

## Digital supplementary material to

GUNAWARDENE, N.R., MAJER, J.D. & EDIRISINGHE, J.P. 2012: Correlates of ant (Hymenoptera: Formicidae) and tree species diversity in Sri Lanka. – *Myrmecological News* 17: 81-90.

**Appendix 1:** Distance-based linear modelling (DISTLM) of tree species assemblage with non-collinear environmental variables, demonstrated the same patterns as ant species assemblages. Of the seven environmental variables analysed, foliage density at 0 - 50 cm and elevation were significant at the  $P < 0.05$  level. The others were per cent stone cover (stone), per cent plant cover (plant), litter depth (Litter D), foliage density at 0 - 50 cm, 51 - 100 cm, 101 - 150 cm, 151 - 200 cm, together with total number of ant species per quadrat and elevation. SS = sum of squares; Prop represents the proportion of variation explained by each variable.

Variable	SS (trace)	Pseudo-F	P	Prop.
stone	1408.7	0.79636	0.541	5.77E-02
plant	1380.5	0.77949	0.601	5.66E-02
Litter D	3178.6	1.9467	0.072	0.13025
0 - 50	4725.8	3.122	0.019	0.19365
51 - 100	746.42	0.41015	0.974	3.06E-02
101 - 150	769.57	0.42329	0.979	3.15E-02
151 - 200	1322.9	0.74508	0.635	5.42E-02
No. of ant species	1157.2	0.6471	0.771	4.74E-02
Elevation	8094.8	6.4521	0.001	0.33169

**Appendix 2:** Distance-based redundancy analysis (dbRDA) performed on a Bray-Curtis dissimilarity matrix of tree species presence / absence. The ordination shows 15 plots (five plots along three parallel transects going down- slope: 1 = ●; 2 = ▼; and 3 = ■), and the influence of seven non-collinear variables: per cent stone cover (stone); per cent plant cover (plant); litter depth (Litter D); foliage density at 0 - 50 cm, 51 - 100 cm, 101 - 150 cm, 151 - 200 cm; and number of ant species per plot and elevation.

