Appendix 019406

Corrêa, A., Gurevitch, J., Martins-Loução, M. A. and Cruz, C. 2011. C allocation to the fungus is not a cost to the plant in ectomycorrhizae. – Oikos 000: 000–000.

Appendix A1

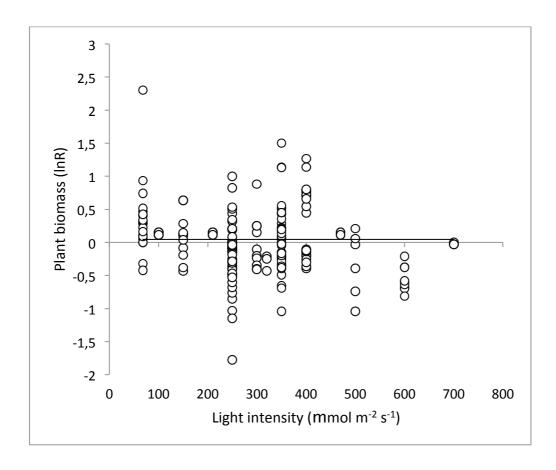


Figure A1. Correlation between light intensity and the effects of ECM (calculated as the ln response ratio (lnR): natural log of the means for the M plants divided by those of the NM plants grown in the same experimental conditions, ln (M/NM)) on plant biomass (r = 0.146, k = 188, p < 0.05).

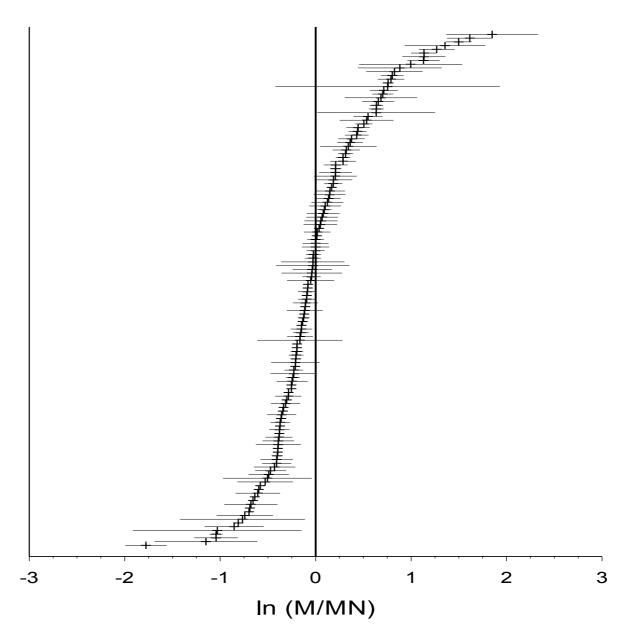


Figure A2. A forest plot of the natural log of the ratios (lnR, indicated by + symbols) of biomass in mycorrhizal (M) to non-mycorrhizal (NM) plants, and the 95% confidence intervals (CIs) of the lnR values, for individual outcomes (cases) from different studies; each + and its CI represents a single outcome (see text). The outcomes are arranged in order of their magnitude. The values here were calculated using a fixed effect model on lnR values. The line for equal values for mycorrhizal and nonmycorrhizal plant biomass (lnR = 0) is shown. The values span a wide range from large positive values to large negative values for mycorrhization.

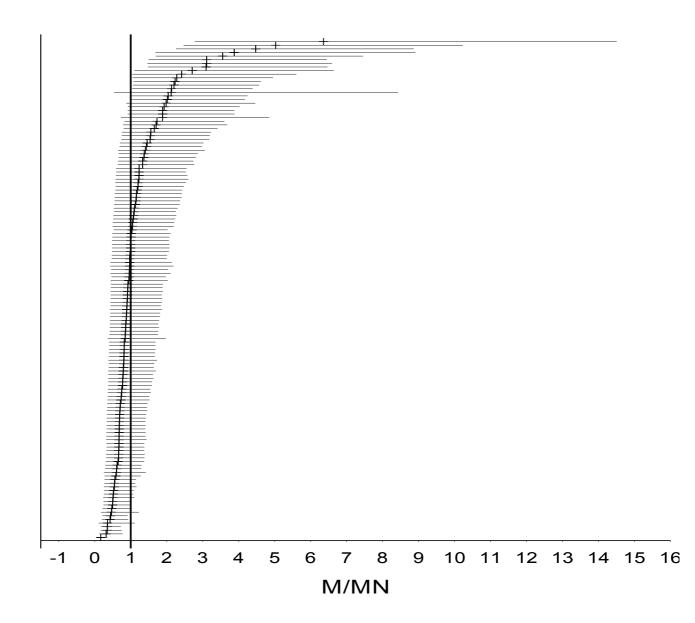


Figure A3. A forest plot of backtransformed values (indicated by + symbols) for the ratio of biomass in mycorrhizal (M) to non-mycorrhizal (NM) plants, and the 95% confidence intervals (CIs) of the ratios, for individual outcomes (cases) from different studies; each + and its CI represents a single outcome (see text). The outcomes are arranged in order of their magnitude. The values here were calculated on natural log transformed ratios (lnR) and backtransformed to a linear scale, using a random effects model. The line for equal values for mycorrhizal and nonmycorrhizal plant biomass (M/MN = 1.0) is shown. The values span a wide range from large positive effects to large detrimental (i.e. < 1.0) effects for mycorrhization on biomass (values < 1.0 were not found, and would indicate plants that lost biomass, which is possible in some cases although not found here).

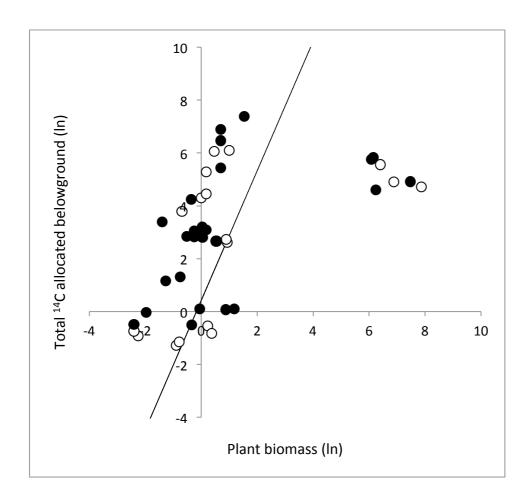


Figure A4. Relationship between total 14 C belowground allocation (ln) and plant biomass (ln) for NM (open circles) and M plants (closed circles) (r = 0.486, k = 45, p = 0.001). The unweighed linear regression was plotted. The correlations were evaluated using the Pearson product moment correlation coefficient.

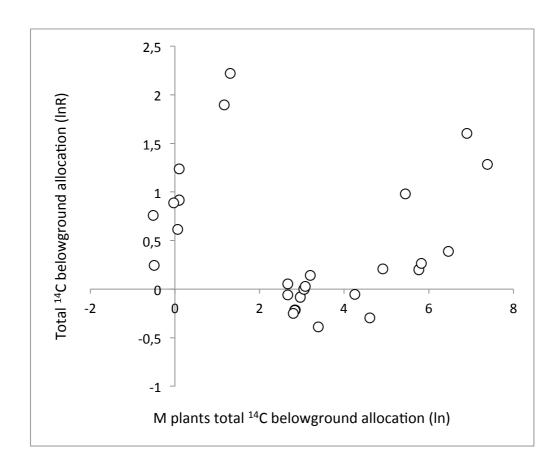


Figure A5. Relation between total 14 C belowground C allocation of M plants and the effects of ECM (calculated as the ln response ratio (lnR): natural log of the means for the M plants divided by those of the NM plants grown in the same experimental conditions, ln (M/NM)) on total 14 C belowground C allocation (UW: r = 0.129, p = 0.522, k = 26). The correlation was evaluated using the Pearson product moment correlation coefficient.