## Figure 1

Figure 1: Relative abundance (RA) of foliar fungal endophytes (FEF) in leaves of seedlings of seven tropical tree species. Data include OTUs representing Ascomycota only. (a) Box plots show individuals’ RA and its distribution by species. (b) The RA of OTU’s by treatment within each tree species. Pink outlined box plots represent low endophyte (*E-low*) treatment and yellow filled represent high endophyte (*E-high*) treatment. Relative abundance is the percentage of endophyte colonization within individuals of the same species. Statistical significance was calculated using a two-sided Student’s t-Test. Significance levels are represented by *ns* (not significant) and asterisks [*p* < .05 (\*), *p* < .01 (\*\*), *p* < .001 (\*\*\*), *p* < .001 (\*\*\*), and *p* < .0001 (\*\*\*\*)].

## Figure 2

Figure 2: Distribution of values of herbivory (%) damage caused by *Atta colombica* in treatment groups (*E-low* and *E-high*) and pathogen damage cause by *Calonectria*sp. tree species. a) Comparison of herbivory (%) means between treatment groups across individuals of all species. b) Comparison of the absolute pathogen damage (%) means between treatment groups across individuals of all species (values from 'control' treated leaves were subtracted from 'pathogen' treated leaves). Pink represents low FEF group (*E-low*) and yellow outlined box plots represent high FEF group (*E-high*). Statistical significance was calculated using a two-sided Student’s t-Test. Significance levels are represented by *ns* (not significant) and asterisks [*p* < .05 (\*), *p* < .01 (\*\*), *p* < .001 (\*\*\*), *p* < .001 (\*\*\*), and *p* < .0001 (\*\*\*\*)].

## Figure 3

Figure 3: FEF community composition was associated with leaf functional traits from the leaf economic spectrum. The plot shows the variation in FEF community composition within and between host species (*n* = 7) and treatment groups (*E-low*, *E-high*) based on distance-based redundancy analyses (dbRDA). Solid black arrows represent statistically significant associations (*p* < .01). Arrows are displayed at double their actual size to enhance visual clarity. Each point represents a FEF community sample from one host tree species per treatment group; colors represent host tree species. Circles and filled triangles represent low (*E-low*) and high (*E-high*) FEF treatment groups, respectively.

## Figure 4

Figure 4: Leaf functional traits are conserved within tree species regardless of endophyte load treatment. (a) Principal Component Analysis (PCA) of leaf functional traits from all tree species separated by *E-low* and *E-high* treatment. (b) PCA of leaf functional traits of plants solely used in ant herbivory assays. (c) PCA leaf functional traits of plants used solely in pathogen damage assays. Colors represent tree species. Circle and triangles represent low (*E-low*) and high (E-high) FEF treatment groups, respectively. Colored ellipses correspond to tree species and represent 95% confidence intervals.

## Figure 5

Figure 5: Simple linear regressions of herbivory and pathogen damage on PC1 and PC2 axes from PCAs of leaf traits for ant herbivory and pathogen damage assays. Linear regression of a) percent herbivory damage and PC1 axis (R2adj = -0.0024, p = 0.447); b) percent herbivory damage and PC2 axis (R2adj = 0.079, *p* = < .001); c) percent pathogen damage and PC1 axis (R2-adjusted = 0.064, *p* = < .001); and d) percent pathogen damage and PC2 axis (R2adj = 0.0016, *p* = .207). Colors represent individual species. Circle and triangles represent *E-low* and *E-high* treatments, respectively.