

Table S1. Physicochemical parameters of niter-bed soil samples^a

Sample ID	Soil pH	Moisture (%)	Ignission loss (%)	Organic compound (%)	Insoluble minerals (%)	Maximum nitrification rate (µg/g soil/day)	Inorganic ion concentration (mg/g-soil)										
							NO ₃	Cl	SiO ₂	P ₂ O ₅	K	Na	Ca	Mg	Al	SO ₃	Fe
OVA1	7.50	21.2	44.4	23.2	29.6	5.6	59.6	19.32	109.4	28.3	37.51	6.50	57.8	9.35	9.10	12.0	8.34
OVA2	7.50	16.0	32.5	15.5	23.6	0.5	39.2	8.89	89.7	37.1	19.25	4.60	136.1	17.06	9.87	10.7	7.29
OVA3	8.00	14.0	23.1	9.1	27.9	184.4	22.1	1.78	114.7	36.7	9.70	2.17	121.7	15.64	11.02	6.8	6.72
OVA4	8.05	19.8	27.2	8.4	45.6	120.0	2.0	N.D.	100.9	32.2	8.84	1.58	78.1	6.49	18.07	4.6	11.44
OVA5	8.15	12.1	19.9	8.8	31.6	664.2	4.6	0.14	114.4	37.9	8.55	1.53	119.0	13.38	11.85	4.3	7.05
OVB2	8.35	5.0	11.6	6.6	57.0	N.T.	11.1	1.37	71.3	30.2	8.36	1.68	65.4	7.19	10.75	2.4	6.44
OVB3	7.60	5.2	13.9	8.6	54.6	N.T.	14.9	1.61	67.8	19.4	8.69	2.31	74.7	9.82	12.10	2.4	5.27
OVC1	7.35	3.6	N.T.	N.T.	N.T.	N.T.	11.9	2.05	69.4	N.T.	8.34	3.12	75.3	11.54	N.T.	N.T.	N.T.
OVC2	7.60	3.9	N.T.	N.T.	N.T.	N.T.	9.5	1.19	101.6	13.8	8.93	2.21	88.6	13.60	N.T.	N.T.	N.T.

^a Data were adopted from previous reports [13, 17]; N.T., not tested; N.D., not detected