

SUPPLEMENTARY INFORMATION

Elevated CO₂ impacts bell pepper growth with consequences to *Myzus persicae* life history, feeding behaviour and virus transmission ability

Beatriz Dáder^{1,2,*}, Alberto Fereres¹, Aránzazu Moreno¹, Piotr Trębicki²

¹Institute of Agricultural Sciences. Spanish National Research Council. Calle Serrano 115 dpdo, 28006 Madrid, Spain

²Grains Innovation Park. Department of Economic Development, Jobs, Transport and Resources. 110 Natimuk Road, Horsham VIC 3400, Australia

[*beatrizdader@ica.csic.es](mailto:beatrizdader@ica.csic.es)

Organism	Parameter	aCO ₂	eCO ₂	<i>p</i>
Aphid	<i>d</i>	6.72±0.11	7.44±0.13	<0.001
	<i>Md</i>	39.76±1.33	28.80±1.46	<0.001
	<i>M₁₀</i>	53.52±1.42	33.76±1.89	<0.001
	<i>Td</i>	9.11±0.15	10.08±0.18	<0.001
	<i>r_m</i>	0.40±0.01	0.33±0.01	<0.001
	<i>RGR</i>	0.47±0.01	0.39±0.01	<0.001
Pepper	Height (cm)	12.5±0.5	14.3±0.3	0.002
	Number of leaves	12.9±0.6	13.4±0.3	0.418
	SPAD	43.8±0.9	28.9±1.2	<0.001
	Leaf area (cm ²)	487.3±37.8	421.4±22.6	0.184
	Leaf dry weight (g)	1.6±0.1	2.3±0.1	0.001
	Stem dry weight (g)	1.3±0.1	1.6±0.1	0.018
	Above-ground dry weight (g)	2.9±0.2	3.9±0.2	0.002
	Specific leaf area	314.3±9.8	187.8±0.1	<0.001
	C (%)	41.0±0.2	41.2±0.1	0.521
	N (%)	3.1±0.1	1.1±0.1	<0.001
	C:N	13.8±0.6	37.0±1.2	<0.001

Supplementary Table S1. Life history parameters of *Myzus persicae* and plant development and leaf chemical profile of peppers grown under aCO₂ (400 ppm) and eCO₂ (650 ppm). Different letters stand for statistical differences according to Student *t*-test for Gaussian variables or Mann-Whitney *U*-test for non-Gaussian variables (*p*≤0.05). Statistically different parameters are highlighted in bold.