

## Supplementary Materials

Table S1: Properties of tested standard soils, which is essential for soil studies (three samples in each group).

Abbreviation of soil sample	pH (in KCl)	Soil organic matter, %	Physical sand fraction percentage (0.05–0.25 mm fine sand)	Physical clay fraction (0.001 mm, silt)
Sandy loam	8	0.38	90.4	6.7
	7.9	0.33	85.4	5.9
	8	0.31	88.7	6.3
Light loam	5.3	0.55	81.7	8.5
	5.7	0.24	79.1	8.9
	5.2	0.38	77.4	8.3
Medium loam	7.3	0.48	57.3	17.3
	7.6	0.38	59.4	15.7
	7.3	0.56	58.9	16.8
Heavy loam	7.5	0.73	28.3	26.4
	7	0.81	29.1	29.2
	7.2	1.01	24.5	29.2
high humus soil	6.3	8.37	17.6	21
	7	7.96	19.1	20.4
	6.8	8.87	18.7	20.9
Sandy loam, 1%	7.8	0.55	84.8	6.2
	6.9	1.34	84	9.8
	6.9	1.04	84.5	7
Sandy loam, 3%	6.7	4.72	67.9	12.8
	6.7	2.26	69.2	13.1
	6.8	1.95	79.4	9.7
Sandy loam, 5%	6.7	5.32	53.4	16.9
	6.8	3.09	74.3	10.8
	6.7	4.21	68	13
Light loam, 1%	6.6	1.24	77.3	8.4
	6.4	1.58	77.1	9
	6.3	1.33	75.6	9.8
Light loam, 3%	7	2.5	70.3	9.7
	6.3	3.46	59	14.2
	6.2	1.84	70	11.5
Light loam, 5%	6.3	5.22	54.1	16.1
	6.3	3.5	58	12.9
	6.8	4.01	58.1	14.1
	6.3	1.52	60.6	13.9

Abbreviation of soil sample	pH (in KCl)	Soil organic matter, %	Physical sand fraction percentage (0.05–0.25 mm fine sand)	Physical clay fraction (0.001 mm, silt)
Medium loam, 1%	7.1	1.2	58.4	16.1
	6.5	0.86	59	15.1
	6.8	1.81	54.1	16.6
Medium loam, 3%	6.8	3.32	53	16.2
	6.8	2.81	53.6	16.2
	7	3.5	48.3	18.2
Medium loam, 5%	6.9	4.92	45.8	17.2
	6.9	5.22	43.8	18.7
	7.1	2.69	26.6	27.8
Heavy loam, 1%	7.2	1.84	29.2	27.1
	7.2	1.64	25.7	28.7
	7.2	4.01	25	28.2
Heavy loam, 3%	7.2	2.76	24	26.1
	7	4.03	24.4	23.8
	7.2	5.42	21.6	25
Heavy loam, 5%	7.1	4.92	23.1	24.2
	7.1	6.03	21.5	26.6