

Table A2. Statistical Post Hoc Tukey p values for the measured soil parameters. The p values represent the results of comparisons made between the Brooklands grassland and adjacent *E. grandis* plantations and within the different age-classes of *E. grandis* plantations. The p values shown were for comparisons made within seasons. Yellow highlighting indicates significance at the five percent level and red highlighting indicates significance at the one percent level.

		Brooklands vs 2 yr old <i>E. grandis</i>		Brooklands vs 8 yr old <i>E. grandis</i>		Brooklands vs 13 yr old <i>E. grandis</i>		2 yr old <i>E. grandis</i> vs 8 yr old <i>E. grandis</i>		2 yr old <i>E. grandis</i> vs 13 yr old <i>E. grandis</i>		8 yr old <i>E. grandis</i> vs 13 yr old <i>E. grandis</i>	
		Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer
Clay	soil	0.000	na	0.000	na	0.212	na	0.001	na	0.001	na	0.000	na
Silt (2-20µm)	soil	0.337	na	0.848	na	0.015	na	0.114	na	0.188	na	0.008	na
Silt (20-50µm)	soil	0.063	na	0.113	na	0.119	na	0.975	na	0.968	na	1.000	na
Sand	soil	0.838	na	0.004	na	0.097	na	0.010	na	0.030	na	0.008	na
Water content	soil	0.968	0.108	1.000	0.099	0.651	0.019	0.958	1.000	0.987	0.848	0.621	0.877
pH	soil	0.001	0.055	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	1.000	0.017
BASIC CATIONS													
Na ⁺	soil total	0.999	0.842	0.715	0.998	0.995	0.886	0.434	0.987	1.000	1.000	0.373	0.995
Na ⁺	soil exch	0.980	0.734	0.838	0.940	0.542	0.371	0.999	0.999	0.940	0.993	0.998	0.895
Mg ²⁺	soil total	1.000	0.999	0.613	1.000	1.000	1.000	0.656	1.000	1.000	1.000	0.678	1.000
Mg ²⁺	soil exch	0.929	0.190	0.841	0.999	0.113	0.139	0.302	0.094	0.446	1.000	0.020	0.068
K ⁺	soil total	0.988	0.990	1.000	1.000	1.000	0.993	0.971	0.999	1.000	0.788	0.999	0.960
K ⁺	soil exch	0.779	0.834	0.042	0.514	0.095	0.974	0.288	0.097	0.567	0.379	0.997	0.937
Ca ²⁺	soil total	0.809	0.102	0.940	0.995	0.997	0.874	0.291	0.042	0.984	0.485	0.682	0.533
Ca ²⁺	soil exch	1.000	0.599	0.722	0.979	1.000	1.000	0.656	0.228	1.000	0.794	0.587	0.888
Sum of exch Ca ²⁺ , Mg ²⁺ , K ⁺	soil exch	1.000	0.164	0.171	0.775	1.000	0.956	0.153	0.024	1.000	0.533	0.108	0.291
ACIDIC CATIONS													
Mn ²⁺	soil total	0.837	0.162	1.000	0.987	0.848	0.435	0.958	0.423	1.000	0.985	0.963	0.840
Mn ²⁺	soil exch	0.964	0.497	1.000	0.998	0.725	0.901	0.951	0.802	0.997	0.985	0.691	0.997
Fe ³⁺	soil total	0.870	0.422	0.981	0.369	1.000	0.784	1.000	0.956	1.000	0.994	0.998	0.985
Fe ³⁺	soil exch	0.998	0.993	1.000	1.000	0.988	0.904	0.992	0.991	0.843	0.999	0.997	0.889
Al ³⁺	soil total	0.973	0.483	0.929	0.158	1.000	0.800	1.000	0.969	0.991	0.997	0.966	0.751
Al ³⁺	soil exch	0.948	1.000	0.012	0.033	0.340	0.241	0.045	0.027	0.852	0.195	0.251	0.754
Exchangeable acidity	soil exch	0.624	1.000	0.003	0.017	0.125	0.106	0.024	0.016	0.827	0.104	0.146	0.801
Aluminium saturation	soil exch	0.865	0.836	0.005	0.030	0.244	0.572	0.024	0.006	0.845	0.113	0.138	0.332
Ca:Al	soil exch	0.568	0.540	0.067	0.831	0.288	0.994	0.635	0.102	0.997	0.250	0.922	0.994
TOTAL N, P, C													
N	soil total	0.935	1.000	1.000	0.982	0.995	0.677	0.879	0.998	1.000	0.807	0.982	0.982
P	soil total	0.254	1.000	0.947	0.254	0.947	1.000	0.739	0.254	0.739	1.000	1.000	0.254
C	soil total	1.000	0.684	1.000	0.826	0.565	0.188	1.000	1.000	0.585	0.909	0.786	0.792
C:N	soil total	0.119	1.000	0.517	1.000	0.193	1.000	0.895	0.999	1.000	0.998	0.982	1.000
Anaerobic N min index	soil	0.739	0.880	0.047	0.135	1.000	0.891	0.087	0.009	0.047	1.000	1.000	0.010