

**Table S1.** Structure of microbial biomass.

Soil pit	Fungi											Prokaryotes								The proportion of fungi total microbial biomass, %
	Mycelium			Spores (diameter, μm)					Total spore biomass, mg/g	Total biomass of fungi, mg/g	The proportion of fungal mycelium in total fungal biomass, %	Actinomycete mycelium, m/g		Unicellular prokaryotes		Total prokaryotes biomass, mg/g	The proportion actinomycete mycelium in total biomass, %	Total microbial biomass, mg/g		
				2	3	5	Biomass, mg/g	Length, m/g				Number, cells/g×10 <sup>8</sup>	Biomass, μg/g							
	Biomass, mg/g	Lenght, m/g	Number, cells/g×10 <sup>5</sup>	Biomass, mg/g	Number, cells/g×10 <sup>4</sup>	Biomass, mg/g			Number, cell/g×10 <sup>3</sup>	Biomass, mg/g										
RY01	0.294± 0.049	232.88± 41.50	1.59± 0.30	0.053± 0.010	5.42± 0.97	0.063± 0.012	2.42± 0.41	0.013± 0.002	0.129± 0.024	0.423± 0.081	68.1	1.07± 0.20	27.31± 5.12	9.13± 1.67	40.31±7 .26	41.38± 12.05	2.6	0.539± 0.032	78.5	
RY02	0.159± 0.028	125.94± 22.09	1.44± 0.27	0.048± 0.009	4.99± 0.95	0.058± 0.011	3.16± 0.60	0.017± 0.003	0.123± 0.023	0.282± 0.054	56.4	0.57± 0.11	14.54± 2.65	6.12± 1.21	27.02±4 .86	27.59± 3.5	2.0	0.309± 0.005	91.3	
RY08	0.018± 0.003	14.26±0 2.08	1.11± 0.24	0.037± 0.007	9.83± 1.84	0.066± 0.012	– –	– –	0.103± 0.020	0.121± 0.023	14.9	0.20± 0.04	5.17± 0.95	2.25± 0.41	9.93±1. 79	10.13± 2.5	2.0	0.131± 0.060	92.4	
RY04	0.156± 0.027	123.57± 21.75	1.02± 0.20	0.034± 0.006	6.11± 0.95	0.041± 0.008	– –	– –	0.075± 0.014	0.231± 0.044	54.5	0.41± 0.08	10.45± 1.89	6.05± 1.10	26.71±4 .81	27.12± 3.8	1.5	0.258± 0.034	89.5	
RY07	0.143± 0.025	113.27± 19.66	1.26± 0.20	0.042± 0.008	10.73± 2.20	0.072± 0.014	– –	– –	0.114± 0.021	0.257± 0.050	55.6	0.29± 0.05	7.39± 1.40	12.56±2. 49	55.45±9 .98	55.74± 10.2	0.5	0.313± 0.040	82.1	
RY09	0.523± 0.098	413.67± 81.24	1.47± 0.28	0.049± 0.009	8.20± 1.59	0.055± 0.010	7.62± 1.49	0.041± 0.008	0.145± 0.027	0.669± 0.013	78.2	0.19± 0.04	5.07± 0.90	5.84± 1.12	25.78±4 .64	25.97± 4.3	0.7	0.695± 0.006	96.2	
RY10	0.337± 0.064	267.27± 50.43	1.17± 0.24	0.039± 0.007	7.06± 1.23	0.051± 0.010	– –	– –	0.090± 0.017	0.427± 0.083	14.4	2.49± 0.49	66.32± 12.71	2.72± 0.52	12.01±2 .16	14.50± 3.8	17.2	0.442± 0.032	96.6	
RY11	0.083± 0.015	65.67±0 12.57	0.96± 0.19	0.032± 0.005	5.36± 1.00	0.036± 0.007	– –	– –	0.068± 0.013	0.151± 0.028	55.0	1.11± 0.22	29.67± 5.14	2.13± 0.42	9.40±1. 69	10.51± 1.8	10.6	0.162± 0.005	93.2	
R13	0.108± 0.020	85.40±0 16.02	1.35± 0.28	0.045± 0.008	4.99± 0.95	0.058± 0.011	– –	– –	0.103± 0.020	0.211± 0.040	51.1	0.06± 0.011	1.47± 0.20	3.27± 0.64	14.44±2 .60	14.50± 2.3	0.4	0.226± 0.045	93.4	

RY14	0.321±	254.19±	1.53±	0.051±	6.11±	0.041±	11.33±	0.061±	0.153±	0.474±	67.7	0.67±	17.91±	2.42±	10.68±1	11.35±	5.9	0.485±	97.7
	0.062	48.78	0.29	0.009	0.95	0.008	2.03	0.012	0.028	0.094		0.013	3.36	0.47	.92	0.8		0.123	

Note: “-” sign means “not found”

