Table S1. Pre-planting soil physicochemical characteristics. Methods for the soil chemical characterization are described in the soil characterization section. Particle size distribution was quantified by hydrometer analysis on samples previously dry-sieved at 2 mm as detailed in Amendola et al. [31]. All concentrations are on a dry matter basis and represent the means of three replicates ± standard deviation.

PARAMETER	VALUE
pH	7.1 ± 0.20
Alkalinity (% CaCO$_3$)	7.6 ± 0.40
EC (dS/m)	0.8 ± 0.02
Moisture (g/kg)	48.9 ± 4.07
Ash (%)	93.8 ± 0.89
N $_{tot}$ (g/kg)	1.3 ± 0.07
P $_{tot}$ (mg/kg)	286.8 ± 15.90
P$_{av}$ (mg/kg)	<12.0 ± 0.00
C $_{tot}$ (g/kg)	18.9 ± 0.40
CEC (cmol/kg)	33.8 ± 3.43
Particle size distribution:	
ø >2 mm (%)	13.2 ± 0.7
200 μm < ø < 2 mm (%)	39.4 ± 1.6
50 < ø < 200 μm (%)	11.4 ± 1.2
20 < ø < 50 μm (%)	5.0 ± 0.2
2 < ø < 20 μm (%)	17.1 ± 2.4
ø < 2 μm (%)	13.9 ± 1.9