



Appendix

Source	DF	Type III Sum of Squares	Mean Square	F-value	Pr>F	CV
Tree Species						
PH	2	0.80543	0.40272	4.05	0.045	4.668
EC (mmhos/Cm)	2	0.00031111	0.00015556	0.01	0.99	28.3274
OC (%)	2	8.33874444	4.16937222	12.19	0.001	10.4831
OM (%)	2	25.75914444	12.8795722	13.88	8E-04	9.99745
TN (%)	2	0.06164444	0.03082222	12.36	0.001	10.38
P (mg/kg soil)	2	12.44981111	6.22490556	4.99	0.027	21.9968
Ca (Cmol (+)/kg soil)	2	0.4825	0.24125	0.21	0.81	13.4215
Mg (Cmol (+)/kg soil)	2	5.69053333	2.84526667	0.79	0.476	6.13415
K (Cmol (+)/kg soil)	2	0.09563333	0.04781667	0.49	0.62	26.5735
Na (Cmol (+)/kg soil)	2	0.01074444	0.00537222	1.01	0.39	23.1025
CEC (Meq/100g soil)	2	15.47167778	7.73583889	4.07	0.045	11.142
Canopy Cover (CC)						
PH	1	0.81493889	0.81493889	8.19	0.014	4.668
EC (mmhos/Cm)	1	0.13005	0.13005	8.23	0.014	28.3274
OC (%)	1	2.30408889	2.30408889	6.74	0.234	10.4831
OM (%)	1	7.28347222	7.28347222	7.85	0.016	9.99745
TN (%)	1	0.01742222	0.01742222	6.98	0.022	10.38
P (mg/kg soil)	1	0.25442222	0.25442222	0.2	0.66	21.9968
Ca (Cmol (+)/kg soil)	1	0.61235556	0.61235556	0.53	0.48	13.4215
Mg (Cmol (+)/kg soil)	1	11.18645	11.18645	3.1	0.104	6.13415
K (Cmol (+)/kg soil)	1	1.33388889	1.33388889	13.72	0.003	26.5735
Na (Cmol (+)/kg soil)	1	0.03645	0.03645	6.83	0.023	23.1025
CEC (Meq/100g soil)	1	10.90445	10.90445	5.74	0.338	11.142
TS *CC						
PH	2	0.19314444	0.09657222	0.97	0.407	4.668
EC (mmhos/Cm)	2	0.02253333	0.01126667	0.71	0.51	28.3274
OC (%)	2	4.70047778	2.35023889	6.87	0.01	10.4831
OM (%)	2	13.35647778	6.67823889	7.2	0.009	9.99745
TN (%)	2	0.03417778	0.01708889	6.85	0.01	10.38
P (mg/kg soil)	2	7.64847778	3.82423889	3.06	841	21.9968
Ca (Cmol (+)/kg soil)	2	0.57401111	0.28700556	0.25	0.784	13.4215
Mg (Cmol (+)/kg soil)	2	4.5844	2.2922	0.64	0.55	6.13415
K (Cmol (+)/kg soil)	2	0.33307778	0.16653889	1.71	0.22	26.5735

Na (Cmol (+)/kg soil)	2	0.03243333	0.01621667	3.04	0.086	23.1025
CEC (Meq/100g soil)	2	16.07023333	8.03511667	4.23	0.041	11.142
Error						
PH	12	1.19453333	0.09954444			
EC (mmhos/Cm)	12	0.18973333	0.01581111			
OC(%)	12	4.10446667	0.34203889			
OM (%)	12	11.13173333	0.92764444			
N (%)	12	0.02993333	0.00249444			
P (mg/kg soil)	12	14.97746667	1.24812222			
Ca (Cmol (+)/kg soil)	12	13.85753333	1.15479444			
Mg (Cmol (+)/kg soil)	12	43.23846667	3.60320556			
K (Cmol (+)/kg soil)	12	1.1666	0.09721667			
Na (Cmol (+)/kg soil)	12	0.064	0.00533333			
CEC (Meq/100g soil)	12	22.80986667	1.90082222			

Appendix Table 1: ANOVA for the effects of tree species, canopy cover and their interactions on soil chemical nutrients.

TN = total nitrogen; OM = organic matter; Av. P = available phosphorus; Na = sodium; K = potassium; Ca = calcium; Mg = magnesium; CEC= cation exchange capacity, EC= electrical conductivity; Df = degree of freedom, CV= coefficient of variation, Pr > F = probability, CC= canopy cover and TS=tree species.

