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Supplement of

Physiological responses to ultra-high CO_2 levels in an evergreen tree species

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Supplementary Figures

Net assimilation [μ mol m⁻² s⁻¹] -2 -4 Photosynthetically active radiation [μ mol m⁻² s⁻¹]

Fig. S1. Light response curve of *Psidium cattleyanum*. Plants were exposed to increasing
light levels and their net assimilation rate was measured. Error bars represent standard errors
(n = 6).

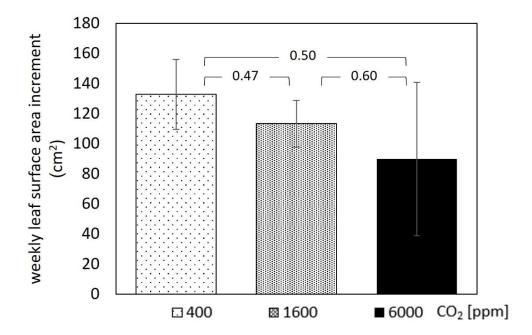
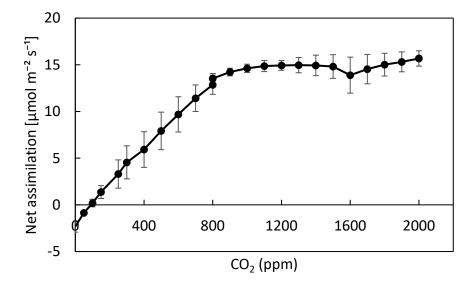


Fig. S2. Leaf surface area increment is similar under different CO₂ concentrations. Bar heights are means of 10 Guava saplings subjected to different CO₂ concentrations. Error bars represent standard errors. P-values are from paired t-tests.



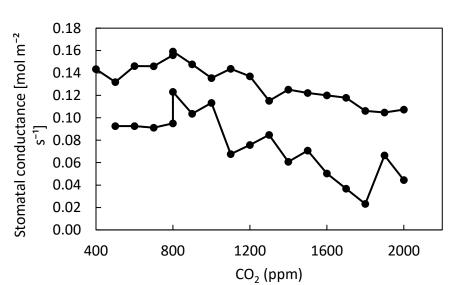


Fig. S3. Leaf assimilation increases and stomatal conductance decreases under instantaneous exposure to elevated CO_2 concentrations. Plants were grown under ambient CO_2 level and were exposed to increasing CO_2 concentrations using the IRGA chamber. Data points are means \pm SE of three plants (top) or measurements in two discrete plants (bottom).

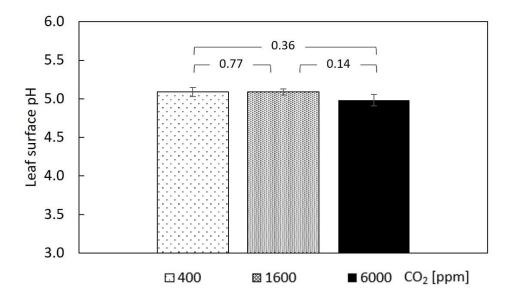


Fig. S4 Leaf surface pH is similar under different CO₂ concentrations. Data points are means of 10 guava saplings subjected to different CO₂ concentrations. Error bars represent standard errors. P-values are from paired t-tests.