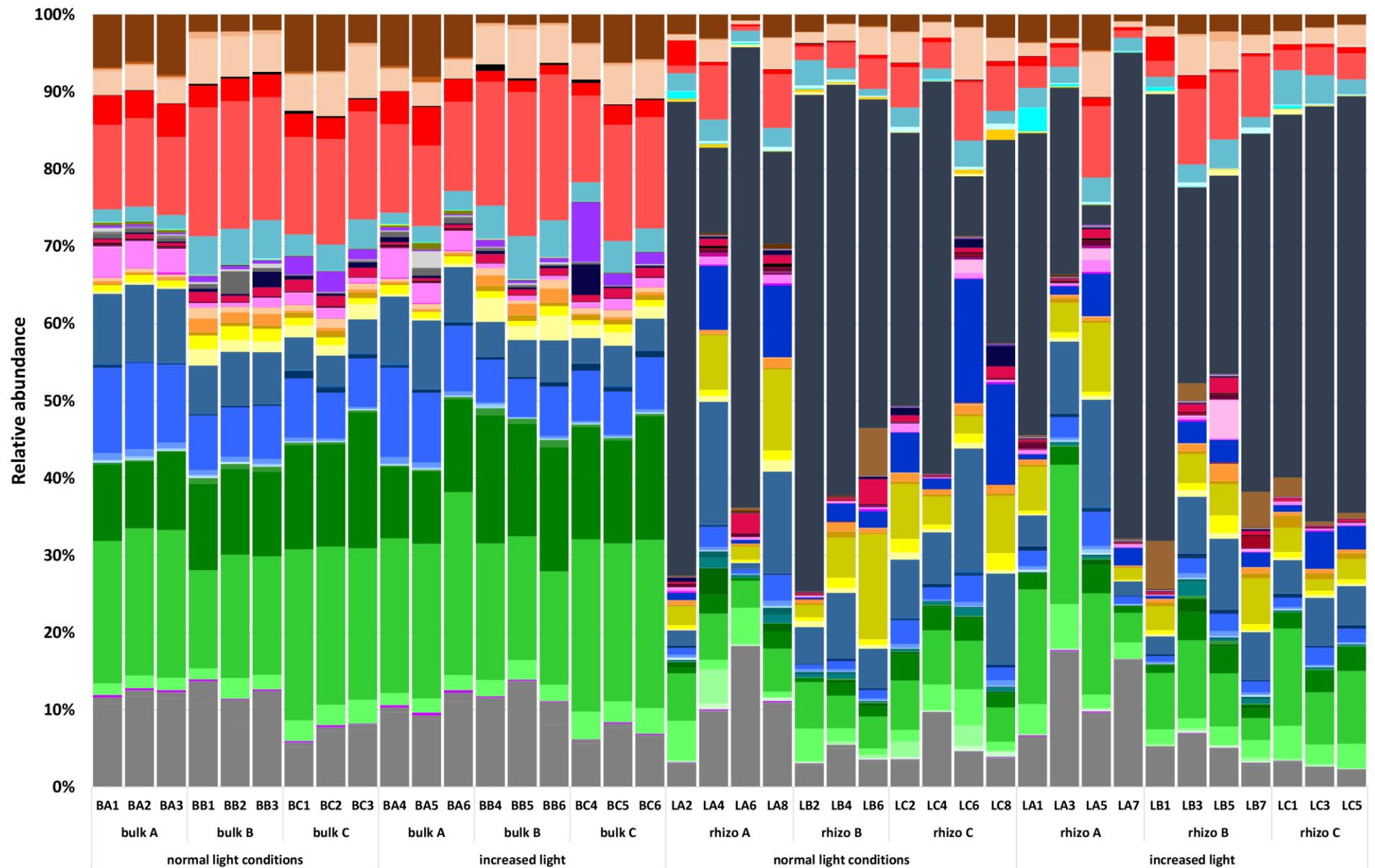


**Figure S1:** Community composition of prokaryotes on genus level representing most abundant genera (98% of relative abundance) in bulk and rhizosphere (rhizo) soils at normal and increased light conditions. A,B,C represent the replicate forest sites. BA, BB, BC stand for bulk soils on site replicate A, B and C. LA, LB, LC stand for rhizosphere soil of *L. decidua* (L) on site replicate A, B and C.

Phylum	Class	Order	Family	Genus
<b>Verrucomicrobia</b>	Subdivision3	Subdivision3 unclassified	Subdivision3 unclassified	Subdivision3 unclassified
	Spartobacteria	Spartobacteria unclassified	Spartobacteria unclassified	Spartobacteria unclassified
	Proteobacteria	Proteobacteria unclassified	Proteobacteria unclassified	Proteobacteria unclassified
<b>Proteobacteria</b>	Gammaproteobacteria	Xanthomonadales	Sinobacteraceae	<i>Steroidobacter</i> spp. Sinobacteraceae unclassified
	Deltaproteobacteria	Gammaproteobacteria unclassified	Gammaproteobacteria unclassified	Gammaproteobacteria unclassified
		Myxococcales	Polyangiaceae	Polyangiaceae unclassified
		Deltaproteobacteria unclassified	Myxococcales unclassified	Myxococcales unclassified
	Betaproteobacteria	Rhodocycles	Deltaproteobacteria unclassified	Deltaproteobacteria unclassified
		Nitrosomonadales	Rhodocyclaceae	Rhodocyclaceae unclassified
		Burkholderiales	Nitrosomonadaceae	<i>Nitrospira</i> spp.
	Alphaproteobacteria	Betaproteobacteria unclassified	Comamonadaceae	Comamonadaceae unclassified
		Sphingomonadales	Burkholderiaceae	Burkholderiaceae unclassified
		Rhodospirillales	Betaproteobacteria unclassified	<i>Burkholderia</i> spp.
<b>Planctomycetes</b>	Planctomycetia	Rhizobiales	Sphingomonadaceae	<i>Sphaerotilus</i> spp. <i>Sphaerotilus</i> unclassified
			Rhodospirillales unclassified	Rhodospirillales unclassified
			Rhodospirillaceae	Rhodospirillaceae unclassified
		Caulobacterales	Reyranella	Reyranella unclassified
			Acetobacteraceae	Acetobacteraceae unclassified
			Xanthobacteraceae	<i>Labrys</i> spp.
		Alphaproteobacteria	Rhizobiales unclassified	Rhizobiales unclassified
			Rhizobiaceae	<i>Rhizobium</i> spp.
			Phyllobacteriaceae	Phyllobacteriaceae unclassified
		Alphaproteobacteria	Hypomicrobiaceae	<i>Mesorhizobium</i> spp. <i>Rhodomicrobium</i> spp. <i>Pedomicrobium</i> spp.
			Bradyrhizobiaceae	<i>Hypomicrobium</i> spp. <i>Devosia</i> spp.
			Caulobacteraceae	<i>Bradyrhizobium</i> spp. <i>Phenyllobacterium</i> spp.
<b>Gemmatimonadetes</b>	Gemmatimonadetes	Gemmatimonadales	Gemmatimonadaceae	<i>Gemmatimonas</i> spp.
	Candidatus Saccharibacteria	Candidatus Saccharibacteria	Candidatus Saccharibacteria unclassified	Candidatus Saccharibacteria unclassified
	Candidate division WPS-1	Candidate division WPS-1	Candidate division WPS-1 unclassified	Candidate division WPS-1 unclassified
	Bacteroidetes	Sphingobacteria	Sphingobacteriales	<i>Mucilaginibacter</i> spp. <i>Terrimonas</i> spp. <i>Ferruginibacter</i> spp.
		Flavobacterii	Sphingobacteriaceae	<i>Chitinophagaceae</i> unclassified
			Chitinophagaceae	<i>Chitinophaga</i> spp. <i>Fluviicola</i> spp.
	Bacteroidetes	Cytophagia	Cryomorphaceae	<i>Ohtaekwangia</i> unclassified
		Bacteroidetes unclassified	Cytophagaceae	<i>Cytophagaceae</i> unclassified
		Bacteroidetes unclassified	Chryseolinea	<i>Chryseolinea</i> unclassified
<b>Bacteria unclassified</b>	Bacteria unclassified	Bacteroidetes unclassified	Bacteroidetes unclassified	Bacteroidetes unclassified
	Actinobacteria	Actinobacteria	Bacteria unclassified	Bacteria unclassified
		Actinobacteria	Actinobacteria unclassified	Actinobacteria unclassified
		Gaiellales	Gaiellaceae	<i>Gaiella</i> spp.
	Acidimicrobiales	Actinomycetales	Streptomycetaceae	Streptomycetaceae unclassified
		Acidimicrobiales	Nocardioidaceae	<i>Streptomyces</i> spp. <i>Kribbella</i> spp.
			Mycobacteriaceae	<i>Mycobacterium</i> spp.
	Acidimicrobiales	Micromonosporaceae	Micromonosporaceae unclassified	Micromonosporaceae unclassified
		Microbacteriaceae	Microbacteriaceae	<i>Agromyces</i> spp.
		Actinospicaceae	Actinospicaceae	<i>Actinospora</i> spp.
<b>Acidobacteria</b>	Acidobacteria	Actinomycetales	Actinomycetales unclassified	Actinomycetales unclassified
		Acidimicrobiales	Acidimicrobiales unclassified	Acidimicrobiales unclassified
		Gp17	Gp17 unclassified	Gp17 unclassified
		Gp16	Gp16 unclassified	Gp16 unclassified
		Gp7	Gp7 unclassified	Gp7 unclassified
		Gp6	Gp6 unclassified	Gp6 unclassified
		Gp5	Gp5 unclassified	Gp5 unclassified
<b>Granulicella</b>	Granulicella	Gp4	Gp4 unclassified	Gp4 unclassified
		Acidobacteria Gp1	Granulicella unclassified	Granulicella unclassified
<b>Acidobacteria Gp1</b>	Acidobacteria Gp1	Acidobacteria Gp1 unclassified	Acidobacteria Gp1 unclassified	Acidobacteria Gp1 unclassified

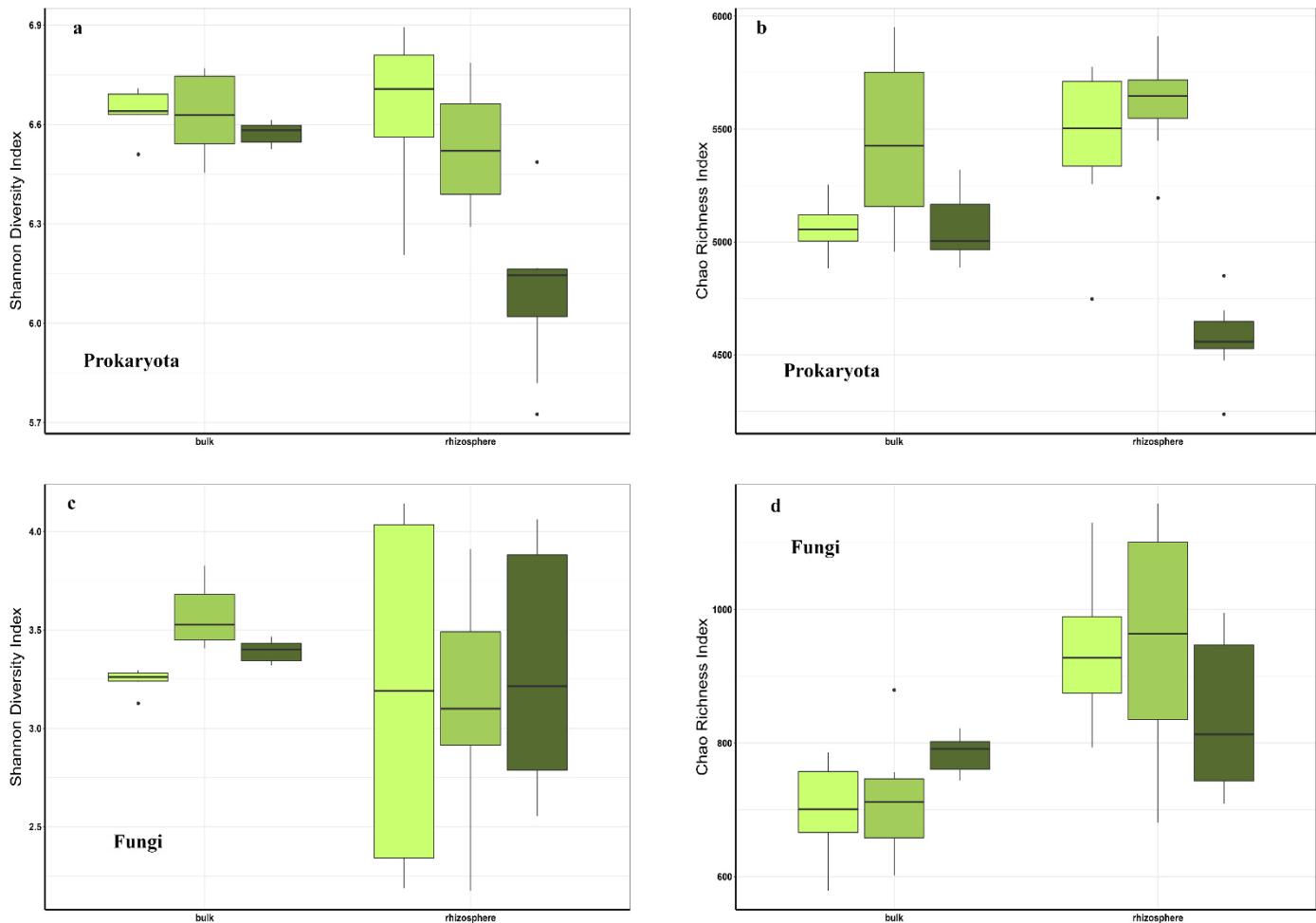
**a****b**

**Figure S2:** Spearman's rank correlation matrix of bacterial classes in bulk (a) and rhizosphere (b) soils. Strong correlations are indicated by large circles and weak correlations are indicated by small circles. The colours of the scale bar denote the nature of the correlation with 1 indicating perfect positive correlation (dark blue) and -1 indicating perfect negative correlation (dark red) between two bacterial classes. Only significant correlations are shown ( $p < 0.05$ ).

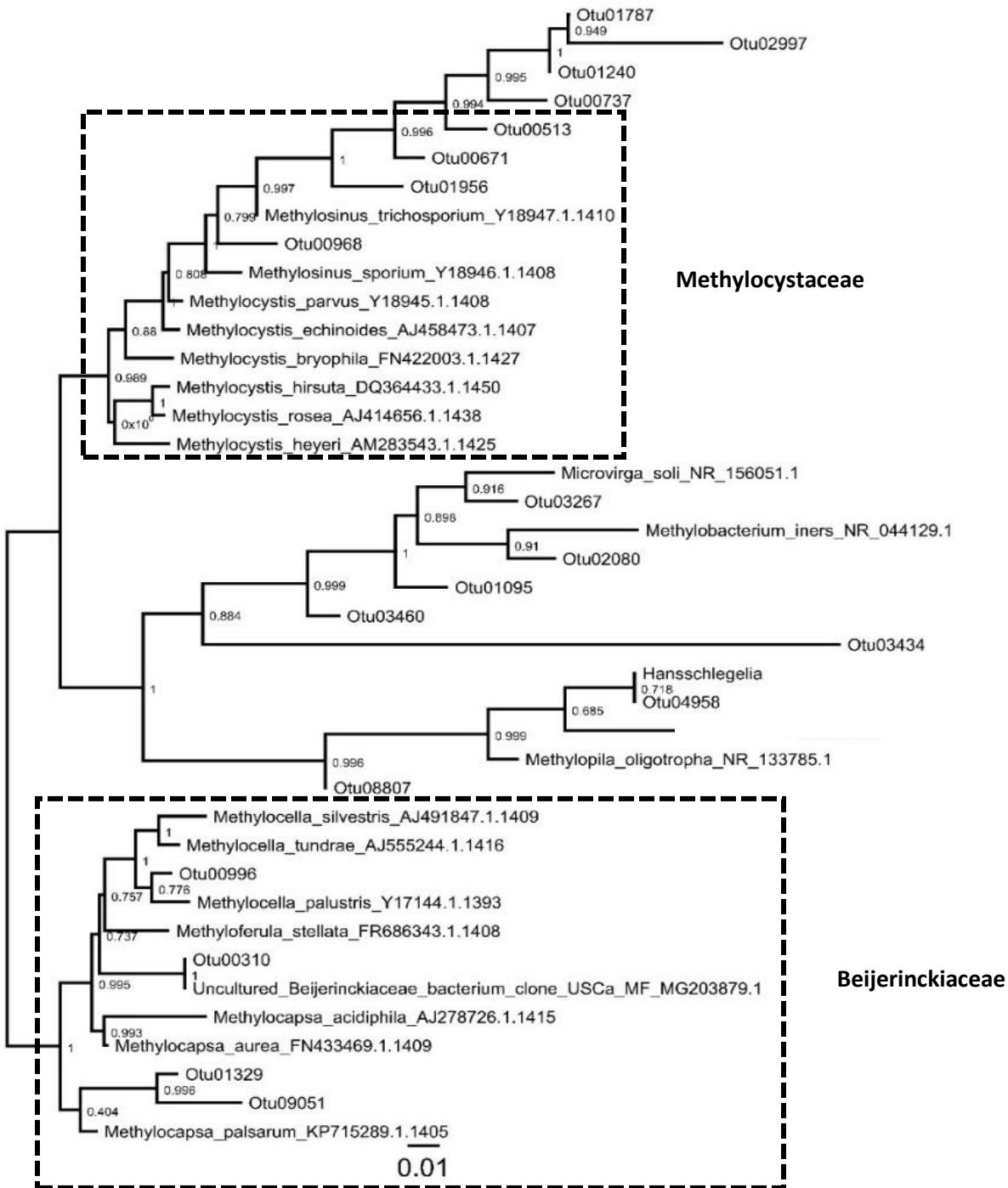


**Figure S3:** Community composition of fungi on genus level representing most abundant genera (99% of relative abundance) in bulk and rhizosphere (rhizo) soils at normal and increased light conditions. A,B,C represent the replicate forest sites. BA, BB, BC stand for bulk soils on site replicate A, B and C. LA, LB, LC stand for rhizosphere soil of *L. decidua* (L) on site replicate A, B and C. LB8 and LC7 were excluded for the description of the fungal community composition as the samples did not meet the quality requirements.

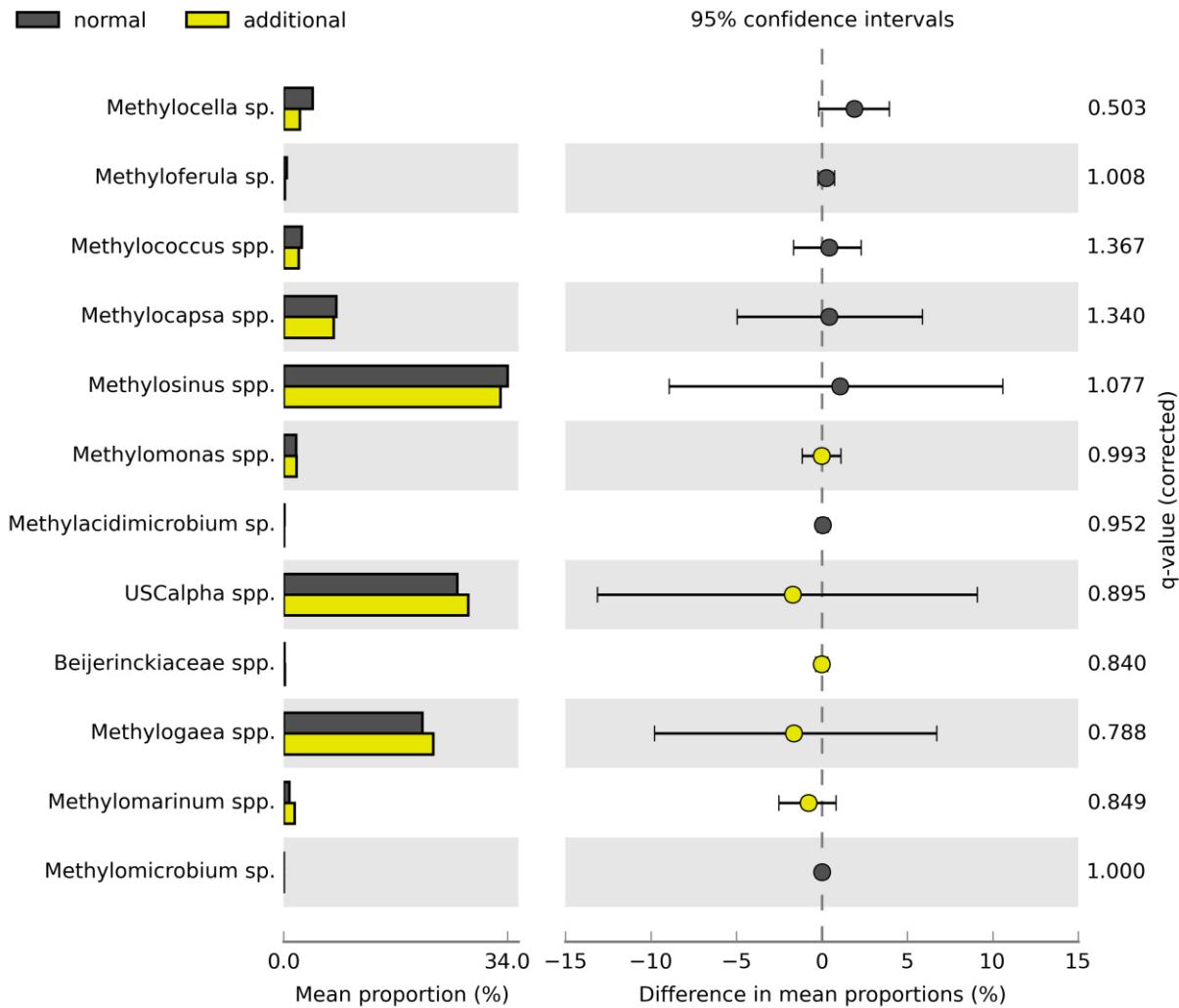
Phylum	Class	Order	Family	Genus
Zygomycota	Zygomycota class Incertae sedis	Mucorales	Umbelopsidaceae Mucoraceae	<i>Umbelopsis</i> spp. <i>Mucor</i> spp. Mucoraceae unclassified <i>Mortierella</i> spp. <i>Ramicandelaber</i> spp.
		Mortierellales Kickxellales	Mortierellaceae Kickxellaceae	
Basidiomycota	Basidiomycota unclassified	Basidiomycota unclassified	Basidiomycota unclassified	Basidiomycota unclassified
	Walleiomycetes	Geminibasidiales	Geminibasidiaceae	<i>Geminibasidium</i> spp.
	Tremellomycetes	Filobasidiales	Filobasidiaceae	<i>Cryptococcus</i> spp.
	Microbotryomycetes	Sporidiobolales	unclassified Sporidiobolales	unclassified Sporidiobolales
	Agaricostilbomycetes	Agaricostilbales Trechisporales	Sporidiobolales family Incertae sedis Chionosphaeraceae unclassified Trechisporales Hydnodontaceae	<i>Rhodotorula</i> spp. <i>Kurtzmanomyces</i> spp. unclassified Trechisporales <i>Trechispora</i> spp. <i>Tomentella</i> spp.
		Thelephorales	Thelephoraceae	<i>Sebacinaceae</i> unclassified
		Sebacinales	Sebacinaceae	<i>Suillus</i> spp.
		Boletales	Suillaceae	unclassified Gomphidiaceae
		Auriculariales	Gomphidiaceae	unclassified Auriculariales
		Agaricales	unclassified Auriculariales Agaricales unclassified	Agaricales unclassified
	Agaricomycetes	Agaricomycetes unclassified	Tricholomataceae Mycenaceae Inocybaceae Hygrophoraceae Agaricaceae	unclassified Tricholomataceae <i>Mycenaceae</i> unclassified <i>Inocybe</i> spp. <i>Hygrocybe</i> spp. <i>Echinoderma</i> spp.
			Agaricomycetes unclassified	Agaricomycetes unclassified
Ascomycota	Ascomycota unclassified	Ascomycota unclassified	Ascomycota unclassified	Ascomycota unclassified
		Xylariales	Hypocreaceae	unclassified Hypocreaceae
	Sordariomycetes	Sordariales Hypocreales	Amphisphaeriaceae Sordariales unclassified Hypocreales unclassified	unclassified Amphisphaeriaceae Sordariales unclassified Hypocreales unclassified
			Hypocreales family Incertae sedis	<i>Stachybotrys</i> spp. <i>Ilyonectria</i> spp. <i>Acremonium</i> spp. <i>Hypocrea</i> spp.
	Pezizomycetes	Pezizales	Hypocreaceae	Hypocreaceae unclassified
	Leotiomycetes	Leotiomycetes order Incertae sedis	Cordycipitaceae	<i>Cordycipitaceae</i> unclassified
			Clavicipitaceae	<i>Metarhizium</i> spp.
		Helotiales	Pyronemataceae	<i>Wilcoxina</i> spp.
			Leotiomycetes family Incertae sedis	<i>Meliomyces</i> spp.
			Helotiales unclassified	<i>Leohumicola</i> spp.
				Helotiales unclassified
				<i>Leptodontidium</i> spp.
				<i>Cadophora</i> spp.
				Dermateaceae unclassified
				Leotiomycetes unclassified
	Eurotiomycetes	Eurotiomycetes unclassified	Trichocomaceae	Trichocomaceae unclassified
		Eurotiales		<i>Penicillium</i> spp.
				<i>Paeciliomyces</i> spp.
				Chaetothyriales unclassified
		Chaetothyriales	Chaetothyriales unclassified	<i>Exophiala</i> spp.
			Herpotrichiellaceae	<i>Cladophialophora</i> spp.
				Herpotrichiellaceae unclassified
				Eurotiomycetes unclassified
				<i>Phoma</i> spp.
		Eurotiomycetes unclassified		Pleosporales family Incertae sedis unclassified
		Pleosporales		Pleomassariaceae unclassified
				<i>Cenococcum</i> spp.
		Hysteriales		unclassified Pseudeurotiaceae
		Dothideomycetes order Incertae sedis		<i>Oidiodendron</i> spp.
				Myxotrichaceae unclassified
				<i>Aureobasidium</i> spp.
				Davidiellaceae unclassified
				<i>Tetrachaetum</i> spp.
				<i>Chalara</i> spp.
	Dothideomycetes	Dothideales	Dothioraceae	Fungi unclassified
	Ascomycota class Incertae sedis	Capnodiales	Davidiellaceae	
		Ascomycota order Incertae sedis	Ascomycota family Incertae sedis	
Fungi unclassified	Fungi unclassified	Fungi unclassified	Fungi unclassified	Fungi unclassified



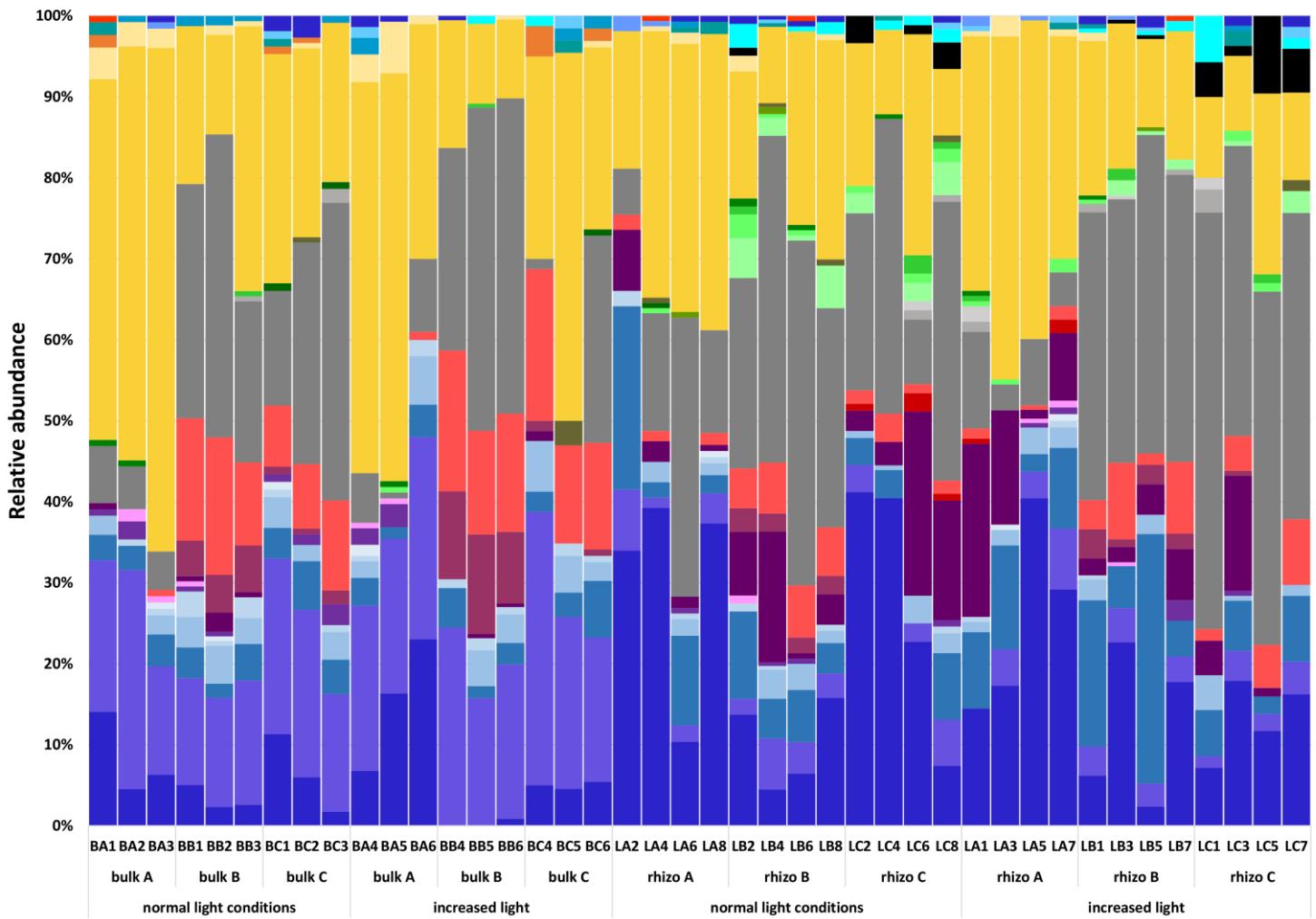
**Figure S4:** Shannon–Wiener Diversity Index ( $H'$ ) (a) and Chao Richness Index (b) of prokaryotic communities and Shannon–Wiener Diversity Index ( $H'$ ) (c) and Chao Richness Index (d) of fungal communities in all bulk and rhizosphere soils of *Larix decidua* (L). The different green colors refer to the replicate sites (A, B, C) in the forest. Boxes represent 25–75% of values, black lines medians ( $n = 3$ ), and whiskers 1.5 interquartile ranges.



**Figure S5:** Unrooted Maximum likelihood tree (PhyML) showing the relationship between selected OTUs that were classified as ‘Rhizobiales unclassified’ as the highest taxonomic resolution and selected reference methanotrophs (and methylotrophic species) within Alphaproteobacteria known from the literature and a reconstructed draft genome of the uncultivated upland soil cluster  $\alpha$  (USC $\alpha$ ) methanotroph (Pratscher et al., 2018). The scale bar represents 1% nucleotide substitution per site and numbers at nodes of the tree indicate Chi<sup>2</sup> values.



**Figure S6:** Extended error bar plot showing mean proportions [%] of methanotrophic genera in rhizosphere soils of *L. decidua* and the respective differences in mean proportions [%] according to normal (grey) and additional (yellow) light conditions. q-values are adjusted p-values following Benjamini-Hochberg method for multiple test correction.



Order	Family	Genus				
<i>Verrucomicrobia</i>	unclassified <i>Verrucomicrobia</i>	<i>Methylacidimicrobium</i> sp. (Otu08201)	Rhizobiales	Beijerinckiaceae	USC <sub>a</sub> Beijerinckiaceae cluster (Otu06160)	
<i>Methylococcales</i>	<i>Methylococcaceae</i>	<i>Methylomonas</i> sp. (Otu03260) <i>Methylomonas</i> sp. (Otu07875) <i>Methylomonas</i> sp. (Otu06015) <i>Methylomonas</i> sp. (Otu04993) <i>Methylomonas</i> sp. (Otu04444) <i>Methylomonas</i> sp. (Otu03413) <i>Methylomicrobium</i> sp. (Otu06027) <i>Methylomarinum</i> sp. (Otu03685) <i>Methylogaea</i> sp. (Otu02547) <i>Methylogaea</i> sp. (Otu00163) <i>Methylococcus</i> sp. (Otu12861) <i>Methylococcus</i> sp. (Otu07827) <i>Methylococcus</i> sp. (Otu07764) <i>Methylococcus</i> sp. (Otu07643) <i>Methylococcus</i> sp. (Otu07070) <i>Methylococcus</i> sp. (Otu05641) <i>Methylococcus</i> sp. (Otu03759) <i>Methylococcus</i> sp. (Otu02779)	Beijerinckiaceae	USC <sub>a</sub> Beijerinckiaceae cluster (Otu04834) USC <sub>a</sub> Beijerinckiaceae cluster (Otu00310) <i>Methylocella</i> sp. (Otu00996) <i>Methylocapsa</i> sp. (Otu09051) <i>Methylocapsa</i> sp. (Otu01445) <i>Methylocapsa</i> sp. (Otu01329) Beijerinckiaceae (Otu07689) <i>Methyloferula</i> sp. (Otu04528)		
			Methylocystaceae		<i>Methylosinus</i> sp. (Otu06414) <i>Methylosinus</i> sp. (Otu02756) <i>Methylosinus</i> sp. (Otu1956) <i>Methylosinus</i> sp. (Otu00968) <i>Methylosinus</i> sp. (Otu00671) <i>Methylosinus</i> sp. (Otu00513)	

**Figure S7:** Community composition of methanotrophs on OTU level in bulk and rhizosphere (rhizo) soils at normal and increased light conditions. A,B,C represent the replicate forest sites. BA, BB, BC stand for bulk soils on site replicate A, B and C. LA, LB, LC stand for rhizosphere soil of *L. decidua* (L) on site replicate A, B and C. OTU, operational taxonomic unit.

**Table S1:** Prokaryotic and fungal community description with dominant phyla, classes, orders and families including the respective relative abundances [%] both, in bulk and rhizosphere soils. Significant differences regarding dominant phyla, classes, families and species are indicated in blue (bulk) and red (rhizosphere). Black colors point to no significant differences between bulk and rhizosphere soils. 1) Abundances are given in the order: bulk, rhizosphere, 2) Significant differences regarding dominant phyla, classes, families and species are indicated in blue (bulk) and red (rhizosphere). Black colors point to no significant differences between bulk and rhizosphere soils.

Domain or kingdom	dominant phyla	relative abundance [%] <sup>1, 2)</sup>	dominant class	class abundance [%] <sup>1, 2)</sup>	dominant order	order abundance [%] <sup>1, 2)</sup>	dominant family <sup>2)</sup>	dominant or exclusive species <sup>2)</sup>
Bacteria	Proteobacteria	34, 37.3	α-Proteobacteria	17, 18	Rhizobiales	9.9, 10.1	Bradyrhizobiaceae	<i>Bradyrhizobium</i> sp.
							Hyphomicrobiaceae	<i>Pedomicrobium</i> sp.
							Rhizobiaceae	<i>Rhizobium</i> sp.
				Rhodospirillales	3.7, 3.8	Acetobacteriaceae	<i>Acidocella</i> sp.	
							Rhodospirillaceae	<i>Inquilinus</i> sp.
		8, 10	β-Proteobacteria	Sphingomonadales	1.3, 2.3	Erythrobacteraceae, Sphingomonadaceae	<i>Altererythrobacter</i> sp.	
				Burkholderiales	1.9, 6.5	Burkholderiaceae	<i>Burkholderia</i> sp.	
						Comamonadaceae		
		3.6, 5.4	γ-Proteobacteria			Oxalobacteraceae		
				Betaproteobacteria unclassified	5.6, 3.1			
				Xanthomonadales	1.4, 3.4	Xanthomonadaceae	<i>Rhodanobacter</i> sp., <i>Pseudoxanthomonas</i> sp.	
						Sinobacteraceae	<i>Steroidobacter</i> sp.	
		δ-Proteobacteria	3.5, 2.4	Myxococcales	2.3, 1.5			
Acidobacteria	22.2, 11.6	Acidobacteria_Gp6	10.6, 3.9					
		Acidobacteria_Gp4	2.6, 0.9					
		Acidobacteria_Gp1	0.1, 2.3				Acidobacteria_Gp1	<i>Granulicella</i> sp.
		Acidobacteria_Gp16	1.8, 0.6					
		Acidobacteria_Gp17	1.7, 0.4					
Bacteria unclassified	15.1, 8.8	Bacteria unclassified	15, 9					
Actinobacteria	9.8, 11.0	Actinobacteria	9, 10.6	Actinomycetales	4.2, 8.2	Streptomycetaceae	<i>Streptomyces</i> sp.	
Bacteroidetes	3.6, 10.17	Sphingobacteriia	2, 6	Gaiellales	2.1, 0.8	Gaiellaceae	<i>Gaiella</i> sp.	
Cd. Saccharibacteria	0.3, 10	Cytophagia	0.7, 2.6	Acidimicrobiales	1.1, 0.7	Acidimicrobiaceae	<i>Ilimatobacter</i> sp.	
Verrucomicrobia	5.8, 4.6	Spartobacteria	4.5, 2.4	Sphingobacteriales	2, 6	Chitinophagaceae	<i>Chitinophaga</i> sp.	
Opitutae	0.1, 0.5	Opitutae	0.1, 0.5	Opitutales	0.1, 0.5	Opitutaceae	<i>Opitutus</i> sp.	
Subdivision 3	0.9, 1.1	Subdivision 3	0.9, 1.1	Subdivision3	0.9, 1.1			

				unclassified			
<b>Planctomycetes</b>	<b>5.7, 3.2</b>	Planctomycetia	<b>5.7, 3.2</b>	Planctomycetales	<b>5.7, 3.2</b>	Planctomycetaceae	<i>Singulisphaera</i> sp., <i>Pirellula</i> sp.
<b>Firmicutes</b>	<b>0.8, 0.7</b>	Bacilli	0.8, 0.7	Bacillales	0.8, 0.7		
<b>Gemmatimonadetes</b>	<b>0.8, 0.6</b>	Gemmatimonadetes	0.8, 0.6	Gemmatimonadales	0.8, 0.6		
<b>Chloroflexi</b>	<b>0.5, 0.8</b>	Ktedonobacteria	<b>0.1, 0.5</b>	Ktedonobacterales	<b>0.1, 0.5</b>		
<b>candidate_division WPS-1</b>	<b>0.5, 0.5</b>	candidate_division WPS-1 unclassified	0.5, 0.5				
<b>Armatimonadetes</b>	<b>0.2, 0.4</b>	Armatimonadia	0.2, 0.4				
<b>Archaea</b>	<b>Thaumarchaeota</b>	<b>0.03, 0.06</b>	Nitrosphaerales	0.03, 0.06	Nitrososphaeria	0.01, 0.03	Nitrosphaeraceae
	<b>Euryarchaeota</b>	<b>0.02, 0.02</b>					
<b>Fungi</b>	<b>Ascomycota</b>	<b>56.5, 38.9</b>	Dothideomycetes	<b>33.5, 15.0</b>	Dothideomycetes order incertae sedis	<b>33, 12</b>	Myxotrichaceae <i>Oidiodendron</i> sp.
							Pseudeurotiaceae
					Pleosporales	<b>0.5, 1.35</b>	Pleosporales family incertae sedis <i>Phoma</i> sp., <i>Setomelanomma</i> sp.
							Pleomassariaceae
					Dothideales	<b>0, 0.7</b>	Dothioraceae <i>Aureobasidium</i> sp.
					Capnodiales	<b>0.05, 0.3</b>	Davidiellaceae
					Hysteriales	<b>0.01, 0.5</b>	Gloniaceae <i>Cenococcum</i> sp.
		Eurotiomycetes	<b>15, 10.6</b>	Eurotiales	6.6, 7.5	Trichocomaceae	<i>Penicillium</i> sp.
					Chaetothyriales	<b>8.3, 2.5</b>	Herpotrichiellaceae <i>Exophiala</i> sp.
		Leotiomycetes	<b>4.6, 7.3</b>	Helotiales	<b>2.5, 6.7</b>	Helotiales family incertae sedis	<i>Cadophora</i> sp.
					Hypocreales	2.0, 1.7	Hypocreaceae
					Pezizales	<b>0.01, 3.7</b>	Pyronemataceae <i>Wilcoxina</i> sp.
<b>Basidiomycota</b>	<b>23.9, 49.4</b>	Agaricomycetes	<b>3.7, 40.6</b>	Boletales	<b>0.07, 38.6</b>	Suillaceae <i>Suillus</i> sp.	
					Agaricales	<b>2.5, 0.4</b>	Hygrophoraceae <i>Hygrocybe</i> sp.
					Trechisporales		
			Tremellomycetes	<b>13.6, 4.7</b>	Filobasidiales	<b>8.8, 2.6</b>	Filobasidiaceae
			Tremellomycetes		Tremellales	<b>4.8, 2.1</b>	Tremellales family incertae sedis <i>Cryptococcus</i> sp.
			Microbotryomycetes	3.5, 2.8	Sporidiobolales	3.3, 2.7	
					Geminibasidiales	<b>2.7, 0.8</b>	Geminibasidiaceae <i>Geminibasidium</i> sp.
<b>Zygomycota</b>	<b>9. 5, 5</b>	Zygomycota class incertae sedis	<b>9.5, 5.0</b>	Mortierellales	<b>4.4, 2.6</b>	Mortierellaceae <i>Mortierella</i> sp.	
					Mucorales	<b>5.1, 2.3</b>	Umbelopsisidaeae <i>Umbelopsis</i> sp.

**Table S2:** Site description and physical and chemical soil characteristics of the replicate study sites (soil site) including dry matter content (DM), pH, electrical conductivity (EC), soil organic matter content (OM), dissolved organic carbon (DOC), maximum water holding capacity (MWHC), total carbon (C) and nitrogen (N) content, carbon/nitrogen ratio (C/N), and plant-available ammonium concentration ( $\text{NH}_4^+$ -N). Data represent means  $\pm$  standard deviations ( $n = 3$ ) in italics.

<i>Soil site</i>	<i>Replicate site</i>	<b>DM</b> [g g <sup>-1</sup> ]	<b>pH</b>	<b>EC</b> [ $\mu\text{S m}^{-1}$ ]	<b>OM</b> [g g <sup>-1</sup> DM]	<b>DOC</b> [ $\mu\text{g g}^{-1}$ DM]	<b>MWHC</b> [g g <sup>-1</sup> DM]	<b>C</b> [%]	<b>N</b> [%]	<b>C/N</b>	<b><math>\text{NH}_4^+</math>-N</b> [ $\mu\text{g g}^{-1}$ DM]
<i>Gschwandtkopf Seefeld/Austria</i>	<b>A</b>	0.67	6.86	82.67	0.11	135.40	0.98	5.45	0.28	19.57	5.29
		<i>0.00</i>	<i>0.05</i>	<i>3.51</i>	<i>0.00</i>	<i>19.60</i>	<i>0.04</i>	<i>0.36</i>	<i>0.01</i>	<i>1.52</i>	<i>0.70</i>
	<b>B</b>	0.65	6.34	103.67	0.11	165.94	1.14	5.53	0.26	21.79	11.82
		<i>0.00</i>	<i>0.05</i>	<i>0.58</i>	<i>0.00</i>	<i>2.13</i>	<i>0.01</i>	<i>0.42</i>	<i>0.01</i>	<i>2.21</i>	<i>1.20</i>
	<b>C</b>	0.71	6.16	89.33	0.09	147.36	0.81	3.95	0.18	21.99	12.51
		<i>0.00</i>	<i>0.19</i>	<i>4.62</i>	<i>0.00</i>	<i>9.11</i>	<i>0.01</i>	<i>0.32</i>	<i>0.01</i>	<i>2.14</i>	<i>1.11</i>

## References

Pratscher, J., Dumont, M. G. & Conrad, R. Assimilation of acetate by the putative atmospheric methane oxidizers belonging to the USC $\alpha$  clade. *Environ. Microbiol.* **13**, 2692–2701; 10.1111/j.1462-2920.2011.02537.x (2011).