

Table S1. Basic physicochemical properties of sandy soils

City	Land use / Horizon		Depth	pH in H ₂ O	pH in KCl	C [g/kg]	N [g/kg]	HA	S	CEC	Soil composition
								[mmol/kg]			
BP	DG	Ap	0-20	7.3	7.1	37.02	2.20	8.48	101.85	110.33	loamy sand /sand
		A	20-36	7.4	7.1	32.22	2.14	7.88	102.76	110.63	
		A/C	36-65	7.2	6.8	7.20	0.59	6.60	57.19	63.79	
		CG	65-111	6.7	5.9	1.47	0.19	5.48	22.36	27.83	
		G	>111	6.8	6.0	0.51	0.13	3.38	13.95	17.32	
	AG	Ap	0-20	6.8	6.5	20.95	1.70	10.50	93.70	104.20	loamy sand /sand
		A	20-32	6.5	6.0	19.27	1.59	15.00	74.77	89.77	
		Es	32-69	5.4	4.4	1.71	0.28	10.28	14.48	24.75	
		Bhs	69-91	5.2	4.2	0.56	0.14	6.38	17.99	24.37	
		CG	>91	5.5	4.5	0.60	0.12	6.15	18.91	25.06	
	A	Ap	0-27	5.1	3.7	8.49	0.57	21.37	10.67	32.04	sand
		Es	27-47	5.1	4.0	5.49	0.18	16.50	14.33	30.83	
		Bhs	47-82	5.2	4.2	0.75	0.12	10.50	13.56	24.06	
		C	>82	5.2	4.2	0.52	0.10	7.12	4.62	11.74	
LU	DG	Ap	0-20	6.6	6.3	21.30	1.72	9.75	92.08	101.83	loamy sand /sand
		A	20-35	6.7	6.5	10.00	0.83	6.75	68.19	74.94	
		Bv	35-65	6.5	5.9	1.56	0.10	3.75	29.81	33.56	
		C	>65	6.6	5.9	1.20	0.00	3.00	18.79	21.79	
	AG	Ap	0-20	6.2	5.5	13.80	1.15	12.52	61.44	73.96	loamy sand
		A	20-35	5.8	5.1	5.79	0.57	12.25	53.74	65.99	
		Bhs	35-50	6.0	5.4	3.00	2.03	9.22	43.47	52.69	
		G	50-67	6.2	5.3	1.74	0.10	8.25	52.86	61.11	
	A	C	>67	6.5	5.9	1.44	0.10	3.00	15.13	18.13	sand
		Ap	0-20	4.8	4.0	8.40	0.81	17.25	17.12	34.37	
		Bv	20-50	4.9	3.7	7.64	0.62	9.75	9.84	19.59	
		C	>50	6.0	4.4	0.84	0.10	5.47	18.98	24.45	
T	DG	Ap	0-20	7.3	7.2	15.24	1.65	5.40	93.07	98.47	loamy sand
		A	20-40	7.2	7.0	13.44	1.52	6.38	94.08	100.45	
		A	40-65	6.8	6.3	10.84	1.23	7.50	90.01	97.51	
		AG	65-90	6.8	6.2	6.48	0.68	6.75	87.12	93.87	
		G	>100	7.0	6.3	2.58	0.38	4.73	86.13	90.86	
	AG	Ap	0-20	7.0	7.0	13.39	1.29	6.15	78.49	84.64	loamy sand /sandy loam
		A	20-40	7.1	7.1	7.63	0.81	4.50	65.36	69.86	
		A	40-60	7.0	6.6	4.68	0.52	4.28	47.58	51.85	
		AG	60-80	7.0	6.5	1.98	0.28	3.38	32.49	35.87	
		G	80-100	7.0	6.0	2.25	0.40	4.65	71.97	76.62	
	A	C	>100	6.8	5.8	1.08	0.42	5.10	92.81	97.91	sand
		Ap	0-20	4.3	3.8	7.32	0.73	22.88	10.61	33.49	
		A	20-32	4.3	3.7	5.22	0.56	23.03	8.13	31.15	
		Bv	32-55	4.6	4.1	1.53	0.15	10.35	8.25	18.60	
		Bv/C	55-130	4.7	4.2	0.93	0.08	6.00	5.80	11.80	
	C	>130	4.7	4.3	0.66	0.09	5.85	6.37	12.22		

Explanations: BP – Biała Podlaska, LU – Lubartów, T – Tarnobrzeg, DG – domestic garden,

AG – allotment garden, A – arable field