Genetic basis of allochronic differentiation in the fall armyworm

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Additional file 8.

PCR conditions used in the mentioned experiments.

Experiment	Candidate Gene	PCR components[1]		PCR program	
QTL 1	Vrille	1 µl 11.92 µl 2 µl 2 µl 3 µl 0.08 µl	DNA dH_2O 10x Taq buffer 2 mM dNTPs 10 mM primer mix[2] Taq polymerase	2 min 45 s 35x 45 s 60 s 10 min	94°C 94°C T_a[2] 72 °C 72 °C
Structure analysis of *Vrille*	Vrille	1 µl 11.92 µl 2 µl 2 µl 3 µl 0.08 µl	DNA dH_2O 10x Taq buffer 2 mM dNTPs 10 mM primer mix[2] Taq polymerase	2 min 45 s 35x 45 s 90 s 10 min	94°C 94°C T_a[2] 72°C 72°C
	Vrille (touchdown PCR for degenerate primers)	1 µl 11.92 µl 2 µl 2 µl 3 µl 0.08 µl	DNA dH_2O 10x Taq buffer 2 mM dNTPs 10 mM primer mix[2] Taq polymerase	3 min 30 s 28x 30 s 60 s 30 s 23x 30 s 60 s	94°C 94°C T_a[2] * (decrease by 0,7) 72°C 94°C Lowest T_a[2] 72°C
Expression analysis	Vrille eIF1α	1 µl 10 µl 1 µl 1 µl 12 µl	cDNA dH_2O 10 mM primer fw 10 mM primer rv SYBR Mix[3]	10 min 30 s 40x 60 s 60 s 60 s 30s 30s	90°C 95°C 58°C 72°C 95°C 58°C 95°C

[1]Taq polymerase, dNTPs, buffer and primers were purchased from Metabion, Martinsried, Germany

[2]Primers and corresponding annealing temperatures (T_a) can be found in Table S6

[3] ABsolute Blue QPCR SYBR Green Mix from Thermo Fisher Scientific, Schwerte, Germany