

Table. S4. Soil parameters at each survey point.

Point code	Organic layer depth (cm)	A-horizon depth (cm)	Mottles abundance (%)	Organic matter content (%)	Soil moisture (%)	N (mg/kg)	K (mg/kg)	pH	Wet soil color	Clay (%)	Silt (%)	Sand (%)	plant available water (m ³ water/m ³ soil)	Electrical conductivity (µs/m ²)
KP LAKE SED				1.7	48	7.5	12.4	6.12	Yellowish brown	30	10	60	0.09	80.4
KPT1P1	0	17	10	8.8	21.1	7.5	12.4	5.23	Brown	37.5	12.5	50	0.1	161.2
KPT1P10	0	30	0	0.9	5.2	7	24.9	5.68	Brown	15	17.5	67.5	0.1	16.6
KPT1P2	6	13	20	4.5	13.3	7.5	12.4	4.43	Dark gray	42.5	15	42.5	0.11	199.1
KPT1P3	6	10	30	7	19	7	12.4	4.13	Very dark grayish brown	37.5	10	52.5	0.1	116.4
KPT1P4	0	13	0	2.6	11	7.5	29	5.25	Brown	22.5	15	62.5	0.1	63.1
KPT1P5	0.5	23.5	10	9.4	5.5	7.5	45.6	4.71	Brown	12.5	25	62.5	0.11	62.6
KPT1P6	0	16	0	2.3	9.6	7.5	12.4	4.98	Brown	16.25	21.25	62.5	0.1	71.6
KPT1P7	0	14	15	1.7	6.1	7.5	12.4	5.11	Brown	20	35	45	0.13	41.6
KPT1P8	0	20	0	0.4	4.7	7.5	24.9	6.02	Brown	5	15	80	0.09	33.2
KPT1P9	0	19	0	0.9	4.5	7	24.9	5.99	Brown	7.5	12.5	80	0.09	42.7
KPT2P1	0	9	0	5.9	26.2	7	18.7	6.43	Brown	45	12.5	42.5	0.11	365
KPT2P10	1	22	0	8.3	9.8	7	12.4	4.56	Brown	33.75	43.75	22.5	0.16	36
KPT2P2	3.5	12.5	30	7.3	24.9	7	18.7	4.75	Brown	48.75	17.5	33.75	0.12	280
KPT2P3	2	9	34	9.3	18.3	7	15.6	4.33	Grayish brown	61.25	8.75	30	0.11	253
KPT2P4	1	6	10	3.8	12.9	7	12.4	4.05	Very dark gray	37.5	7.5	55	0.09	193
KPT2P5	3	10	50	7.3	17.7	7	39.4	4.22	Dark grayish brown	40	13.75	46.25	0.11	157
KPT2P6	0	17	28	8.1	26.8	7	66.4	4.8	Dark grayish brown	33.75	20	46.25	0.11	119
KPT2P7	3	15	25	6.4	15.7	7	66.4	4.11	brown	38.75	31.25	30	0.14	86
KPT2P8	2	11	0	12	12.3	7	66.4	3.99	brown	27.5	25	47.5	0.12	65
KPT2P9	2	14	40	10.7	24.6	7	66.4	3.94	Dark grayish brown	28.75	35	36.25	0.14	52
KPT3P1	0	26	0	21.8	33.9	7.5	12.4	5.3	Dark	32.5	15	52.5	0.1	180

									yellowish brown					
KPT3P10	0	17	30	10	22.6	7	24.9	4.49	Dark grayish brown	52.5	13.75	33.75	0.12	145
KPT3P2	0	22	20	9.9	23.6	7.5	12.4	4.37	Brown	57.5	15	27.5	0.12	233
KPT3P3	2.5	18.5	57.8	10.6	18.6	7.5	12.4	4.41	Grayish brown	52.5	5	42.5	0.1	165
KPT3P4	5	8	30	11.6	17.9	7.5	12.4	4.46	Dark grayish brown	45	5	50	0.09	113
KPT3P5	1	11	20	10	19.1	7	12.4	4.67	Brown	42.5	12.5	45	0.11	83
KPT3P6	1	9	15	11.1	16.5	7.5	12.4	4.82	Brown	37.5	17.5	45	0.12	81
KPT3P7	4	16	20	8.7	14.4	7.5	12.4	4.19	Brown	40	22.5	37.5	0.12	71
KPT3P8	2	6	30	13.9	14.1	7	24.9	4.38	Brown	33.75	13.75	52.5	0.1	108
KPT3P9	0	13	20	4.3	10.7	7	24.9	4.53	Brown	41.25	13.75	45	0.11	146
PTT1P1	0	22	10	15	44	7.5	24.9	7.06	Brown	45	21.25	33.75	0.12	535
PTT1P10	9	5	20	13.8	20.3	7.5	12.4	4.45	Brown	55	5	40	0.1	288
PTT1P2	3	33	30	13.2	21.4	7.5	24.9	6.01	Brown	52.5	16.25	31.25	0.12	365
PTT1P3	2	13	40	17.6	22.9	7.5	24.9	6	Brown	65	10	25	0.12	230
PTT1P4	3	11	20	12.8	33	7.5	24.9	4.86	Brown	70	8.75	21.25	0.13	317
PTT1P5	3	9	40	12.8	28.3	7.5	24.9	4.73	Brown	70	7.5	22.5	0.13	383
PTT1P6	3.5	14.5	40	13.8	24.6	7.5	18.7	4.81	Brown	62.5	10	27.5	0.12	431
PTT1P7	3.5	17	30	14.1	23.6	7.5	12.4	5.28	Brown	62.5	5	32.5	0.11	291
PTT1P8	3	11	33.3	15.4	19.5	7.5	12.4	4.01	Yellowish brown	63.75	6.25	30	0.11	252
PTT2P1	3	8	80		23	7.5	24.9	6.96	Brown	37.5	20	42.5	0.12	335
PTT2P10	0.7	16.3	10	2.5	26.5	7	12.4	4.56	Brown	21.25	13.75	65	0.09	65
PTT2P2	2	11	50	8.3	35	7.5	45.6	4.16	Brown	42.5	15	42.5	0.11	369
PTT2P3	6	12	50	7.7	29.3	7.5	12.4	4.73	Brown	60	11.25	28.75	0.12	450
PTT2P4	3	10	30	9.5	28.3	7.5	45.6	4.11	Brown	62.5	12.5	25	0.12	340
PTT2P7	3	10	30	12.1	28.1	7.5	12.4	4.32	Dark grayish brown	45	15	40	0.11	242
PTT2P8	2	11	25	9.3	23.1	7	12.4	4.21	Brown	46.25	8.75	45	0.1	133
PTT2P9	3	13	20	9.3	25.6	7.5	18.7	4.02	Very dark gray	40	12.5	47.5	0.1	185
SST1P1	0	24	20	7.1	16.4	7	45.6	5.13	Brown	40	45	15	0.16	443
SST1P10	0	16	0	4.1	4.3	30	83	6.16	Black	5	15	80	0.09	
SST1P2	0	12	40	7	12.8	7	83	4.91	Brown	50	32.5	17.5	0.15	646.5
SST1P3	3	12	30	9.7	20.8	7.5	45.6	4.9	Light	62.5	10	27.5	0.12	396

									brownish gray					
SST1P4	2	16	40	9.6	14.9	7	66.4	4.49	Brown	45	21.25	33.75	0.12	112
SST1P5	0	13		6	10.6	7	66.4	4.52	Dark grayish Brown	20	18.75	61.25	0.1	63
SST1P6	0	8	0	6.7	5.5	7.5	45.6	5.36	Brown	27.5	40	32.5	0.14	97
SST1P7	0	7	29	4.6	6.8	7.5	45.6	5.32	Brown	17.5	26.25	56.25	0.11	52
SST1P8	0	17	29	4.8	3.3	7	45.6	4.78	Light brownish gray	15	47.5	37.5	0.15	84
SST1P9	0	7	0	2.6	4.4	7.5	66.4	4.98	Pale brown	12.5	50	37.5	0.15	
SST2P1	2	30	30	7.5	22.2	7.5	12.4	4.61	Brown	37.5	36.25	26.25	0.15	107
SST2P10	3.5	8.5	40	8.4	31.5	7.5	12.4	5.37	Brown	45.16	37.63	17.21	0.15	209
SST2P2	4	18	30	7.5	25.6	7.5	12.4	4.49	Brown	52.5	25	22.5	0.14	156
SST2P3	6	13	20	6.6	17	7.5	12.4	5.24	Brown	50	28.75	21.25	0.14	184
SST2P5	7	14	40	10.1	17.5	7.5	12.4	5.06	Brown	45	23.75	31.25	0.13	183
SST2P6	5	10	30	5.9	20.5	7.5	12.4	5.17	Brown	52.5	30	17.5	0.14	146
SST2P7	4	9	20	7.4	23	7.5	12.4	5.29	Brown	50	37.5	12.5	0.15	170
SST2P8	3	6	20	9	27.1	7.5	12.4	5.08	Brown	57.5	20	22.5	0.13	280
SST2P9	3	9	30	9.1	30.2	7.5	12.4	5.4	Brown	62.5	20	17.5	0.13	708
SST3P1	0	12	0	8.5	46.5	7.5	12.4	5.72	Brown	46.25	31.25	22.5	0.14	182
SST3P2	5	13	10	8	43.5	15	12.4	6.34	Brown	55	17.5	27.5	0.12	153
SST3P3	7	14	32	7.8	30.5	15	12.4	4.57	Brown	50	25	25	0.13	150.5
SST3P4	3	11	40	8.6	30.1	15	12.4	5.83	Brown	65	16.25	18.75	0.13	310
SST3P5	2	17	20	9.8	45	22.5	12.4	4.22	Brown	33.57	25.83	40.6	0.12	123
SST3P6	5	11	20	8.7	43.5	7.5	12.4	4.67	Dark yellowish brown	51.25	13.75	35	0.12	154
SST3P7	5	8	40	10.9	42	7.5	12.4	4.51	Dark yellowish brown	45	12.5	42.5	0.11	179
SST3P8	3	9	40	13.5	34.7	7.5	12.4	5.74	Brown	46.25	12.5	41.25	0.11	269
SST3P9	3	13	60	7.3	13.9	7.5	12.4	4.66	Yellowish brown	57.5	12.5	30	0.12	170
PTWL					49	7	12.4	6.81	Brown	36.25	11.25	52.5	0.1	519