The herbaceous landlord: Integrating the effects of symbiont consortia within a single host

Supplemental Figures

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Supplemental figures:

Figure S1: Percent root length colonized by AMF and DSEs were correlated positively (Adjusted $R^2 = 0.107$, $F_{1, 153} = 19.51$, $P < 0.001$), indicating facilitation rather than competition. See also Fig. 4 for SEM results.

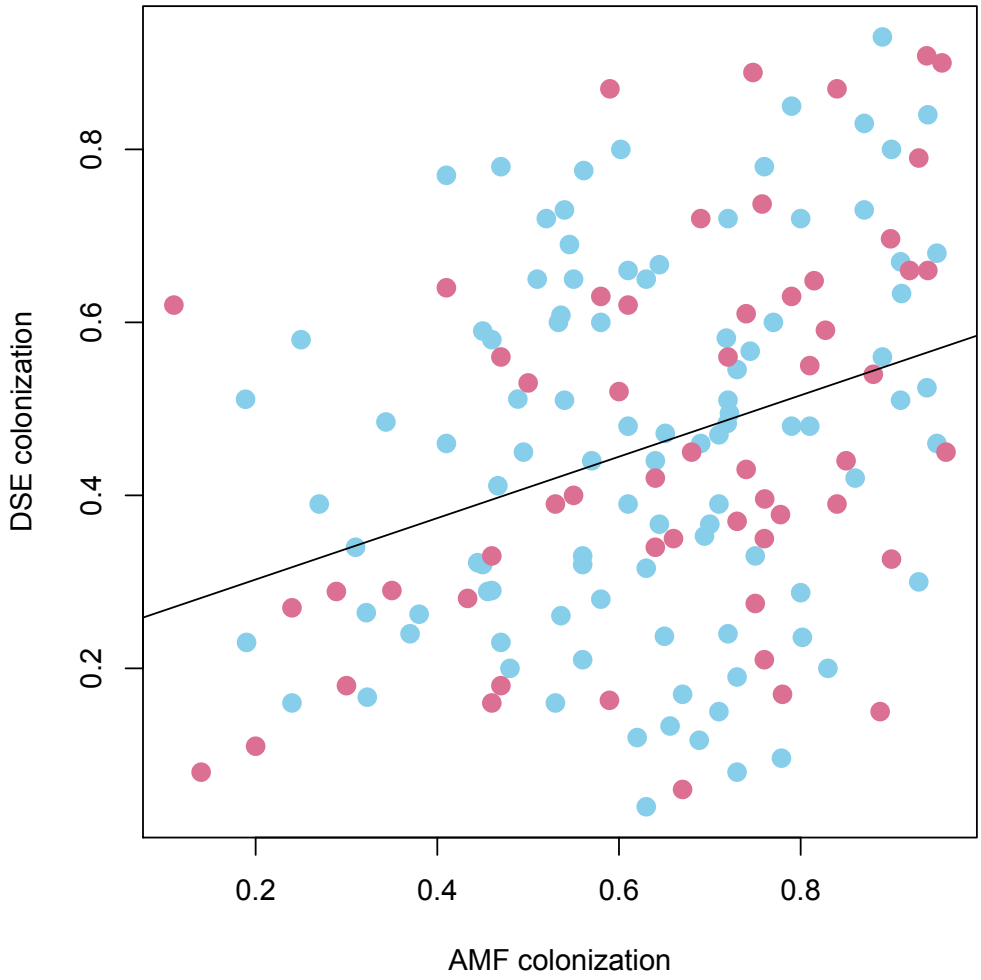


Figure S2: There was a negative correlation between DSE root length colonized and plant biomass, but only in the absence of *Epichloë* infection (E+ Adjusted $R^2 = 0.029$, $F_{1, 54} = 2.644$, $P = 0.110$; E− $R^2 = 0.053$, $F_{1, 97} = 6.437$, $P = 0.013$). See also Fig. 4 for SEM results.

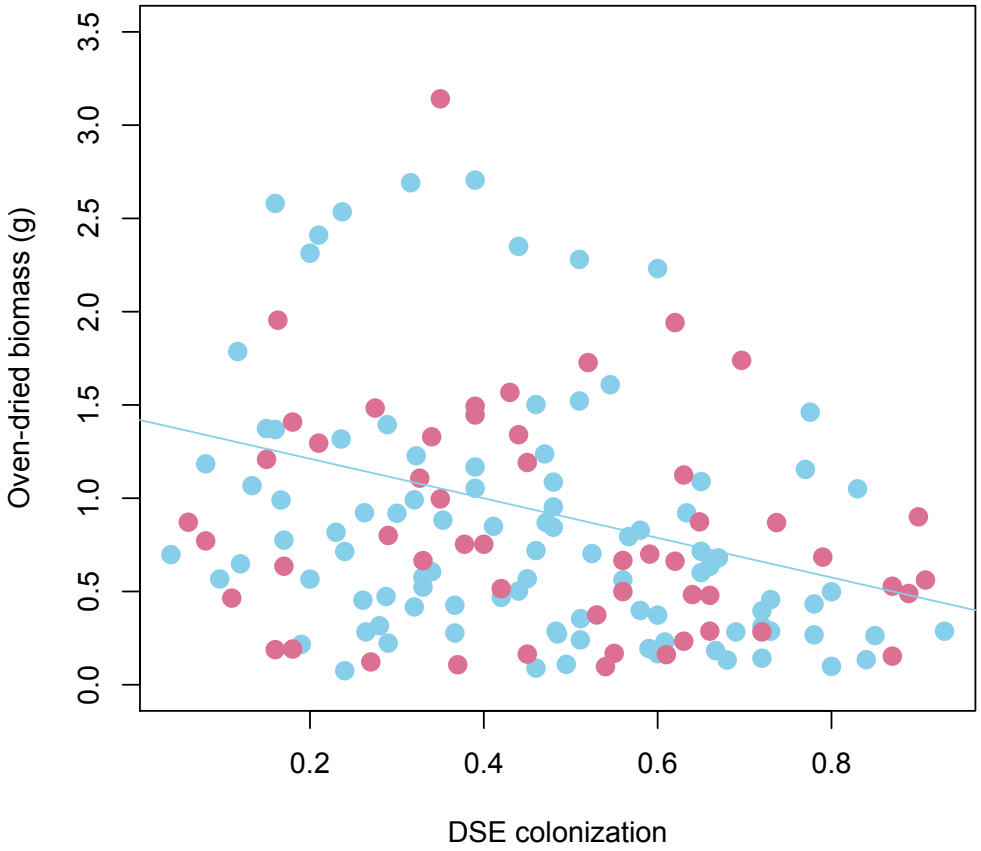


Figure S3: DSE colonization decreased as more water was available to plants (Adjusted R^2 = 0.107, $F_{1, 153} = 19.5$, $P < 0.001$). See also Fig. 4 for SEM results.

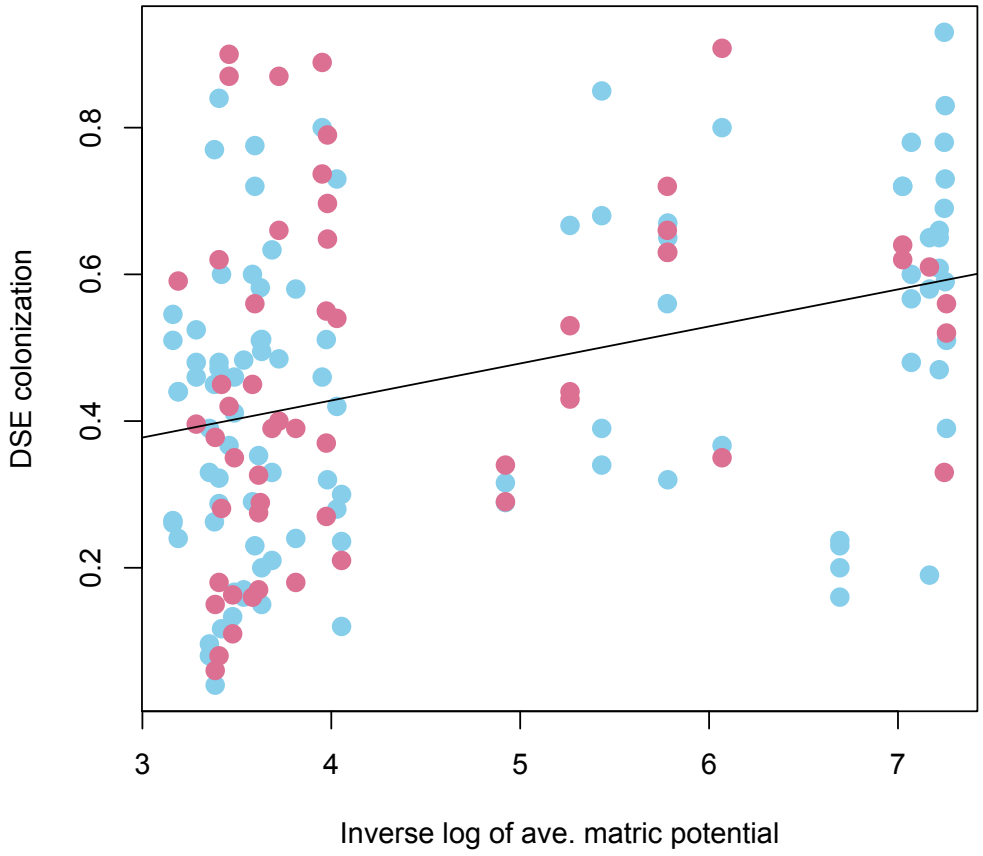


Figure S4-S9: Neither AMF colonization nor proportion of plants hosting *Epichloë* varied significantly with measured edaphic conditions (soil moisture, soil temperature, soil N:P ratios). See also Fig. 4 for SEM results.

Figure S4

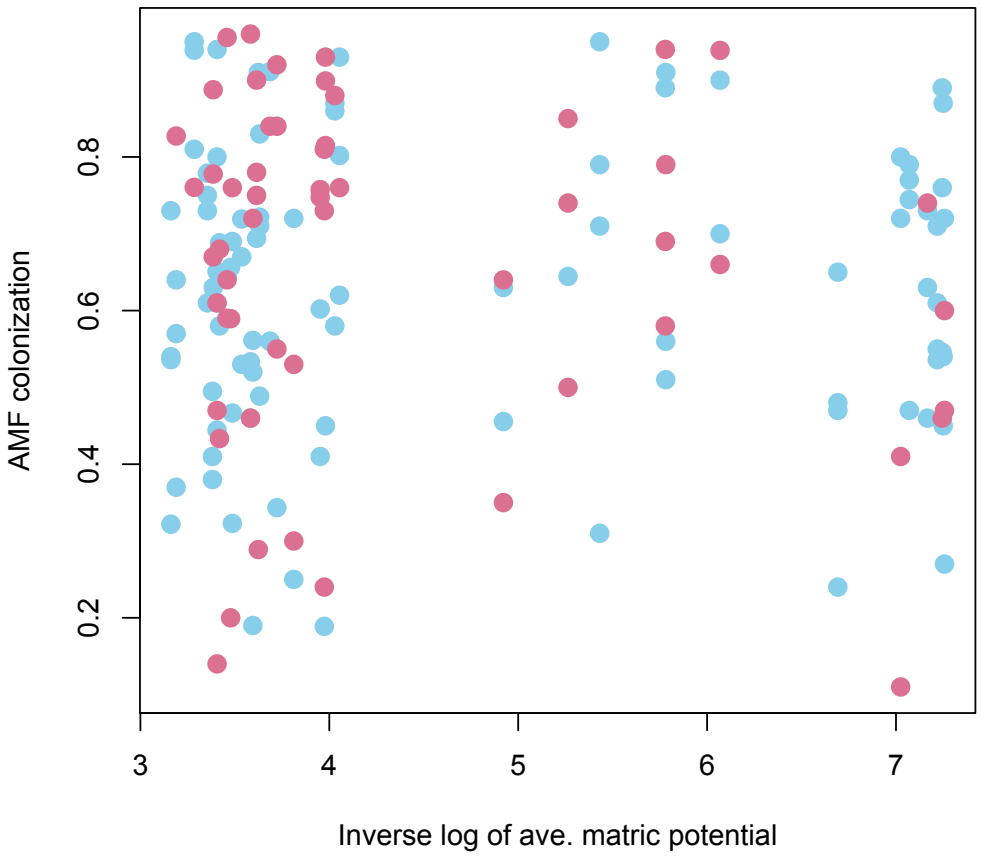


Figure S5

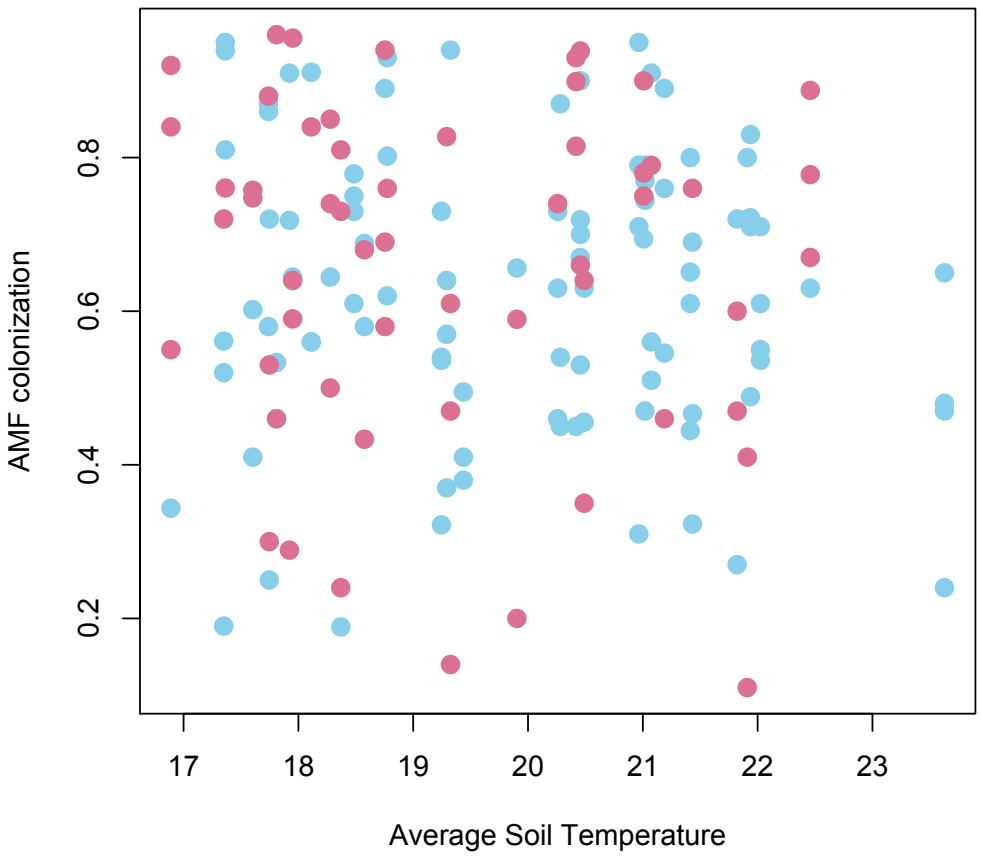

AMF colonization
0.2
0.4
0.6
0.8
17
18
19
20
21
22
23
Average Soil Temperature

Figure S6

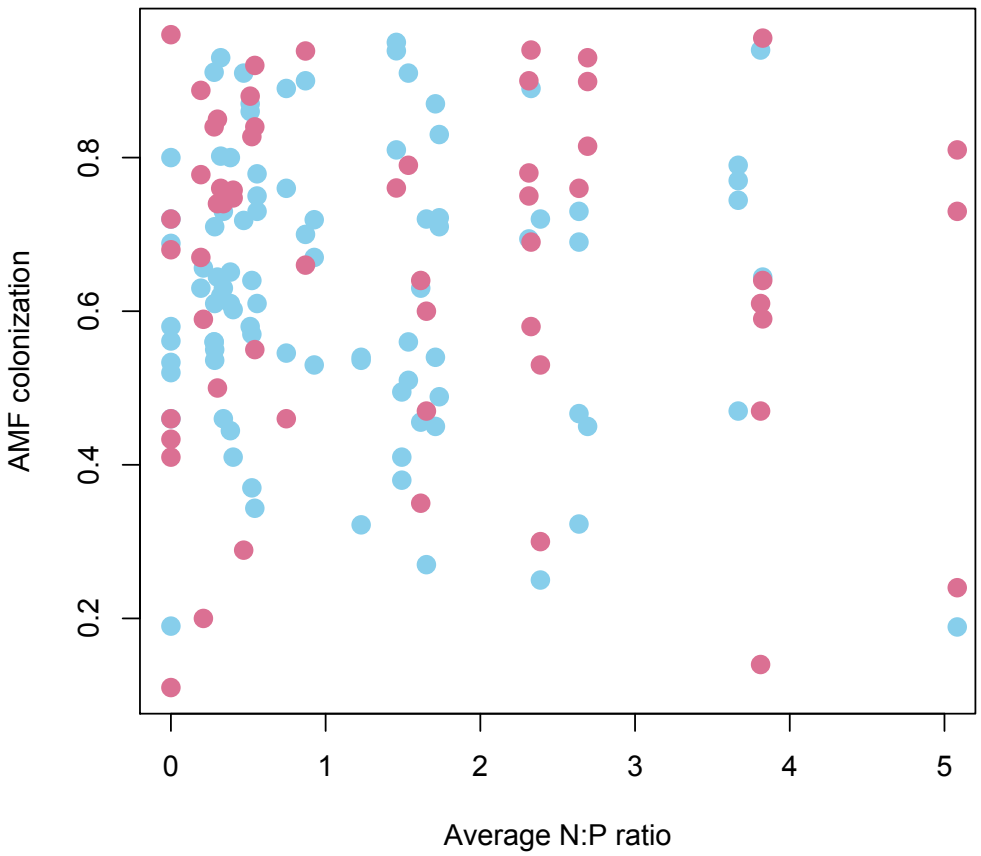
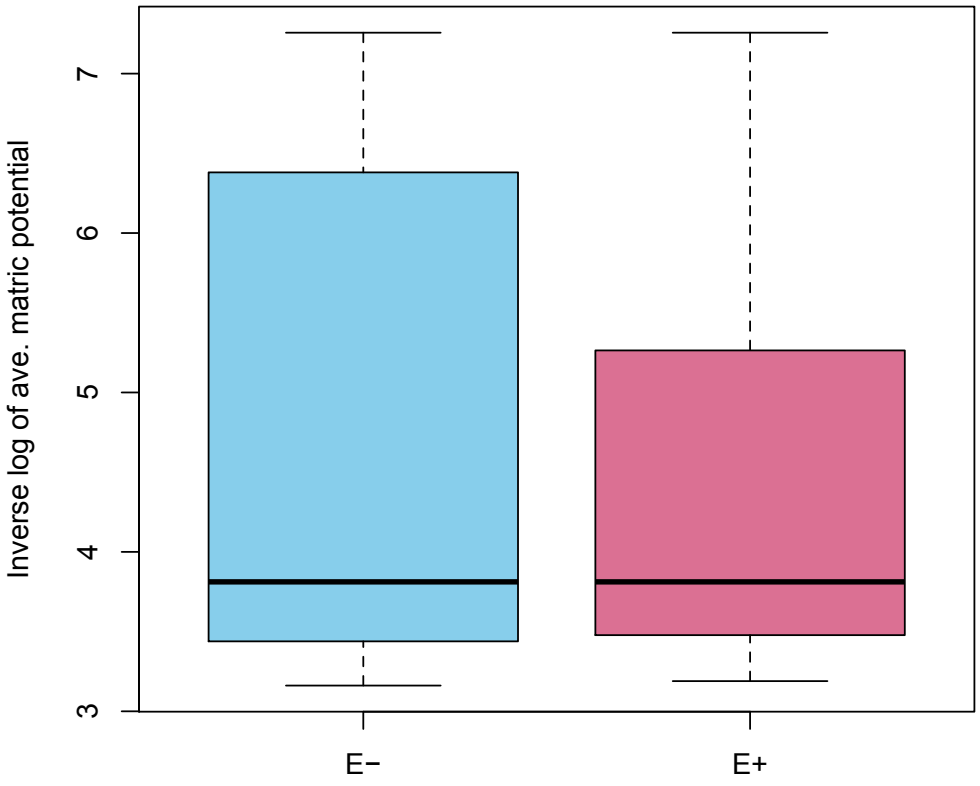


Figure S7



46 **Figure S8**

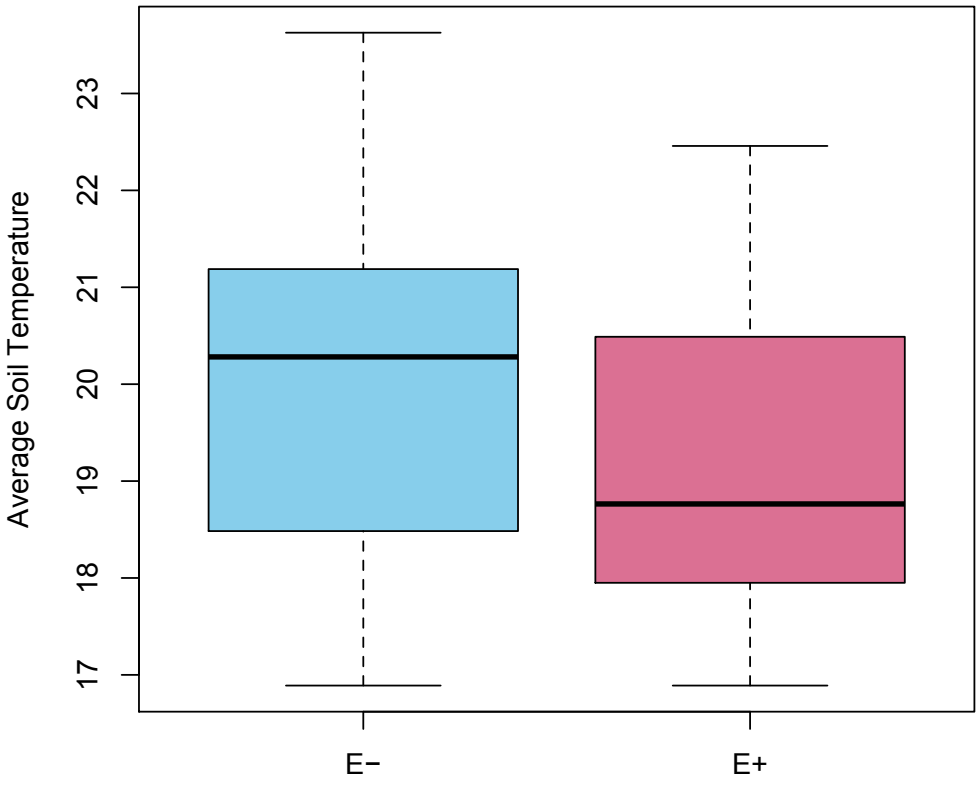


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Figure S9

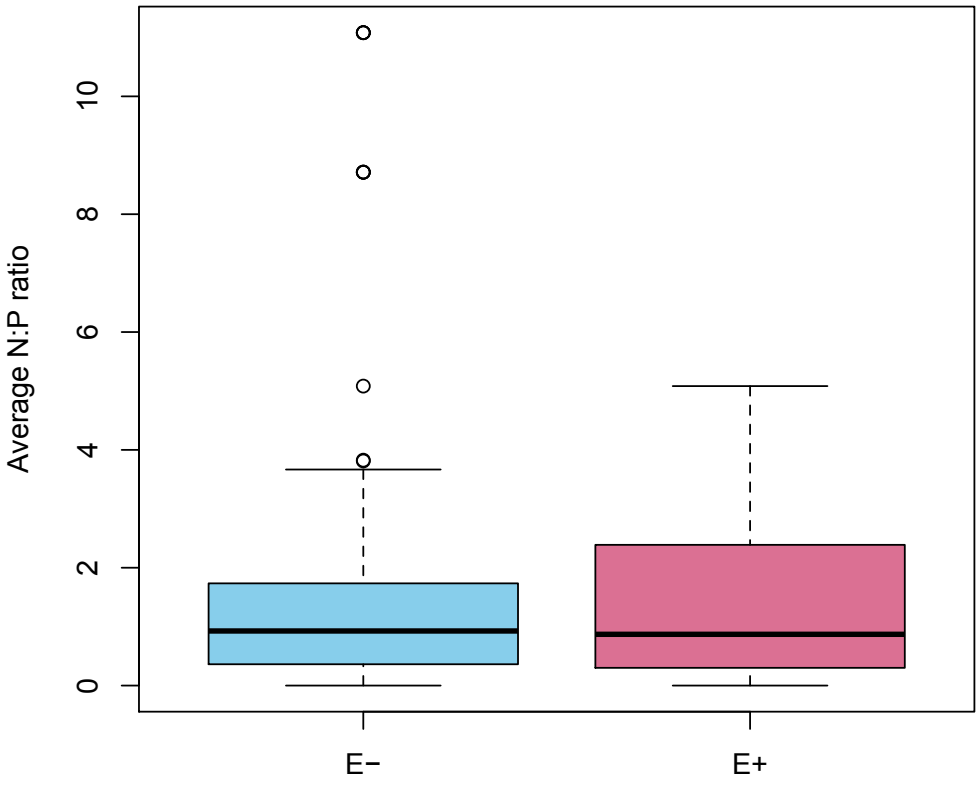

Figure S10: There was effect of *Epichloë* presence on plant fitness as measured by aboveground biomass.

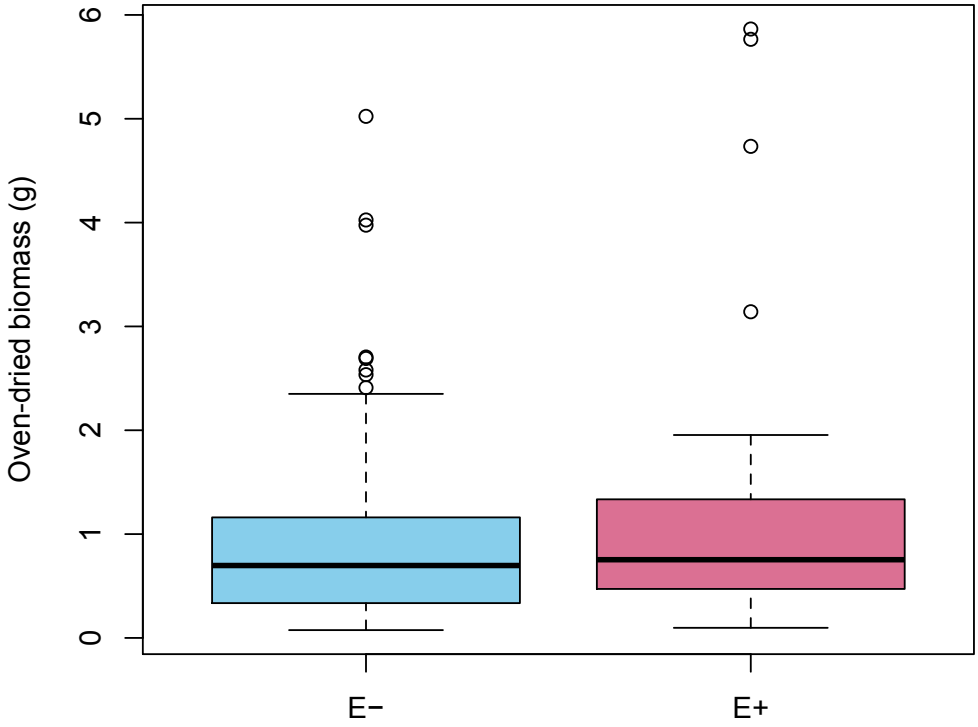

Figure S11: There was effect of AMF colonization on plant fitness as measured by aboveground biomass.

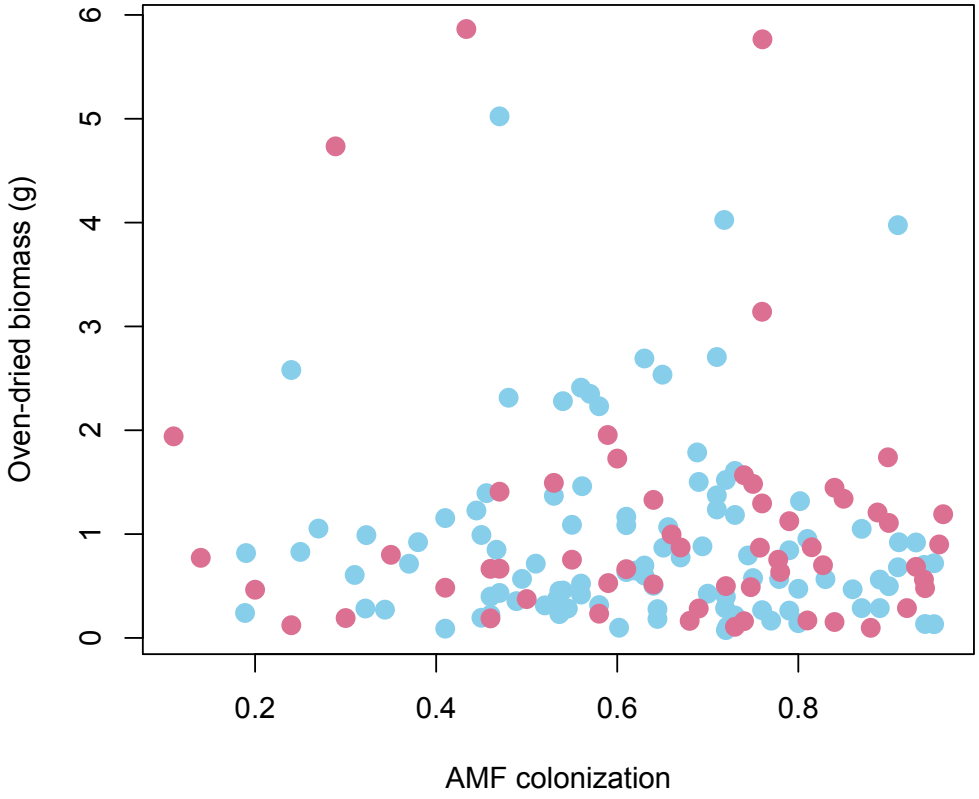

Figure S12: Overall SEMs for *Bromus hordeaceus*, with different models for those plants without *Epichloë* endophytes (A: E−, blue), and those with *Epichloë* endophytes (B: E+, red). Model fit was good for both models, though the low sample size for the E+ may potentially pose issues with interpretation (A: $\chi^2 = 2.588$, $P = 0.274$; CFI = 1.000; RMSEA = 0.000; n= 83 | B: $\chi^2 = 4.601$, $P = 0.100$; CFI = 1.000; RMSEA = 0.000; n = 19). The numbers above the arrows are the standardized path coefficients. Non-significant ($P > 0.05$) path coefficients are not shown. Numbers in the boxes are total explained variance (R^2) of each variable.