



Table S1: Chemical and physical characteristics of the soils used.

	Sandy soil	Chernozem
Physical and chemical properties		
Dry matter (%)	99.4	96.9
pH	7.0	6.4
Conductivity (mS/m)	2.5	5.4
Loss on ignition (%)	1.2	5.7
Elements for plant growth, total		
Total carbon (%)	0.22	1.9
Nitrogen (%)	0.04	0.21
Phosphorous (%)	0.023	0.071
Potassium (%)	0.067	0.31
Calcium (%)	0.092	0.36
Magnesium (%)	0.12	0.36
Iron (%)	1.00	2.3
Aluminium (%)	0.67	1.7
Boron (mg/kg)	< 5	6.9
Manganese (mg/kg)	170	490
Sodium (mg/kg)	< 50	
Sulphur (mg/kg)	49	210
Available nutrients		
Ammonium-N (%)	0.000755	0.00187
Nitrate-N (%)	0.000294	0.00317
Phosphorous (%)	0.0047	0.010
Potassium (%)	0.010	0.036
Calcium (%)	0.11	0.31
Magnesium (%)	0.0079	0.033
Sodium (%)	<0.005	<0.0051
Heavy metals		
Cadmium (mg/kg)	0.043	0.23
Mercury (mg/kg)	0.009	0.026
Lead (mg/kg)	5.7	17
Nickel (mg/kg)	12	24
Chromium (mg/kg)	7.8	23
Zink (mg/kg)	21	54
Copper (mg/kg)	4.4	17
Arsenic (mg/kg)	3.6	6.3