



Figure S1. Profile photos of the investigated podzols.

Table S1. Texture of studied soils.

Site	Horizon	Depth, cm	Sand					silt		clay
			very coarse	coarse	medium	fine	very fine	coarse	medium and fine	
			2.00-1.00	1.00-0.50	0.50-0.25	0.25-0.10	0.10-0.05	0.05-0.02	0.02-0.002	
Central Siberia (CS), Zotino (Krasnoyarsk region)										
45CS	Epyr	5-11	1	13	46	34	1	0	2	2
	E	11-20	1	9	48	38	1	1	1	2
	Bs	20-45(50)	1	9	39	37	2	3	4	5
	B1	45(50)-70	1	15	50	30	1	0	1	2
79CS	Epyr	2-6	1	8	37	51	2	0	0	1
	E	6-16	0	9	37	49	2	0	1	2
	Bs	16-35	0	7	30	49	2	2	4	6
	B1	35-60	1	10	36	42	2	2	3	4
	B2	60-90	1	8	33	47	1	2	3	5
121CS	Epyr	4-10	0	6	45	44	2	0	1	2
	E	10-20	0	6	44	45	2	0	2	2
	lower part of the tongue		0	10	57	22	0	3	4	4
	Bs1	20-40	0	4	33	48	2	3	4	5
	Bs2	40-60	0	7	38	43	1	3	4	4
	B	60-100	0	7	35	54	1	1	1	1
European North (EN), Pechora-Ilychsky nature reserve (Komi Republic)										
109EN	Epyr	4-7	0	1	19	72	1	2	1	3
	E	7-16	0	1	21	73	1	0	1	2
	Bs1	6-40	0	1	22	63	1	3	4	6
	B1	40-60	0	1	27	63	1	2	3	4
	Black layer	60-80	0	1	31	57	1	3	3	4
	B2	80-100	0	7	58	30	0	1	1	2
113EN	Epyr	4-7	0	2	30	57	3	0	2	6
	E	7-18	0	2	30	56	3	0	2	7
	Bs1	18-25	0	1	28	44	2	4	8	12
	Bs2	25-60	0	1	24	49	3	4	8	12
	B	60-100	0	1	17	59	7	2	4	11
131EN	Epyr	3-7	1	4	31	49	6	1	2	6
	E	7-20	0	4	25	55	6	0	2	7
	Bs	20-35	1	3	22	52	5	3	6	9
	B1	35-60	1	3	27	57	3	2	2	4
	B2	60-100	0	2	18	23	10	6	14	27