

Supplementary information

Article

Simultaneous elevation of CO₂ and temperature alters wheat growth and aphid performance differently depending on virus infection

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Table S1. Development time of pre-reproductive stages of *Rhopalosiphum padi* (mean values) reared on non-infected or BYDV-PAV infected plants under ambient CO₂&T (aCO₂&aT = 400 ppm; 20 °C) or elevated CO₂&T (eCO₂&eT = 800 ppm; 22 °C).

Aphid parameter	CO ₂ &T	Virus infection		Mean	SEM	P-value		
		Non-infected	BYDV-PAV infected			CO ₂ &T	virus	CO ₂ &T x virus
<i>N1 duration (days)</i>	aCO ₂ &aT	1.000	1.000	1.000	0.036	0.167	1.000	1.000
	eCO ₂ &eT	1.050	1.050	1.050				
	Mean	1.025	1.025					
<i>N2 duration (days)</i>	aCO ₂ &aT	1.550	1.684	1.617 A	0.097	<0.001***	0.002**	0.064
	eCO ₂ &eT	1.000	1.500	1.250 B				
	Mean	1.275 b	1.592 a					
<i>N3 duration (days)</i>	aCO ₂ &aT	1.450	1.316	1.383	0.113	0.710	0.416	0.710
	eCO ₂ &eT	1.450	1.400	1.425				
	Mean	1.450	1.358					
<i>N4 duration (days)</i>	aCO ₂ &aT	2.250	2.474	2.362	0.098	0.061	0.167	0.379
	eCO ₂ &eT	2.150	2.200	2.175				
	Mean	2.200	2.337					
<i>From the beginning of adulthood to the onset of reproduction (days)</i>	aCO ₂ &aT	2.050	2.105	2.078 B	0.107	0.033*	0.774	0.572
	eCO ₂ &eT	2.350	2.250	2.300 A				
	Mean	2.200	2.178					

N1 (first nymphal instar), N2 (second nymphal instar), N3 (third nymphal instar), N4 (fourth nymphal instar). P-values according to Two-way ANOVA test for normal and homoscedastic variables. "From the beginning of adulthood to the onset of reproduction" parameter was transformed by log (x+1). Significant differences represented by asterisks: * ($P \leq 0.05$), ** ($P \leq 0.01$) and *** ($P \leq 0.001$). Different lower case letters within row indicate differences due to virus infection ($P \leq 0.05$). Different upper case letters within column indicate differences due to CO₂&T conditions ($P \leq 0.05$). SEM: Standard error of means. n = 20.