Appendix 4
Appendix 4.1 Plant Relative Growth Rate (RGR, g g\(^{-1}\) d\(^{-1}\)) in relation to (a) CO\(_2\) concentration and (b) soil water availability (SWA). Grey dots indicate species average RGR (n=4-6 per species), green lines give linear regression of RGR to CO\(_2\) or SWA across all species points (equation given at top of panel). Box inset notes ANCOVA result main effects of CO\(_2\) and SWA and their interaction. ns: non significant, *:p<0.05, **:p<0.01, ***:p<0.001
Appendix 4.2 Plant Root Mass Fraction (RMF, g g\(^{-1}\)) in relation to (a) CO\(_2\) concentration and (b) soil water availability (SWA). Grey dots indicate species average RMF (n=4-6 per species), green lines give linear regression of RMF to CO\(_2\) or SWA across all species points (equation given at top of panel). Box inset notes ANCOVA result main effects of CO\(_2\) and SWA and their interaction. ns: non significant, *:p<0.05, **:p<0.01, ***:p<0.001

Appendix 4.3 Relative effect of soil water availability (SWA), normalized to 100%SWA, on root mass fraction (RMF, g g\(^{-1}\)) rate at three CO\(_2\) levels. Grey dots indicate species average biomass (n=4-6 per species), green lines give linear regression of RMF to SWA across all species points (equation given at top of panel). Box inset notes ANCOVA result main effects of CO\(_2\) and SWA and their interaction. ns: non significant, *:p<0.05, **:p<0.01, ***:p<0.001
Appendix 4.4 Plant Leaf Mass Fraction (LMF, g g⁻¹) in relation to (a) CO₂ concentration and (b) soil water availability (SWA). Grey dots indicate species average LMF (n=4-6 per species), green lines give linear regression of LMF to CO₂ or SWA across all species points (equation given at top of panel). Box inset notes ANCOVA result main effects of CO₂ and SWA and their interaction. ns: non significant, *:p<0.05, **:p<0.01, ***:p<0.001
Appendix 4.5 Plant Specific Leaf Area (SLA, m$^2$ g$^{-1}$) in relation to (a) CO$_2$ concentration and (b) soil water availability (SWA). Grey dots indicate species average SLA ($n=4$-$6$ per species), green lines give linear regression of SLA to CO$_2$ or SWA across all species points (equation given at top of panel). Box inset notes ANCOVA result main effects of CO$_2$ and SWA and their interaction. ns: non significant, *:p<0.05, **:p<0.01, ***:p<0.001
Appendix 4.6 Plant Nitrogen content (N%, g g⁻¹) in relation to (a) CO₂ concentration and (b) soil water availability (SWA). Grey dots indicate species average N% (n=4-6 per species), green lines give linear regression of N% to CO₂ or SWA across all species points (equation given at top of panel). Box inset notes ANCOVA result main effects of CO₂ and SWA and their interaction. ns: non significant, *:p<0.05, **:p<0.01, ***:p<0.001
Appendix 4.7 Plant net photosynthesis ($A_{\text{net}}$, umol m$^{-2}$ s$^{-1}$) in relation to (a) CO$_2$ concentration and (b) soil water availability (SWA). Grey dots indicate species average $A_{\text{net}}$ (n=4-6 per species), green lines give linear regression of $A_{\text{net}}$ to CO$_2$ or SWA across all species points (equation given at top of panel).

Appendix 4.8 Relative effect of lower soil water availability (SWA) to the relative effect of CO$_2$ (a) decrease from ambient and (b) increase from ambient. Dashed lines give the trend (not significant) between the CO$_2$ effect and SWA effect at (green) 40% SWA and (orange) 20% SWA.