

Table S1. Results from ANOVA statistical analysis.

	Response variable	Temperature	CO ₂	Temperature × CO ₂
NH ₄ ⁺ NO ₃ ⁻ supplied plants	Total plant dry mass	<0.001	<0.001	<0.001
	NO ₃ ⁻ uptake rate	0.0672	<0.001	<0.001
	¹⁵ N shoots: ¹⁵ N roots ratio	<0.001	0.8937	0.1778
	Organic N: total N ratio	0.6803	<0.001	0.0194
	¹⁵ N in plant proteins: ¹⁵ N in plant ratio	0.3849	0.0811	0.0565
	Total NO ₃ ⁻ : total N ratio	0.0134	0.0002	0.0091
	Root %C	0.0356	0.0217	0.5562
	Total non-structural carbohydrates	0.0010	0.6715	0.0015
	Root %N	<0.001	0.1480	0.3330
¹⁵ NH ₄ ⁺ O ₃ supplied plants	Total plant dry mass	<0.001	0.0058	<0.001
	NH ₄ ⁺ uptake rate	<0.001	<0.001	<0.001
	¹⁵ N shoots: ¹⁵ N roots ratio	0.0400	0.5445	0.0307

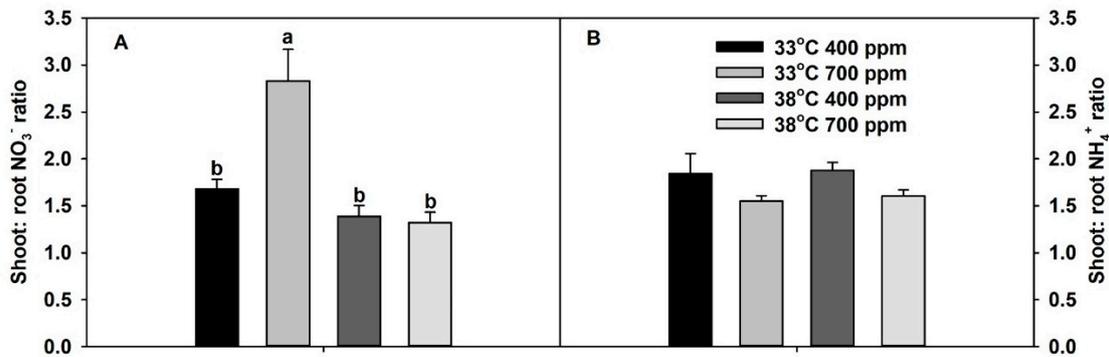


Figure S1. Effects of ambient (400 ppm) vs. elevated (700 ppm) CO₂ and near-optimal (33°C) vs. chronic warming (38°C) day-time temperatures on (A) shoot: root NO₃⁻ and (B) shoot to root NH₄⁺ ratios of *Solanum lycopersicum*, grown for 21 days. Each bar represents mean (n = 5) + 1 SEM. Within each panel, bars not sharing the same letters are significantly different (P < 0.05, Tukey's test); no letters are shown if no differences.