

Additional File 2. Relative abundance (%) of methylotrophic genera in 16S rRNA gene profile of soils.

Genus	Putative/ Confirmed	Unplanted soil	Pea Rhizosphere	Wheat Rhizosphere
<i>Hyphomicrobium</i>	Confirmed	4.329	6.219	5.097
<i>Verrucomicrobium</i>	Confirmed	0.715	1.259	1.73
<i>Methylophilus</i>	Confirmed	0.985	1.083	0.615
<i>Beggiatoa</i>	Confirmed	0.187	0.217	0.25
<i>Methylibium</i>	Confirmed	0.232	0.184	0.237
<i>Azosporillium</i>	Confirmed	0.093	0.202	0.182
<i>Methylobacterium</i>	Confirmed	0.168	0.244	0.168
<i>Variovorax</i>	Confirmed	0.102	0.205	0.166
<i>Burkholderia</i>	Confirmed	0.11	0.103	0.136
<i>Methylosinus</i>	Confirmed	0.15	0.106	0.086
<i>Roseomonas</i>	Confirmed	0.04	0.091	0.076
<i>Methylocella</i>	Confirmed	0.076	0.088	0.068
<i>Methylobacillus</i>	Confirmed	0.09	0.088	0.047
<i>Methylocapsa</i>	Confirmed	0.062	0.048	0.044
<i>Sphingomonas</i>	Confirmed	0.025	0.072	0.031
<i>Methylocystis</i>	Confirmed	0.023	0.012	0.026
<i>Methylotenera</i>	Confirmed	0.023	0.021	0.016
<i>Methyloceanibacter</i>	Confirmed	0.008	0.006	0.013
<i>Starkeya</i>	Confirmed	0.017	0.015	0.01
<i>Rhodopseudomonas</i>	Confirmed	0.017	0.018	0.01
<i>Ancylobacter</i>	Confirmed	0.008	0.009	0.01
<i>Xanthobacter</i>	Confirmed	0	0	0.003
<i>Methyloversatilis</i>	Confirmed	0	0	0.003
<i>Methyloligella</i>	Confirmed	0.003	0	0.003
<i>Beijerinckia</i>	Confirmed	0.003	0.003	0.003
<i>Cupriavidus</i>	Confirmed	0	0.003	0
<i>Oharaeibacter</i>	Confirmed	0	0.003	0

<i>Bradyrhizobium</i>	Putative	3.337	3.75	3.586
<i>Flavobacterium</i>	Putative	3.502	0.764	0.796
<i>Gemmatimonas</i>	Putative	0.469	0.42	0.425
<i>Acidovorax</i>	Putative	0.529	0.465	0.237
<i>Leptothrix</i>	Putative	0.074	0.072	0.073
<i>Mesorhizobium</i>	Putative	0.045	0.048	0.055
<i>Pseudomonas</i>	Putative	0.014	0.003	0.013
<i>Verminephrobacter</i>	Putative	0	0.012	0.003
<i>Subaequorebacter</i>	Putative	0.003	0	0.003
<i>Xanthomonas</i>	Putative	0.003	0.003	0
<i>Meganema</i>	Putative	0.003	0.006	0

16S rRNA gene profiles were produced by sequencing of 16S rRNA gene amplicons produced from DNA extracted from pea and wheat plant rhizosphere soils and unplanted soil. Genera were then designated as either confirmed or putative methylotrophs.

Confirmed indicates a genus that contains species confirmed to be capable of methanol oxidation. Putative indicates a genus that contains species that possess methanol dehydrogenase genes.