Oliveira MF, Marenco RA (2019).

Gas exchange, assimilate partitioning and water-use efficiency in response to elevated CO<sub>2</sub> and drought in crabwood (*Carapa surinamensis*, Meliaceae)

iForest – Biogeosciences and Forestry – doi: 10.3832/ifor2813-011

## **Supplementary Material**

**Tab. 1** - Means of data used in Figs. 1-4. Within rows, significant differences between mean values are indicated with different small letters within a CO<sub>2</sub> level and different capital letters within a water regime (Fisher LSD test at  $p \le 0.05$ ). Each value represents the mean ( $\pm$  SD) of five plants (n = 5). In the last four columns and within rows, significant differences between means of CO<sub>2</sub> levels over water regimes and between means of water regimes over CO<sub>2</sub> levels are indicated with different capital letters (Fisher LSD test at  $p \le 0.05$ , n = 10). Abbreviations are indicated in the abbreviation's section.

Parameter	400 ppm		700 ppm		400	700	1000/ EC	500/ EC
	100% FC(1)	50% FC(2)	100% FC(3)	50% FC(4)	– 400 ppm	700 ppm	100% FC	50% FC
A <sub>sat-mass</sub> (nmol g <sup>-1</sup> s <sup>-1</sup> )	$123.9 \pm 17.5^{\rm Ba}$	$86.5 \pm 14.9^{\text{Bb}}$	$159.0 \pm 21.7^{\mathrm{Aa}}$	$166.5 \pm 21.9^{\mathrm{Aa}}$	105.2 <sup>B</sup>	162.7 <sup>A</sup>	141.4 <sup>A</sup>	126.5 <sup>A</sup>
$A_{\text{max-mass}}$ (nmol g <sup>-1</sup> s <sup>-1</sup> )	$282.6\pm21.0^{\mathrm{Aa}}$	$235.0\pm30.7^{\mathrm{Ab}}$	$206.3 \pm 31.9^{\rm Ba}$	$198.1\pm23.5^{\mathrm{Aa}}$	258.8 <sup>A</sup>	202.2 <sup>B</sup>	244.5 <sup>A</sup>	216.6 <sup>B</sup>
$g_{\text{sCO2-mass}} (\text{mmol g}^{-1} \text{ s}^{-1})$	$1.01\pm0.20^{\mathrm{Aa}}$	$0.58\pm0.13^{\mathrm{Bb}}$	$0.62\pm0.10^{\mathrm{Ba}}$	$0.68\pm0.18^{\mathrm{Ba}}$	$0.80^{A}$	$0.65^{B}$	0.82 <sup>A</sup>	$0.63^{A}$
$C_i/C_a$ (unitless)	$0.646 \pm 0.040^{\mathrm{Aa}}$	$0.581 \pm 0.031^{\rm Bb}$	$0.586 \pm 0.019^{\rm Ba}$	$0.593 \pm 0.036^{\mathrm{Ba}}$	0.614 <sup>A</sup>	$0.590^{A}$	$0.616^{A}$	$0.587^{\mathrm{B}}$
$CE_{mass}$ (mmol $g^{-1}$ $s^{-1}$ bar $^{-1}$ )	$0.745 \pm 0.052^{\mathrm{Aa}}$	$0.636 \pm 0.088^{\mathrm{Aa}}$	$0.569 \pm 0.056^{\rm Ba}$	$0.581 \pm 0.071^{\mathrm{Aa}}$	$0.690^{A}$	$0.575^{\mathrm{B}}$	0.657 <sup>A</sup>	$0.609^{A}$
TNC (mg g <sup>-1</sup> )	$169.4\pm10.1^{\mathrm{Ba}}$	$188.8\pm16.2^{\mathrm{Ba}}$	$230.0\pm14.3^{\mathrm{Aa}}$	$224.2\pm43.5^{\mathrm{Aa}}$	179.1 <sup>B</sup>	227.1 <sup>A</sup>	199.7 <sup>A</sup>	206.5 <sup>A</sup>
RGR (g kg <sup>-1</sup> day <sup>-1</sup> )	$6.28\pm1.1^{\rm Ba}$	$3.75\pm0.9^{\mathrm{Bb}}$	$8.72\pm1.5^{\mathrm{Aa}}$	$6.38\pm1.1^{\mathrm{Ab}}$	5.01 <sup>B</sup>	7.55 <sup>A</sup>	7.50 <sup>A</sup>	$5.07^{\mathrm{B}}$
$\Delta W_{\rm T}$ (g per plant)	$107.0 \pm 54.4^{\rm Ba}$	$43.0\pm11.0^{\mathrm{Bb}}$	$174.1\pm65.0^{\mathrm{Aa}}$	$85.5\pm11.0^{\mathrm{Ab}}$	$75.0^{\mathrm{B}}$	129.8 <sup>A</sup>	140.5 <sup>A</sup>	64.2 <sup>B</sup>
CUW [kg(water) per plant]	$39.7\pm17.1^{\mathrm{Aa}}$	$14.6\pm2.8^{\mathrm{Ab}}$	$22.7 \pm 5.7^{\mathrm{Ba}}$	$8.3\pm1.7^{\rm Bb}$	27.2 <sup>A</sup>	15.5 <sup>B</sup>	31.2 <sup>A</sup>	11.5 <sup>B</sup>
WUE <sub>P</sub> [g(DM) kg(water) <sup>-1</sup> ]	$2.6\pm0.3^{\rm Ba}$	$2.9 \pm 0.3^{\rm Ba}$	$7.5\pm1.1^{\mathrm{Ab}}$	$10.5\pm1.6^{\mathrm{Aa}}$	$2.8^{\mathrm{B}}$	$9.0^{\text{A}}$	5.1 <sup>B</sup>	6.7 <sup>A</sup>
$\Delta W_{\rm L}$ (g per plant)	$44.2\pm20.7^{\mathrm{Aa}}$	$16.1\pm3.9^{\mathrm{Ab}}$	$49.4\pm17.2^{\mathrm{Aa}}$	$21.9 \pm 5.4^{\mathrm{Ab}}$	30.2 <sup>A</sup>	35.7 <sup>A</sup>	46.8 <sup>A</sup>	$19.0^{\rm B}$
$\Delta W_{\rm S}$ (g per plant)	$48.5\pm23.3^{\mathrm{Ba}}$	$20.5\pm6.9^{\mathrm{Bb}}$	$83.6\pm35.9^{\mathrm{Aa}}$	$42.8\pm3.5^{\mathrm{Ab}}$	$34.5^{B}$	63.2 <sup>A</sup>	66.1 <sup>A</sup>	31.6 <sup>B</sup>
$\Delta W_{\rm R}$ (g per plant)	$14.2\pm10.7^{\mathrm{Ba}}$	$6.4 \pm 2.4^{\mathrm{Ba}}$	$41.0\pm28.3^{\rm Aa}$	$20.7\pm3.6^{\mathrm{Aa}}$	10.3 <sup>B</sup>	30.9 <sup>A</sup>	27.6 <sup>A</sup>	13.6 <sup>A</sup>
SRR (unitless)	$7.7 \pm 2.3^{\mathrm{Aa}}$	$6.0\pm1.9^{\rm Aa}$	$3.9 \pm 1.4^{\rm Ba}$	$3.2 \pm 0.3^{\rm Ba}$	$6.9^{A}$	3.5 <sup>B</sup>	5.8 <sup>A</sup>	4.6 <sup>A</sup>