

# 1 Supplementary Material

2 **Supplementary Table 1.** Individuals analyzed by Transposon display. All the individuals that are  
 3 presented in this table were analyzed by transposon display, according to Supplementary Figure 1  
 4 (n=86).

Parental crosses	F1 Analyzed offspring	F1 crosses	F2 Analyzed offspring
♀ 129F X ♂ P129 <i>D.mojavensis X D.arizonae</i>	F129♂1 F129♂2 F129♂4 F129♂5		
	F129♀A F129♀C F129♀J F129♀L F129♀O F129♀R	F129♀A X ♂ <i>D. arizonae</i>	5 ♀ and 3 ♂
		F129♀J X ♂ <i>D. arizonae</i>	4 ♀ and 5 ♂
		F129♀L X ♂ <i>D. arizonae</i>	5 ♀ and 5 ♂
		F129♀O X ♂ <i>D. arizonae</i>	5 ♀ and 5 ♂
		F129♀R X ♂ <i>D. arizonae</i>	4 ♀ and 3 ♂
♀ 149F X ♂ P149 <i>D.mojavensis X D.arizonae</i>	F149♂1 F149♂2 F149♂4		
	F149♀A F149♀B F149♀C F149♀D F149♀E		
		F149♀B X ♂ <i>D. arizonae</i>	3 ♀ and 4 ♂
		F149♀E X ♂ <i>D. arizonae</i>	4 ♀ and 2 ♂

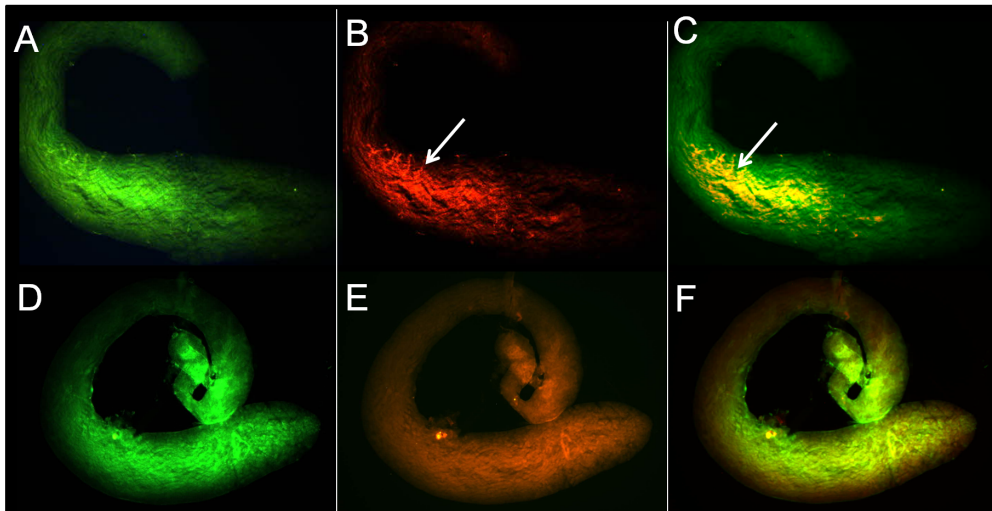
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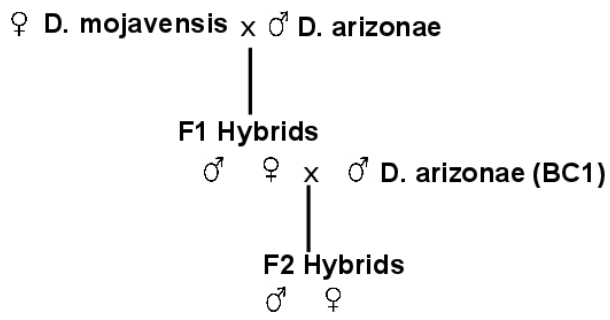
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14 **Supplementary Fig. S1.** Immunofluorescence for the Cyclin B mRNA (DNA in green, RNA  
15 in red) in testes of *D. mojavensis*. A-C cyclinB mRNA; D-F negative control (tissues without  
16 anti-DIG treatment). In A and D: DNA was labeled by SYTOX Green Nucleic Acid Stain; B  
17 and D: *cyclinB* mRNA probe; C and F: merge image (DNA plus RNA).

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20 **Supplementary Fig. S2.** Transposon Display cross diagram.

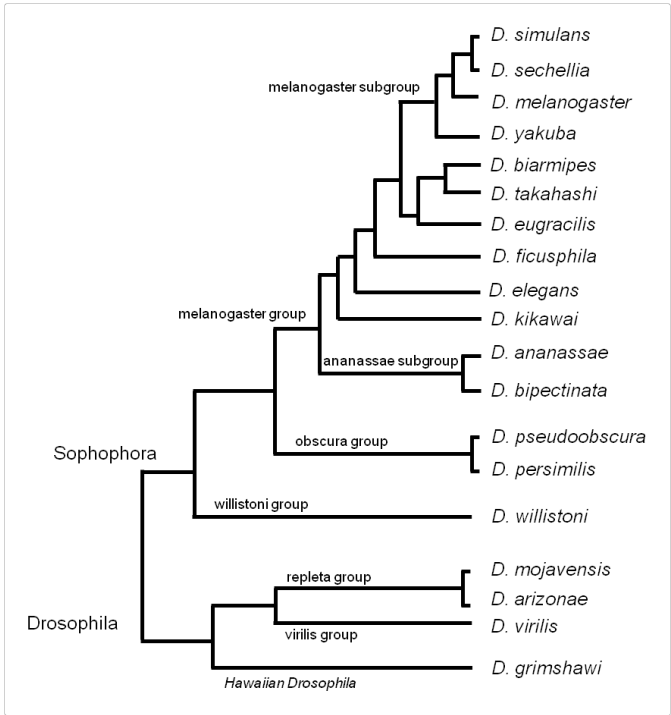
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27 **Supplementary Fig. S3 *Drosophila* species phylogeny.**

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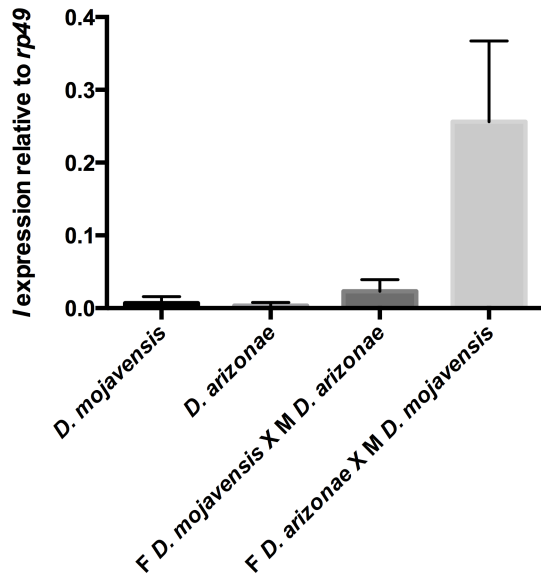
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36 **Supplementary Fig. S4.** Expression *I*-like mRNA of testes in the second experiment..

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