



Supplement of

Microbial activity responses to water stress in agricultural soils from simple and complex crop rotations

Jörg Schneckner et al.

Correspondence to: Jörg Schneckner (joerg.schneckner@univie.ac.at)

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Table S1. Mean values and SE for all parameters measured at destructive harvests. Parameters are: gravimetric water content (WC, soil pH (pH), activities of β -glucosidase (BG), cellobiohydrolase (CBH), N-acetyl-glucosaminidase (NAG), leucine-amino-peptidase (LAP, phenoloxidase (POX) and peroxidase (PEX), NH_4 , NO_3 , respiration (CO_2), N_2O production (N_2O), extractable organic carbon (EOC), total extractable nitrogen (TEN), microbial biomass C (MBC) and permanganate oxidizable C (POXC)

Colorado complex	% dry soil			nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	µg N g ⁻¹ dry soil	µg N g ⁻¹ dry soil	µg C h ⁻¹ g ⁻¹ dry soil	pg N h ⁻¹ g ⁻¹ dry soil	µg C g ⁻¹ dry soil	µg N g ⁻¹ dry soil	µg C g ⁻¹ dry soil	µg C g ⁻¹ dry soil
	harvest	WC	pH	CBH	BG	NAG	LAP	POX	NO ₃	NH ₄	CO ₂	N ₂ O	ECO	TEN	MBC	POX-C
control	H1	18.13 ± 0.886	5.60 ± 0.05	52.40 ± 8.177	114.2 ± 8.771	84.96 ± 1.958	31.25 ± 1.982	620.5 ± 15.46	70.42 ± 10.20	25.00 ± 5.132	0.480 ± 0.031	0.483 ± 0.045	53.49 ± 10.25	125.1 ± 14.32	12.75 ± 2.668	336.6 ± 62.43
	H2	18.53 ± 0.549	5.15 ± 0.12	44.82 ± 8.031	95.74 ± 6.519	70.98 ± 7.538	14.48 ± 0.192	481.1 ± 14.27	109.4 ± 15.59	0.480 ± 0.048	0.409 ± 0.006	0.000 ± 0.000	23.62 ± 1.737	90.77 ± 4.653	36.64 ± 3.081	306.7 ± 72.21
	H3	19.07 ± 0.576	4.98 ± 0.05	45.98 ± 7.447	144.4 ± 15.10	63.70 ± 5.748	38.29 ± 0.963	459.9 ± 22.40	109.3 ± 14.01	4.425 ± 1.629	0.338 ± 0.030	0.110 ± 0.029	45.60 ± 6.428	136.2 ± 27.48	63.68 ± 28.57	377.6 ± 66.88
	H4	18.69 ± 0.186	5.79 ± 0.29	30.59 ± 7.236	91.40 ± 15.49	60.44 ± 6.474	35.90 ± 0.757	422.1 ± 40.65	109.8 ± 16.82	1.887 ± 0.525	0.172 ± 0.010	0.115 ± 0.039	41.39 ± 7.790	138.7 ± 23.96	95.11 ± 9.727	352.7 ± 28.91
	H5	18.82 ± 0.879	4.95 ± 0.07	47.21 ± 4.051	107.6 ± 11.56	92.32 ± 1.545	57.06 ± 2.421	291.8 ± 99.40	101.0 ± 12.68	0.455 ± 0.122	0.155 ± 0.029	0.011 ± 0.009	38.88 ± 4.837	174.4 ± 30.55	37.61 ± 10.53	367.6 ± 77.09
	H6	18.74 ± 0.676	4.81 ± 0.08	52.65 ± 9.263	107.5 ± 15.21	101.7 ± 4.924	24.27 ± 0.652	382.1 ± 31.30	231.5 ± 19.18	1.682 ± 0.750	0.278 ± 0.028	0.250 ± 0.057	21.03 ± 3.805	206.2 ± 20.56	59.11 ± 8.016	229.6 ± 71.40
	H7	18.27 ± 0.494	4.83 ± 0.08	54.74 ± 9.436	137.8 ± 14.14	84.20 ± 8.007	26.03 ± 1.124	403.3 ± 8.553	219.8 ± 21.86	0.434 ± 0.095	0.192 ± 0.037	0.086 ± 0.029	21.44 ± 5.516	182.0 ± 35.27	25.83 ± 0.451	392.5 ± 69.64
	H8	19.04 ± 1.032	4.82 ± 0.08	37.29 ± 6.609	117.6 ± 12.45	66.52 ± 3.781	31.57 ± 1.474	469.9 ± 12.81	228.3 ± 18.50	0.478 ± 0.066	0.233 ± 0.003	0.248 ± 0.067	24.04 ± 5.765	87.86 ± 5.106	39.82 ± 2.719	320.4 ± 66.35
	H9	19.56 ± 0.611	4.77 ± 0.06	45.64 ± 8.985	82.18 ± 19.55	61.49 ± 7.666	18.93 ± 1.555	430.7 ± 12.90	226.8 ± 18.26	1.213 ± 0.165	0.168 ± 0.025	0.031 ± 0.025	28.18 ± 0.126	233.3 ± 30.75	20.01 ± 4.439	281.9 ± 65.18
	H10	18.66 ± 0.940	4.81 ± 0.09	41.67 ± 3.868	103.3 ± 9.277	65.51 ± 2.876	27.11 ± 0.723	296.9 ± 50.52	246.4 ± 17.55	1.315 ± 0.442	0.124 ± 0.017	0.092 ± 0.024	12.93 ± 3.169	205.3 ± 21.65	31.57 ± 6.704	433.5 ± 73.67
drought	H1	18.13 ± 0.886	5.60 ± 0.05	52.40 ± 8.177	114.2 ± 8.771	84.96 ± 1.958	31.25 ± 1.982	620.5 ± 15.46	70.42 ± 10.20	25.00 ± 5.132	0.480 ± 0.031	0.483 ± 0.045	53.49 ± 10.25	125.1 ± 14.32	12.75 ± 2.668	336.6 ± 62.43
	H2	1.801 ± 0.097	5.13 ± 0.10	27.74 ± 6.048	69.61 ± 10.11	49.41 ± 4.056	11.61 ± 0.062	544.0 ± 11.61	104.0 ± 32.50	12.85 ± 4.861	0.030 ± 0.006	0.000 ± 0.000	36.47 ± 6.019	140.2 ± 32.84	35.87 ± 4.269	371.4 ± 96.97
	H3	19.58 ± 0.836	4.96 ± 0.06	43.83 ± 4.290	131.5 ± 18.72	60.77 ± 7.115	38.55 ± 2.023	443.0 ± 57.56	98.81 ± 14.00	5.081 ± 2.011	0.389 ± 0.047	0.283 ± 0.127	23.59 ± 4.246	117.7 ± 16.01	39.88 ± 8.981	323.5 ± 78.06
	H4	18.73 ± 0.628	5.60 ± 0.20	32.36 ± 5.081	79.14 ± 7.476	60.39 ± 5.111	35.99 ± 0.896	417.8 ± 37.67	97.28 ± 10.58	1.046 ± 0.084	0.188 ± 0.011	0.248 ± 0.033	30.65 ± 1.589	121.2 ± 13.67	92.43 ± 9.723	367.6 ± 74.12
	H5	18.00 ± 0.562	5.03 ± 0.06	45.93 ± 4.258	99.17 ± 11.19	83.43 ± 1.639	62.81 ± 2.985	202.6 ± 37.41	92.22 ± 13.54	0.351 ± 0.039	0.112 ± 0.028	0.000 ± 0.000	31.35 ± 0.807	140.4 ± 23.73	31.15 ± 5.265	376.3 ± 74.02
	H6	18.63 ± 0.513	5.00 ± 0.08	38.12 ± 6.395	77.35 ± 7.004	86.84 ± 3.919	21.24 ± 0.414	321.0 ± 32.82	207.5 ± 16.50	1.462 ± 0.585	0.184 ± 0.034	0.736 ± 0.543	16.25 ± 0.991	170.5 ± 21.36	64.64 ± 12.75	373.9 ± 64.45
	H7	3.436 ± 1.063	5.46 ± 0.45	42.36 ± 6.676	107.1 ± 11.60	69.42 ± 7.562	20.11 ± 0.738	347.4 ± 39.34	194.0 ± 6.796	0.801 ± 0.145	0.017 ± 0.002	0.063 ± 0.029	21.44 ± 3.509	141.5 ± 23.35	28.50 ± 1.887	243.3 ± 53.65
	H8	20.19 ± 1.009	5.10 ± 0.08	31.75 ± 4.667	99.67 ± 13.74	69.48 ± 3.489	31.09 ± 0.190	419.4 ± 15.53	220.5 ± 21.72	0.742 ± 0.058	0.176 ± 0.021	0.204 ± 0.032	18.11 ± 2.864	78.53 ± 10.14	37.83 ± 5.659	319.2 ± 87.14
	H9	19.70 ± 0.784	4.93 ± 0.09	35.32 ± 7.983	70.10 ± 12.16	77.57 ± 6.329	20.23 ± 0.253	385.7 ± 23.68	214.6 ± 20.56	1.351 ± 0.085	0.154 ± 0.035	0.024 ± 0.011	26.59 ± 2.119	223.3 ± 25.04	28.66 ± 8.326	296.8 ± 73.01
	H10	18.28 ± 0.982	4.95 ± 0.09	37.53 ± 7.515	92.52 ± 12.06	70.69 ± 3.921	26.72 ± 0.349	256.0 ± 8.590	228.6 ± 22.41	1.138 ± 0.428	0.117 ± 0.021	0.073 ± 0.039	22.31 ± 6.388	193.9 ± 18.73	44.58 ± 10.70	431.0 ± 69.67
flooding	H1	18.13 ± 0.886	5.60 ± 0.05	52.40 ± 8.177	114.2 ± 8.771	84.96 ± 1.958	31.25 ± 1.982	620.5 ± 15.46	70.42 ± 10.20	25.00 ± 5.132	0.480 ± 0.031	0.483 ± 0.045	53.49 ± 10.25	125.1 ± 14.32	12.75 ± 2.668	336.6 ± 62.43
	H2	31.51 ± 0.465	5.04 ± 0.02	42.59 ± 9.480	86.58 ± 11.14	79.03 ± 2.900	16.76 ± 0.142	564.6 ± 33.38	80.57 ± 13.35	0.620 ± 0.094	0.397 ± 0.027	67.81 ± 5.410	30.46 ± 2.237	101.4 ± 19.65	59.26 ± 9.469	358.9 ± 76.21
	H3	18.99 ± 0.744	5.02 ± 0.07	45.98 ± 8.578	144.3 ± 18.81	65.94 ± 11.19	37.61 ± 1.424	458.8 ± 24.22	119.4 ± 1.663	0.792 ± 0.481	0.261 ± 0.017	5.019 ± 2.942	24.18 ± 4.884	148.5 ± 7.641	36.62 ± 0.489	382.7 ± 77.39
	H4	18.88 ± 0.485	5.43 ± 0.15	38.81 ± 8.695	85.63 ± 14.52	57.17 ± 6.363	36.23 ± 0.948	431.8 ± 11.65	112.5 ± 13.27	0.898 ± 0.173	0.177 ± 0.024	1.795 ± 1.230	38.14 ± 7.363	162.3 ± 36.11	53.58 ± 4.451	418.6 ± 65.69
	H5	18.11 ± 0.869	4.99 ± 0.09	62.06 ± 6.715	113.2 ± 16.39	87.88 ± 5.343	63.47 ± 4.999	175.6 ± 8.891	120.3 ± 16.32	0.534 ± 0.040	0.128 ± 0.013	0.057 ± 0.024	25.34 ± 1.860	114.9 ± 10.65	30.73 ± 2.493	380.1 ± 74.76
	H6	19.24 ± 0.908	4.89 ± 0.08	53.40 ± 11.84	91.55 ± 17.09	75.39 ± 7.635	22.26 ± 0.723	373.6 ± 9.295	227.3 ± 17.79	1.479 ± 0.615	0.203 ± 0.032	0.112 ± 0.028	15.63 ± 2.538	186.4 ± 24.06	53.84 ± 11.18	247.0 ± 77.66
	H7	31.12 ± 0.731	4.91 ± 0.10	61.48 ± 11.76	147.6 ± 16.55	89.35 ± 14.30	29.82 ± 0.285	334.5 ± 6.294	207.8 ± 27.27	0.526 ± 0.094	0.208 ± 0.024	13.22 ± 8.115	18.09 ± 3.735	162.9 ± 28.49	30.86 ± 5.390	253.3 ± 67.96
	H8	18.73 ± 0.356	4.90 ± 0.10	35.91 ± 6.310	106.7 ± 17.66	69.74 ± 8.508	27.28 ± 3.740	451.0 ± 27.69	230.8 ± 21.06	0.812 ± 0.169	0.156 ± 0.024	0.113 ± 0.028	19.22 ± 1.385	89.28 ± 10.71	42.07 ± 6.225	312.9 ± 78.48
	H9	18.39 ± 0.140	4.82 ± 0.08	55.53 ± 11.15	96.62 ± 12.01	71.93 ± 8.873	23.72 ± 1.026	434.4 ± 22.19	209.5 ± 20.69	1.099 ± 0.119	0.181 ± 0.021	0.069 ± 0.056	23.08 ± 3.904	213.6 ± 32.48	25.60 ± 5.691	255.7 ± 81.72
	H10	18.47 ± 1.032	4.87 ± 0.09	50.44 ± 11.00	117.5 ± 17.95	77.52 ± 8.516	27.94 ± 1.126	261.0 ± 8.931	222.3 ± 18.75	0.746 ± 0.206	0.164 ± 0.019	0.046 ± 0.038	16.66 ± 4.137	200.5 ± 18.31	29.60 ± 7.079	436.0 ± 58.45

Colorado simple		% dry soil		nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	μg N g ⁻¹ dry soil	μg N g ⁻¹ dry soil	μg C h ⁻¹ g ⁻¹ dry soil	pg N h ⁻¹ g ⁻¹ dry soil	μg C g ⁻¹ dry soil	μg N g ⁻¹ dry soil	μg C g ⁻¹ dry soil	μg C g ⁻¹ dry soil
control	harvest	WC	pH	CBH	BG	NAG	LAP	POX	NO ₃	NH ₄	CO ₂	N ₂ O	ECO	TEN	MBC	POX-C
	H1	17.95 ± 1.074	5.76 ± 0.17	31.12 ± 6.336	70.53 ± 15.17	61.00 ± 4.428	30.23 ± 3.618	611.8 ± 39.77	83.77 ± 1.485	20.07 ± 5.671	0.763 ± 0.037	0.435 ± 0.057	37.63 ± 3.113	140.5 ± 4.110	26.75 ± 4.904	n.a.
	H2	19.71 ± 0.437	5.74 ± 0.27	33.64 ± 6.900	90.10 ± 12.44	78.82 ± 6.240	15.18 ± 0.336	491.7 ± 29.46	118.1 ± 6.135	0.661 ± 0.210	0.590 ± 0.013	0.000 ± 0.000	33.30 ± 3.180	147.1 ± 3.589	38.38 ± 11.13	498.2 ± 55.10
	H3	19.88 ± 0.599	5.44 ± 0.24	31.17 ± 1.783	106.0 ± 7.524	70.13 ± 0.586	39.60 ± 3.528	435.7 ± 9.611	127.3 ± 0.755	0.662 ± 0.228	0.440 ± 0.013	1.208 ± 0.823	34.78 ± 1.459	159.7 ± 4.289	47.94 ± 6.549	537.4 ± 43.86
	H4	19.65 ± 0.454	5.37 ± 0.08	43.10 ± 8.475	69.41 ± 9.239	82.10 ± 6.483	56.74 ± 6.514	450.9 ± 28.24	130.8 ± 3.383	1.634 ± 0.552	0.235 ± 0.035	0.111 ± 0.025	18.69 ± 4.151	145.5 ± 12.41	104.3 ± 10.23	657.3 ± 97.13
	H5	18.17 ± 0.530	5.84 ± 0.29	48.95 ± 10.54	120.7 ± 25.05	97.21 ± 1.735	51.83 ± 13.67	176.2 ± 9.085	146.2 ± 2.077	0.294 ± 0.020	0.195 ± 0.023	0.009 ± 0.008	39.57 ± 3.539	211.1 ± 6.594	48.77 ± 13.93	422.3 ± 65.48
	H6	19.91 ± 0.576	5.8 ± 0.4	43.71 ± 7.900	103.4 ± 14.08	89.91 ± 5.118	21.20 ± 0.754	355.9 ± 20.33	252.6 ± 8.614	0.469 ± 0.054	0.186 ± 0.003	0.295 ± 0.068	21.88 ± 1.485	207.6 ± 10.13	53.58 ± 10.24	275.6 ± 48.67
	H7	20.00 ± 0.321	5.81 ± 0.36	54.30 ± 7.491	113.8 ± 12.01	103.5 ± 7.833	31.03 ± 0.666	409.6 ± 39.70	220.0 ± 4.380	0.282 ± 0.014	0.215 ± 0.042	0.055 ± 0.042	16.92 ± 0.464	170.5 ± 4.476	43.95 ± 2.491	363.9 ± 40.72
	H8	20.04 ± 0.942	5.80 ± 0.35	39.07 ± 10.00	106.3 ± 15.36	78.94 ± 12.05	22.93 ± 1.504	442.9 ± 22.52	255.3 ± 5.631	0.894 ± 0.494	0.147 ± 0.010	0.149 ± 0.045	24.14 ± 7.228	104.0 ± 13.66	54.75 ± 5.707	386.3 ± 60.71
	H9	19.97 ± 0.498	5.72 ± 0.39	55.25 ± 8.420	88.48 ± 10.46	79.02 ± 2.810	23.35 ± 1.169	405.2 ± 41.06	247.1 ± 6.230	0.896 ± 0.014	0.230 ± 0.038	0.043 ± 0.020	23.33 ± 1.872	263.1 ± 21.69	59.39 ± 10.09	373.9 ± 55.90
H10	19.18 ± 0.523	5.73 ± 0.38	41.47 ± 3.205	92.10 ± 11.23	68.19 ± 2.785	32.64 ± 2.062	394.4 ± 23.73	258.3 ± 7.221	0.400 ± 0.037	0.198 ± 0.040	0.011 ± 0.009	27.55 ± 4.060	240.2 ± 9.197	33.52 ± 2.984	400.0 ± 36.92	
drought	H1	17.95 ± 1.074	5.76 ± 0.17	31.12 ± 6.336	70.53 ± 15.17	61.00 ± 4.428	30.23 ± 2.618	611.8 ± 39.77	83.77 ± 1.485	20.07 ± 5.671	0.763 ± 0.037	0.435 ± 0.057	37.63 ± 3.113	140.5 ± 4.110	26.75 ± 4.904	n.a.
	H2	1.793 ± 0.091	5.78 ± 0.26	27.40 ± 4.902	77.91 ± 8.752	57.61 ± 1.512	12.27 ± 0.179	556.3 ± 19.29	126.1 ± 6.364	6.660 ± 3.909	0.030 ± 0.006	0.037 ± 0.030	57.66 ± 3.199	167.6 ± 7.954	22.02 ± 4.875	409.9 ± 62.52
	H3	20.16 ± 0.731	5.65 ± 0.31	32.55 ± 3.997	104.0 ± 14.51	56.95 ± 4.823	37.03 ± 3.032	407.6 ± 13.95	115.6 ± 2.526	3.525 ± 1.776	0.568 ± 0.011	0.338 ± 0.154	29.67 ± 9.001	141.4 ± 4.364	60.29 ± 6.117	574.8 ± 42.37
	H4	19.07 ± 0.389	5.47 ± 0.13	30.25 ± 4.994	87.41 ± 7.757	78.99 ± 4.075	49.41 ± 4.306	503.8 ± 34.32	111.7 ± 6.293	1.373 ± 0.479	0.255 ± 0.034	0.176 ± 0.065	23.94 ± 2.432	155.9 ± 1.513	85.80 ± 7.331	656.1 ± 74.29
	H5	18.22 ± 0.805	5.96 ± 0.33	48.92 ± 7.644	113.8 ± 11.80	109.3 ± 6.910	51.23 ± 11.08	177.1 ± 13.09	138.9 ± 2.943	0.376 ± 0.090	0.202 ± 0.011	0.031 ± 0.026	29.97 ± 1.726	140.3 ± 14.70	25.86 ± 2.897	416.1 ± 64.51
	H6	19.85 ± 0.589	5.89 ± 0.33	38.12 ± 7.475	88.54 ± 10.07	87.93 ± 11.50	20.63 ± 0.652	331.8 ± 34.65	239.5 ± 11.66	0.502 ± 0.057	0.228 ± 0.019	0.064 ± 0.048	19.96 ± 1.373	191.5 ± 15.43	58.89 ± 13.71	490.7 ± 27.82
	H7	1.873 ± 0.120	5.46 ± 0.21	39.23 ± 3.691	88.75 ± 7.968	74.44 ± 4.338	23.54 ± 0.180	357.4 ± 21.76	209.4 ± 4.712	0.612 ± 0.060	0.016 ± 0.004	0.089 ± 0.037	21.16 ± 3.434	174.1 ± 6.023	25.41 ± 4.048	299.3 ± 51.80
	H8	19.99 ± 0.473	5.96 ± 0.34	34.08 ± 6.455	100.6 ± 12.25	72.87 ± 2.041	22.35 ± 0.849	476.0 ± 7.157	232.7 ± 4.402	1.088 ± 0.707	0.149 ± 0.013	0.294 ± 0.117	23.80 ± 6.642	96.96 ± 10.68	64.42 ± 8.810	357.7 ± 62.42
	H9	19.92 ± 0.465	5.84 ± 0.34	45.68 ± 9.352	88.82 ± 17.99	74.18 ± 2.866	21.03 ± 0.282	386.2 ± 41.84	226.1 ± 9.484	0.912 ± 0.040	0.175 ± 0.019	0.039 ± 0.019	16.46 ± 4.548	192.2 ± 19.85	68.99 ± 10.88	340.3 ± 42.20
	H10	19.06 ± 0.365	5.80 ± 0.34	29.10 ± 3.113	84.16 ± 3.872	61.86 ± 5.718	33.04 ± 2.405	299.2 ± 23.56	247.4 ± 10.18	0.385 ± 0.090	0.132 ± 0.016	0.040 ± 0.024	25.42 ± 2.499	209.7 ± 15.21	38.63 ± 6.122	436.0 ± 52.58
flooding	H1	17.95 ± 1.074	5.76 ± 0.17	31.12 ± 6.336	70.53 ± 15.17	61.00 ± 4.428	30.23 ± 2.618	611.8 ± 39.77	83.77 ± 1.485	20.07 ± 5.671	0.763 ± 0.037	0.435 ± 0.057	37.63 ± 3.113	140.5 ± 4.110	26.75 ± 4.904	n.a.
	H2	32.70 ± 0.483	5.96 ± 0.29	29.35 ± 4.935	83.53 ± 8.256	80.80 ± 4.633	18.75 ± 0.131	546.8 ± 38.31	104.8 ± 4.066	0.656 ± 0.032	0.563 ± 0.029	73.25 ± 16.41	33.39 ± 5.943	132.8 ± 2.744	43.55 ± 1.368	393.7 ± 60.56
	H3	20.35 ± 0.332	5.76 ± 0.32	32.54 ± 4.443	112.4 ± 16.00	62.63 ± 0.955	43.68 ± 0.683	442.2 ± 20.16	121.9 ± 6.065	1.667 ± 0.869	0.386 ± 0.020	1.912 ± 0.428	34.90 ± 8.744	154.4 ± 4.700	57.49 ± 10.76	471.7 ± 71.36
	H4	19.82 ± 0.459	5.47 ± 0.15	40.81 ± 6.801	85.53 ± 9.043	67.65 ± 3.702	44.91 ± 4.915	476.5 ± 38.70	91.06 ± 3.771	1.015 ± 0.281	0.235 ± 0.005	0.558 ± 0.295	26.95 ± 2.396	148.8 ± 11.69	75.09 ± 9.056	488.2 ± 66.96
	H5	18.05 ± 0.531	6.01 ± 0.36	42.37 ± 9.260	119.5 ± 22.07	87.44 ± 8.501	44.62 ± 11.31	173.5 ± 9.495	139.8 ± 2.058	0.342 ± 0.040	0.205 ± 0.030	0.043 ± 0.019	31.55 ± 2.196	171.4 ± 11.28	102.4 ± 21.20	448.4 ± 54.84
	H6	19.76 ± 0.299	5.90 ± 0.38	42.71 ± 11.18	95.12 ± 7.266	82.61 ± 7.342	21.19 ± 2.082	370.6 ± 24.62	229.9 ± 5.366	0.437 ± 0.031	0.168 ± 0.013	0.102 ± 0.042	24.13 ± 0.459	210.2 ± 14.04	37.86 ± 2.084	322.9 ± 84.54
	H7	32.80 ± 0.404	5.99 ± 0.36	59.30 ± 10.74	134.9 ± 10.16	96.06 ± 1.224	38.30 ± 2.389	382.9 ± 29.72	226.5 ± 4.428	0.377 ± 0.039	0.217 ± 0.016	14.42 ± 4.242	23.12 ± 4.805	163.5 ± 11.77	52.24 ± 17.32	393.7 ± 86.80
	H8	20.09 ± 0.425	5.92 ± 0.36	52.88 ± 2.691	127.6 ± 8.464	97.04 ± 10.94	26.33 ± 1.035	483.9 ± 8.744	245.0 ± 9.765	1.007 ± 0.554	0.184 ± 0.029	0.110 ± 0.019	30.80 ± 10.89	83.53 ± 7.565	60.79 ± 16.59	373.9 ± 50.86
	H9	20.02 ± 0.372	5.82 ± 0.39	63.06 ± 2.400	93.00 ± 11.59	71.39 ± 3.297	25.15 ± 1.472	433.2 ± 28.21	231.1 ± 1.313	0.817 ± 0.067	0.203 ± 0.020	0.416 ± 0.205	24.15 ± 4.516	259.0 ± 8.862	21.55 ± 5.280	319.2 ± 59.79
	H10	19.44 ± 0.592	5.94 ± 0.37	44.37 ± 13.13	84.64 ± 2.011	72.06 ± 10.59	39.49 ± 2.907	413.9 ± 46.13	220.0 ± 7.315	0.426 ± 0.040	0.158 ± 0.014	0.023 ± 0.019	30.37 ± 7.847	199.6 ± 2.799	26.80 ± 5.160	414.9 ± 67.91

Maryland complex	% dry soil		nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	μg N g ⁻¹ dry soil	μg N g ⁻¹ dry soil	μg C h ⁻¹ g ⁻¹ dry soil	pg N h ⁻¹ g ⁻¹ dry soil	μg C g ⁻¹ dry soil	μg N g ⁻¹ dry soil	μg C g ⁻¹ dry soil	μg C g ⁻¹ dry soil	
	harvest	WC	pH	CBH	BG	NAG	LAP	POX	NO ₃	NH ₄	CO ₂	N ₂ O	ECO	TEN	MBC	POX-C
control	H1	18.91 ± 0.228	6.55 ± 0.05	52.79 ± 2.202	95.95 ± 2.485	71.56 ± 4.848	43.01 ± 0.889	552.7 ± 15.44	38.17 ± 3.685	0.490 ± 0.027	0.561 ± 0.094	1.094 ± 0.828	41.98 ± 3.867	49.15 ± 3.956	76.01 ± 6.378	665.7 ± 48.55
	H2	19.54 ± 0.439	6.73 ± 0.02	55.77 ± 3.079	107.5 ± 4.803	78.56 ± 3.503	14.67 ± 0.160	440.2 ± 34.63	42.74 ± 0.394	0.617 ± 0.358	0.498 ± 0.040	0.040 ± 0.022	73.59 ± 1.952	55.56 ± 2.661	67.29 ± 11.52	726.3 ± 45.27
	H3	18.97 ± 0.379	6.44 ± 0.04	63.33 ± 8.987	154.7 ± 16.05	71.80 ± 8.629	62.81 ± 3.639	418.1 ± 30.67	46.02 ± 3.745	1.385 ± 0.641	0.412 ± 0.026	0.125 ± 0.003	34.47 ± 7.204	73.17 ± 5.093	115.8 ± 16.28	716.0 ± 44.35
	H4	19.22 ± 0.781	6.06 ± 0.04	59.20 ± 2.780	111.7 ± 10.20	81.82 ± 5.261	80.95 ± 5.059	480.4 ± 30.53	49.90 ± 3.103	0.943 ± 0.126	0.246 ± 0.009	0.172 ± 0.036	56.64 ± 6.520	68.92 ± 5.706	94.07 ± 14.84	669.4 ± 40.61
	H5	17.21 ± 0.759	6.73 ± 0.04	91.03 ± 8.176	219.1 ± 22.64	172.9 ± 13.19	91.96 ± 2.568	60.64 ± 6.278	71.21 ± 8.247	0.507 ± 0.024	0.170 ± 0.031	0.000 ± 0.000	40.70 ± 5.949	106.8 ± 16.41	29.60 ± 3.493	702.1 ± 46.38
	H6	18.03 ± 0.508	6.69 ± 0.06	101.0 ± 3.141	164.6 ± 7.399	118.7 ± 4.474	55.77 ± 1.611	379.7 ± 36.50	177.6 ± 8.035	0.415 ± 0.032	0.154 ± 0.026	0.125 ± 0.058	42.79 ± 2.911	105.7 ± 7.997	88.03 ± 12.54	687.1 ± 50.78
	H7	18.67 ± 0.076	6.69 ± 0.06	63.91 ± 5.027	155.7 ± 13.70	74.25 ± 7.922	45.55 ± 2.185	486.0 ± 32.31	169.5 ± 7.065	0.938 ± 0.387	0.189 ± 0.006	0.032 ± 0.016	20.72 ± 2.807	50.77 ± 4.694	85.87 ± 14.78	660.1 ± 44.90
	H8	18.80 ± 0.190	6.63 ± 0.04	91.44 ± 10.37	174.6 ± 11.01	100.4 ± 12.83	56.31 ± 1.662	553.9 ± 40.75	175.5 ± 8.060	0.207 ± 0.036	0.167 ± 0.026	0.069 ± 0.021	25.21 ± 3.364	168.3 ± 9.569	117.6 ± 17.48	689.0 ± 39.66
	H9	19.81 ± 0.189	6.53 ± 0.05	91.99 ± 15.85	118.3 ± 6.730	87.85 ± 9.626	44.82 ± 2.726	430.3 ± 31.70	178.1 ± 10.99	0.757 ± 0.017	0.173 ± 0.005	0.008 ± 0.005	47.63 ± 6.814	156.4 ± 19.81	136.4 ± 27.00	639.6 ± 47.04
	H10	18.14 ± 0.140	6.51 ± 0.07	57.53 ± 15.60	110.3 ± 10.79	72.25 ± 12.28	55.50 ± 1.560	349.8 ± 3.657	214.0 ± 17.26	0.354 ± 0.009	0.134 ± 0.001	0.025 ± 0.018	63.27 ± 6.312	185.8 ± 30.98	88.54 ± 12.88	692.7 ± 39.68
drought	H1	18.91 ± 0.228	6.55 ± 0.05	52.79 ± 2.202	95.95 ± 2.485	71.56 ± 4.848	43.01 ± 0.889	552.7 ± 15.44	38.17 ± 3.685	0.490 ± 0.027	0.561 ± 0.094	1.094 ± 0.828	41.98 ± 3.867	49.15 ± 3.956	76.01 ± 6.378	665.7 ± 48.55
	H2	0.856 ± 0.042	6.72 ± 0.04	67.77 ± 7.313	110.7 ± 5.583	65.17 ± 6.687	13.39 ± 0.680	450.5 ± 29.05	32.60 ± 2.766	1.265 ± 0.308	0.016 ± 0.004	0.000 ± 0.000	83.10 ± 17.23	51.65 ± 2.138	49.24 ± 13.02	670.4 ± 19.22
	H3	19.09 ± 0.704	6.34 ± 0.06	64.69 ± 2.348	165.6 ± 4.443	56.79 ± 2.448	65.43 ± 1.398	428.1 ± 27.02	50.23 ± 3.755	1.562 ± 0.719	0.547 ± 0.049	0.530 ± 0.302	36.25 ± 6.735	71.41 ± 6.847	98.22 ± 6.565	728.2 ± 80.82
	H4	19.27 ± 0.417	6.04 ± 0.02	61.96 ± 4.356	129.4 ± 2.970	78.10 ± 5.605	81.90 ± 7.003	451.4 ± 31.09	54.34 ± 8.504	1.012 ± 0.193	0.300 ± 0.039	0.164 ± 0.035	46.14 ± 3.825	75.85 ± 8.857	106.1 ± 14.43	718.8 ± 56.91
	H5	18.07 ± 0.224	6.73 ± 0.03	98.14 ± 7.132	214.2 ± 28.39	128.6 ± 9.827	99.76 ± 5.770	58.53 ± 2.479	77.04 ± 4.006	0.419 ± 0.020	0.203 ± 0.013	0.067 ± 0.025	34.11 ± 3.169	87.76 ± 4.047	36.80 ± 2.738	609.8 ± 46.27
	H6	18.49 ± 0.164	6.62 ± 0.08	95.27 ± 9.849	153.0 ± 6.146	91.97 ± 6.345	57.89 ± 4.209	388.6 ± 37.93	183.8 ± 11.13	0.390 ± 0.033	0.216 ± 0.008	0.049 ± 0.025	28.81 ± 3.887	96.15 ± 19.53	123.4 ± 22.58	628.4 ± 44.53
	H7	0.999 ± 0.077	6.64 ± 0.04	71.70 ± 0.888	166.1 ± 13.08	55.25 ± 1.416	40.51 ± 2.168	431.2 ± 30.45	171.2 ± 22.26	0.630 ± 0.025	0.017 ± 0.002	0.039 ± 0.009	52.23 ± 5.614	138.3 ± 21.20	39.64 ± 14.95	695.5 ± 35.42
	H8	16.04 ± 1.880	6.63 ± 0.06	68.69 ± 4.547	164.8 ± 12.47	57.99 ± 5.625	54.88 ± 4.974	624.5 ± 108.3	170.5 ± 6.483	0.245 ± 0.014	0.147 ± 0.011	0.158 ± 0.020	33.11 ± 3.799	163.8 ± 14.76	94.63 ± 6.227	679.7 ± 51.56
	H9	18.26 ± 0.582	6.46 ± 0.03	74.66 ± 10.20	141.9 ± 15.27	57.60 ± 8.078	44.70 ± 4.755	481.9 ± 43.63	163.4 ± 13.68	0.962 ± 0.162	0.180 ± 0.034	0.037 ± 0.020	33.44 ± 3.308	109.7 ± 16.43	123.9 ± 19.61	538.9 ± 66.36
	H10	18.33 ± 0.265	6.53 ± 0.09	66.10 ± 11.32	132.2 ± 1.521	58.37 ± 5.468	56.36 ± 3.060	416.2 ± 34.52	204.8 ± 5.677	0.318 ± 0.020	0.125 ± 0.010	0.032 ± 0.016	67.68 ± 1.619	163.1 ± 16.38	78.55 ± 18.47	715.1 ± 36.32
flooding	H1	18.91 ± 0.228	6.55 ± 0.05	52.79 ± 2.202	95.95 ± 2.485	71.56 ± 4.848	43.01 ± 0.889	552.7 ± 15.44	38.17 ± 3.685	0.490 ± 0.027	0.561 ± 0.094	1.094 ± 0.828	41.98 ± 3.867	49.15 ± 3.956	76.01 ± 6.378	665.7 ± 48.55
	H2	31.40 ± 0.483	6.80 ± 0.04	56.07 ± 5.439	110.9 ± 12.87	75.03 ± 4.881	17.74 ± 1.485	489.4 ± 50.28	37.00 ± 1.664	0.260 ± 0.070	0.513 ± 0.053	9.836 ± 5.408	35.33 ± 12.67	54.45 ± 3.134	134.7 ± 23.14	757.1 ± 22.74
	H3	19.85 ± 0.444	6.33 ± 0.04	62.91 ± 6.485	149.8 ± 15.16	66.71 ± 5.776	59.97 ± 5.905	424.1 ± 42.95	56.11 ± 5.777	2.540 ± 1.487	0.357 ± 0.019	0.351 ± 0.072	42.30 ± 13.85	76.05 ± 7.470	92.61 ± 6.164	764.5 ± 37.28
	H4	19.08 ± 0.080	6.08 ± 0.05	62.99 ± 0.790	120.4 ± 9.980	78.77 ± 2.962	74.22 ± 6.992	475.9 ± 52.62	47.24 ± 2.123	1.177 ± 0.294	0.243 ± 0.041	0.205 ± 0.034	36.38 ± 7.040	63.46 ± 4.345	91.75 ± 8.004	710.4 ± 42.90
	H5	18.04 ± 0.172	6.83 ± 0.05	93.62 ± 15.02	209.8 ± 27.63	147.7 ± 18.88	88.67 ± 6.086	61.56 ± 5.203	74.02 ± 5.154	0.588 ± 0.077	0.134 ± 0.021	0.047 ± 0.027	33.25 ± 3.076	65.05 ± 6.618	35.54 ± 7.970	677.8 ± 43.54
	H6	18.86 ± 0.271	6.70 ± 0.08	95.83 ± 7.214	138.1 ± 11.04	105.0 ± 5.078	53.10 ± 3.623	396.6 ± 23.80	180.8 ± 7.312	0.424 ± 0.031	0.150 ± 0.013	0.052 ± 0.029	33.02 ± 4.952	110.5 ± 12.64	116.5 ± 22.78	704.9 ± 46.57
	H7	30.95 ± 0.754	6.77 ± 0.10	70.44 ± 5.858	167.0 ± 18.18	77.18 ± 7.777	56.21 ± 3.137	497.7 ± 53.98	160.2 ± 6.721	0.513 ± 0.070	0.218 ± 0.008	10.31 ± 2.466	35.36 ± 5.300	44.10 ± 4.048	135.6 ± 27.32	699.3 ± 40.35
	H8	19.39 ± 0.199	6.67 ± 0.07	66.30 ± 7.363	161.9 ± 15.54	71.73 ± 2.823	49.86 ± 4.788	554.7 ± 43.18	186.9 ± 9.915	0.349 ± 0.091	0.182 ± 0.029	0.293 ± 0.145	18.22 ± 2.209	159.4 ± 6.373	104.8 ± 16.88	652.6 ± 31.68
	H9	18.60 ± 0.099	6.63 ± 0.06	81.78 ± 10.42	114.0 ± 18.66	69.45 ± 10.68	37.23 ± 4.474	461.5 ± 40.24	176.4 ± 9.713	1.070 ± 0.177	0.177 ± 0.011	0.000 ± 0.000	41.05 ± 7.072	129.6 ± 8.278	130.5 ± 9.871	643.3 ± 53.39
	H10	17.96 ± 0.281	6.73 ± 0.09	59.17 ± 11.31	118.0 ± 12.72	71.60 ± 7.787	56.94 ± 3.593	397.1 ± 46.67	171.7 ± 13.19	0.399 ± 0.053	0.137 ± 0.008	0.000 ± 0.000	65.94 ± 5.694	142.4 ± 19.92	90.74 ± 14.19	715.1 ± 48.71

Maryland simple	% dry soil		nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	nmol h ⁻¹ g ⁻¹ dry soil	µg N g ⁻¹ dry soil	µg N g ⁻¹ dry soil	µg C h ⁻¹ g ⁻¹ dry soil	pg N h ⁻¹ g ⁻¹ dry soil	µg C g ⁻¹ dry soil	µg N g ⁻¹ dry soil	µg C g ⁻¹ dry soil	µg C g ⁻¹ dry soil
harvest	WC	pH	CBH	BG	NAG	LAP	POX	NO ₃	NH ₄	CO ₂	N ₂ O	ECO	TEN	MBC	POX-C
H1	10.08 ± 1.274	6.81 ± 0.08	54.22 ± 5.164	116.8 ± 10.29	66.87 ± 4.592	47.60 ± 1.166	457.7 ± 112.9	2.196 ± 0.591	0.336 ± 0.020	0.481 ± 0.051	0.054 ± 0.047	21.07 ± 1.715	13.95 ± 0.557	33.37 ± 2.038	437.3 ± 14.38
H2	9.164 ± 2.944	6.93 ± 0.08	46.19 ± 7.045	112.8 ± 14.78	63.89 ± 6.148	13.64 ± 0.580	455.3 ± 87.17	4.108 ± 0.560	0.531 ± 0.181	0.457 ± 0.047	0.051 ± 0.044	49.54 ± 2.689	16.88 ± 0.496	37.61 ± 2.392	502.5 ± 29.85
H3	17.92 ± 0.785	6.75 ± 0.09	51.15 ± 4.588	135.7 ± 5.985	66.35 ± 3.007	62.91 ± 2.227	478.2 ± 111.9	11.67 ± 1.788	2.927 ± 1.400	0.379 ± 0.022	0.103 ± 0.042	10.44 ± 1.810	14.22 ± 4.760	59.19 ± 6.759	703.9 ± 58.59
H4	17.77 ± 0.128	6.28 ± 0.05	45.06 ± 3.707	151.7 ± 12.91	76.67 ± 2.474	66.04 ± 3.345	542.5 ± 134.2	22.59 ± 4.354	2.557 ± 1.440	0.158 ± 0.033	0.143 ± 0.005	62.04 ± 39.11	36.7 ± 17.561	90.70 ± 23.74	462.4 ± 6.772
H5	17.38 ± 0.344	6.87 ± 0.18	62.74 ± 4.934	147.6 ± 7.490	103.9 ± 2.996	55.39 ± 12.59	64.89 ± 9.209	35.17 ± 2.498	0.560 ± 0.036	0.126 ± 0.027	0.069 ± 0.032	28.35 ± 0.872	36.29 ± 5.238	26.77 ± 1.331	433.5 ± 31.76
H6	17.86 ± 0.266	6.72 ± 0.29	48.22 ± 7.601	103.6 ± 20.33	91.31 ± 23.30	44.57 ± 4.461	315.4 ± 69.72	115.7 ± 1.175	0.608 ± 0.079	0.210 ± 0.006	0.081 ± 0.043	14.09 ± 4.028	39.42 ± 4.388	69.67 ± 9.297	465.2 ± 26.52
H7	17.62 ± 0.360	6.68 ± 0.26	77.26 ± 10.52	140.6 ± 13.71	98.39 ± 6.287	45.18 ± 2.700	525.7 ± 101.0	103.8 ± 4.261	0.745 ± 0.305	0.157 ± 0.014	0.119 ± 0.023	18.37 ± 2.932	15.56 ± 6.406	59.03 ± 5.547	488.5 ± 18.29
H8	17.55 ± 0.225	6.67 ± 0.22	34.82 ± 3.409	113.7 ± 11.19	54.52 ± 4.737	40.86 ± 2.383	534.1 ± 101.6	112.2 ± 3.840	0.282 ± 0.040	0.150 ± 0.012	0.186 ± 0.024	11.46 ± 1.081	74.61 ± 5.882	72.71 ± 4.088	485.7 ± 18.22
H9	18.56 ± 0.335	6.54 ± 0.26	43.59 ± 2.412	80.78 ± 2.444	55.12 ± 6.816	37.13 ± 0.704	457.8 ± 79.46	111.7 ± 4.943	0.884 ± 0.049	0.148 ± 0.011	0.060 ± 0.030	21.67 ± 2.990	77.05 ± 9.201	56.06 ± 12.52	453.1 ± 18.24
H10	15.57 ± 0.851	6.60 ± 0.29	62.38 ± 6.725	133.4 ± 8.856	63.98 ± 4.553	42.85 ± 1.248	552.5 ± 84.34	120.6 ± 2.841	0.606 ± 0.082	0.132 ± 0.017	0.010 ± 0.008	52.65 ± 1.793	106.9 ± 10.57	52.92 ± 9.328	502.5 ± 33.79
H1	10.08 ± 1.274	6.81 ± 0.08	54.22 ± 5.164	116.8 ± 10.29	66.87 ± 4.592	47.60 ± 1.166	457.7 ± 112.9	2.196 ± 0.591	0.336 ± 0.020	0.481 ± 0.051	0.054 ± 0.047	21.07 ± 1.715	13.95 ± 0.557	33.37 ± 2.038	437.3 ± 14.38
H2	0.874 ± 0.063	6.80 ± 0.06	41.91 ± 3.670	98.29 ± 6.687	50.95 ± 4.467	12.08 ± 0.188	494.2 ± 111.3	4.375 ± 1.299	0.580 ± 0.055	0.009 ± 0.000	0.030 ± 0.026	64.98 ± 10.11	17.75 ± 0.793	28.46 ± 3.739	525.8 ± 24.36
H3	17.67 ± 0.498	6.59 ± 0.09	42.36 ± 2.836	119.6 ± 8.034	43.33 ± 2.221	60.01 ± 4.577	508.3 ± 126.1	8.258 ± 2.680	0.999 ± 0.513	0.440 ± 0.027	0.202 ± 0.040	18.02 ± 2.423	32.20 ± 8.100	72.63 ± 7.307	751.5 ± 18.76
H4	17.58 ± 0.375	6.29 ± 0.05	45.63 ± 5.232	135.5 ± 9.575	57.55 ± 2.358	68.01 ± 5.341	590.4 ± 147.3	21.08 ± 0.764	1.835 ± 0.434	0.214 ± 0.025	0.168 ± 0.034	29.59 ± 9.156	30.59 ± 5.531	57.48 ± 14.86	486.7 ± 22.31
H5	16.21 ± 0.740	6.85 ± 0.18	60.66 ± 6.984	165.0 ± 17.09	90.46 ± 7.244	68.32 ± 4.466	60.74 ± 13.98	35.12 ± 2.835	0.398 ± 0.060	0.170 ± 0.020	0.015 ± 0.008	25.70 ± 0.858	34.93 ± 1.905	27.58 ± 8.375	347.7 ± 43.35
H6	16.96 ± 0.330	6.71 ± 0.25	51.49 ± 6.230	117.1 ± 10.34	59.70 ± 2.282	47.04 ± 2.191	315.6 ± 68.95	106.3 ± 6.229	0.351 ± 0.019	0.204 ± 0.021	0.025 ± 0.013	15.45 ± 1.372	34.97 ± 7.411	65.09 ± 5.755	447.5 ± 9.266
H7	0.811 ± 0.072	6.62 ± 0.27	77.32 ± 4.051	149.4 ± 5.781	74.47 ± 2.120	42.07 ± 1.112	526.9 ± 88.52	100.2 ± 5.632	1.011 ± 0.445	0.021 ± 0.001	0.061 ± 0.034	33.32 ± 5.133	24.87 ± 4.571	31.17 ± 3.464	439.1 ± 10.75
H8	17.61 ± 0.414	6.64 ± 0.25	33.88 ± 2.329	115.9 ± 6.950	36.31 ± 1.512	42.09 ± 1.355	531.0 ± 89.61	107.3 ± 7.061	0.310 ± 0.057	0.180 ± 0.005	0.119 ± 0.015	16.14 ± 2.259	70.63 ± 1.645	72.70 ± 9.221	467.1 ± 13.95
H9	18.27 ± 0.313	6.58 ± 0.28	39.55 ± 3.073	90.56 ± 6.773	45.27 ± 5.597	38.05 ± 1.420	487.2 ± 115.1	132.0 ± 13.63	0.995 ± 0.174	0.145 ± 0.008	0.048 ± 0.024	48.39 ± 5.328	93.08 ± 17.28	43.11 ± 12.26	565.9 ± 34.60
H10	17.35 ± 0.705	6.59 ± 0.27	68.75 ± 4.331	137.4 ± 8.125	58.45 ± 2.497	45.69 ± 2.099	694.7 ± 146.7	120.8 ± 6.556	0.413 ± 0.018	0.107 ± 0.005	0.014 ± 0.011	53.52 ± 3.379	94.41 ± 2.113	62.26 ± 4.409	474.6 ± 15.32
H1	10.08 ± 1.274	6.81 ± 0.08	54.22 ± 5.164	116.8 ± 10.29	66.87 ± 4.592	47.60 ± 1.166	457.7 ± 112.9	2.196 ± 0.591	0.336 ± 0.020	0.481 ± 0.051	0.054 ± 0.047	21.07 ± 1.715	13.95 ± 0.557	33.37 ± 2.038	437.3 ± 14.38
H2	30.21 ± 0.350	6.90 ± 0.11	38.23 ± 2.818	100.8 ± 6.895	65.39 ± 4.025	17.01 ± 0.729	535.1 ± 112.7	4.838 ± 1.426	0.056 ± 0.014	0.464 ± 0.021	0.765 ± 0.448	54.92 ± 4.492	18.02 ± 1.755	47.72 ± 6.789	422.3 ± 30.56
H3	18.07 ± 0.294	6.59 ± 0.14	46.99 ± 2.494	132.2 ± 2.196	52.24 ± 4.967	57.06 ± 2.857	503.2 ± 112.9	20.11 ± 2.643	1.097 ± 0.291	0.313 ± 0.011	0.146 ± 0.024	15.98 ± 1.205	43.51 ± 5.882	76.79 ± 2.805	537.0 ± 17.46
H4	18.38 ± 0.348	6.36 ± 0.04	54.18 ± 2.983	165.0 ± 8.414	89.65 ± 7.681	76.20 ± 4.054	549.9 ± 115.1	20.50 ± 0.684	0.969 ± 0.075	0.211 ± 0.013	0.179 ± 0.062	16.24 ± 5.165	21.95 ± 3.305	75.26 ± 5.544	527.7 ± 13.73
H5	16.86 ± 0.162	6.97 ± 0.22	68.08 ± 4.264	164.9 ± 14.81	116.2 ± 10.73	66.97 ± 7.329	60.99 ± 13.78	32.82 ± 1.258	0.510 ± 0.032	0.138 ± 0.012	0.160 ± 0.042	23.98 ± 2.450	33.22 ± 5.458	32.77 ± 4.808	450.3 ± 30.37
H6	18.52 ± 0.553	6.71 ± 0.25	62.28 ± 2.928	110.8 ± 4.976	98.37 ± 25.44	51.56 ± 4.083	325.9 ± 75.97	110.5 ± 5.434	0.395 ± 0.015	0.159 ± 0.004	0.103 ± 0.033	16.43 ± 3.276	49.88 ± 5.065	51.03 ± 11.88	457.8 ± 20.70
H7	28.81 ± 0.735	6.72 ± 0.26	79.83 ± 2.426	156.4 ± 2.571	97.94 ± 7.613	55.00 ± 5.204	610.4 ± 121.4	103.0 ± 9.109	0.403 ± 0.046	0.182 ± 0.009	3.165 ± 0.972	27.89 ± 6.844	65.48 ± 8.556	53.51 ± 9.255	446.6 ± 13.28
H8	17.41 ± 0.720	6.62 ± 0.27	53.18 ± 6.332	142.0 ± 6.919	60.30 ± 6.334	45.51 ± 2.449	529.4 ± 79.89	114.4 ± 9.565	0.281 ± 0.041	0.166 ± 0.014	0.098 ± 0.026	14.46 ± 2.967	77.63 ± 11.89	63.13 ± 1.697	452.2 ± 6.593
H9	18.17 ± 0.322	6.53 ± 0.26	50.67 ± 6.375	107.8 ± 16.66	58.52 ± 3.163	40.55 ± 2.330	495.6 ± 89.06	117.1 ± 7.169	1.427 ± 0.400	0.158 ± 0.004	0.026 ± 0.015	36.67 ± 7.403	93.01 ± 11.61	40.53 ± 4.918	440.1 ± 13.66
H10	17.85 ± 0.760	7.45 ± 0.48	57.55 ± 4.123	130.6 ± 8.809	66.43 ± 4.312	44.74 ± 1.337	553.8 ± 135.1	110.9 ± 8.943	0.440 ± 0.047	0.147 ± 0.009	0.011 ± 0.009	56.70 ± 1.839	86.90 ± 8.338	51.08 ± 5.035	507.2 ± 13.01