

Table S1. Physical properties of soils under *A. gigantea* stands at 13 sites in southern Illinois.

*Standard error of the mean. ‡Mean and range represent 12 sites.

Parameter	Mean ± SE*	Range
Soil Strength (MPa)	0.59 ± 0.02	0.04-1.42
Water Content (%)	30.75 ± 1.51	4.40-59.70
Infiltration (cm hr ⁻¹)‡	61.40 ± 20.76	5.74-198.89
Bulk Density (g cm ⁻³)	1.32 ± 0.02	1.01-1.59
Sand (%)	18.70 ± 1.78	4.00-46.80
Silt (%)	63.76 ± 2.06	34.00-79.60
Clay (%)	17.53 ± 1.02	8.00-29.20

Table S2. Chemical properties of soils under *A. gigantea* stands at 13 sites in southern Illinois.

*Standard error of the mean.

Parameter	Mean ± SE*	Range
pH	6.09 ± 0.18	5.30-7.10
Phosphorus (kg ha ⁻¹)	57.60 ± 7.72	17.59-120.61
Potassium (kg ha ⁻¹)	235.80 ± 18.38	125.63-366.84
Calcium (kg ha ⁻¹)	4079.13 ± 465.57	1368.12-8084.34
Magnesium (kg ha ⁻¹)	866.37 ± 380.73	198.50-5348.10
Organic Matter (%)	2.27 ± 0.06	1.80-2.60
CEC (meq 100 g ⁻¹)	12.37 ± 0.99	6.30-17.80