

Supplemental Information for:

Wolbachia causes cytoplasmic incompatibility, but not male-killing in a grain pest beetle

Julian Simon Thilo Kiefer¹, Gerrit Schmidt¹, Ronja Krüsemmer², Martin Kaltenpoth^{1,2}, Tobias Engl^{1,2,*}

¹ Department of Evolutionary Ecology, Institute of Organismic and Molecular Evolution,
Johannes Gutenberg-University, Mainz, Germany

² Department of Insect Symbiosis, Max-Planck-Institute for Chemical Ecology, Jena, Germany

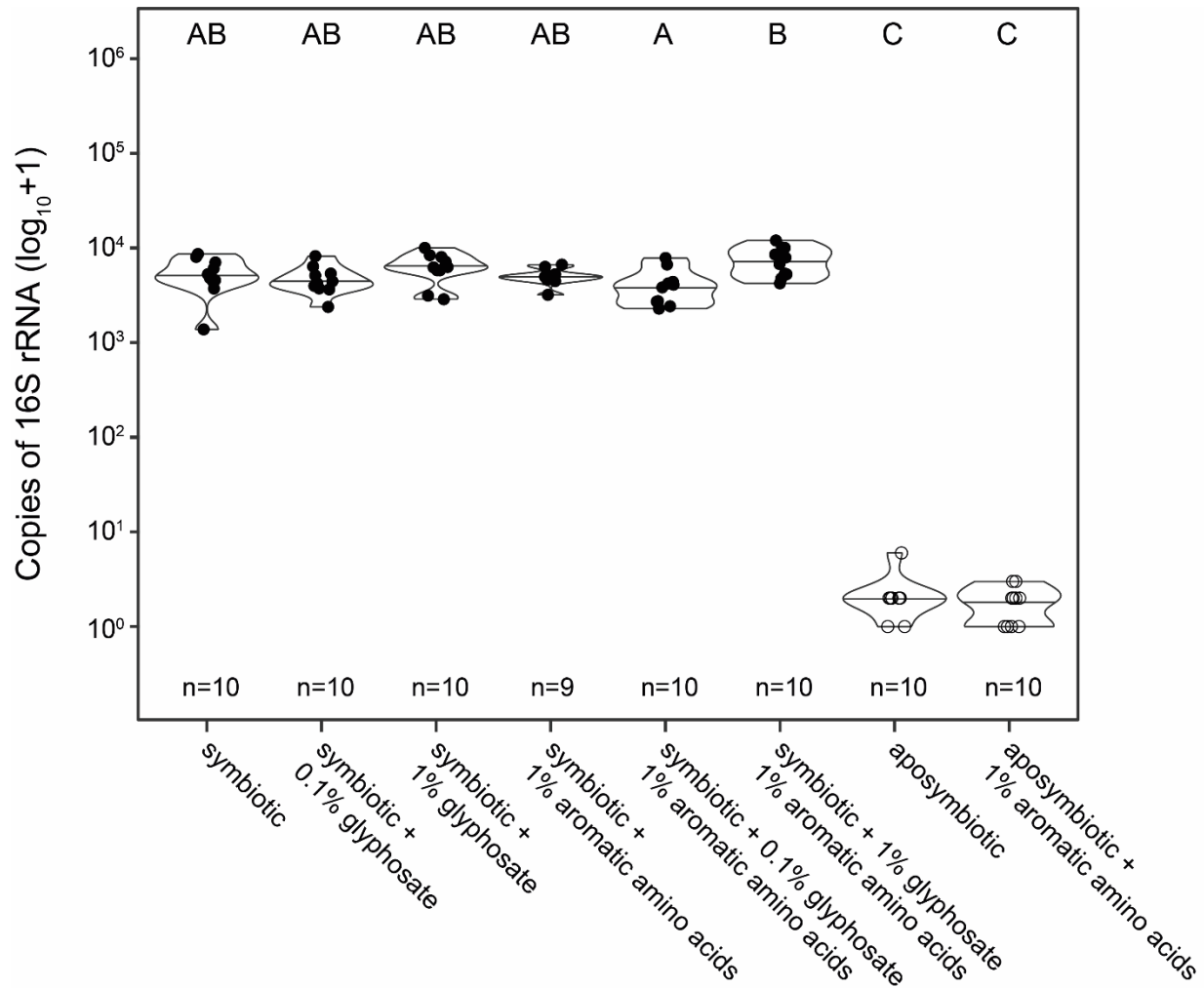
* Corresponding author: tengl@ice.mpg.de

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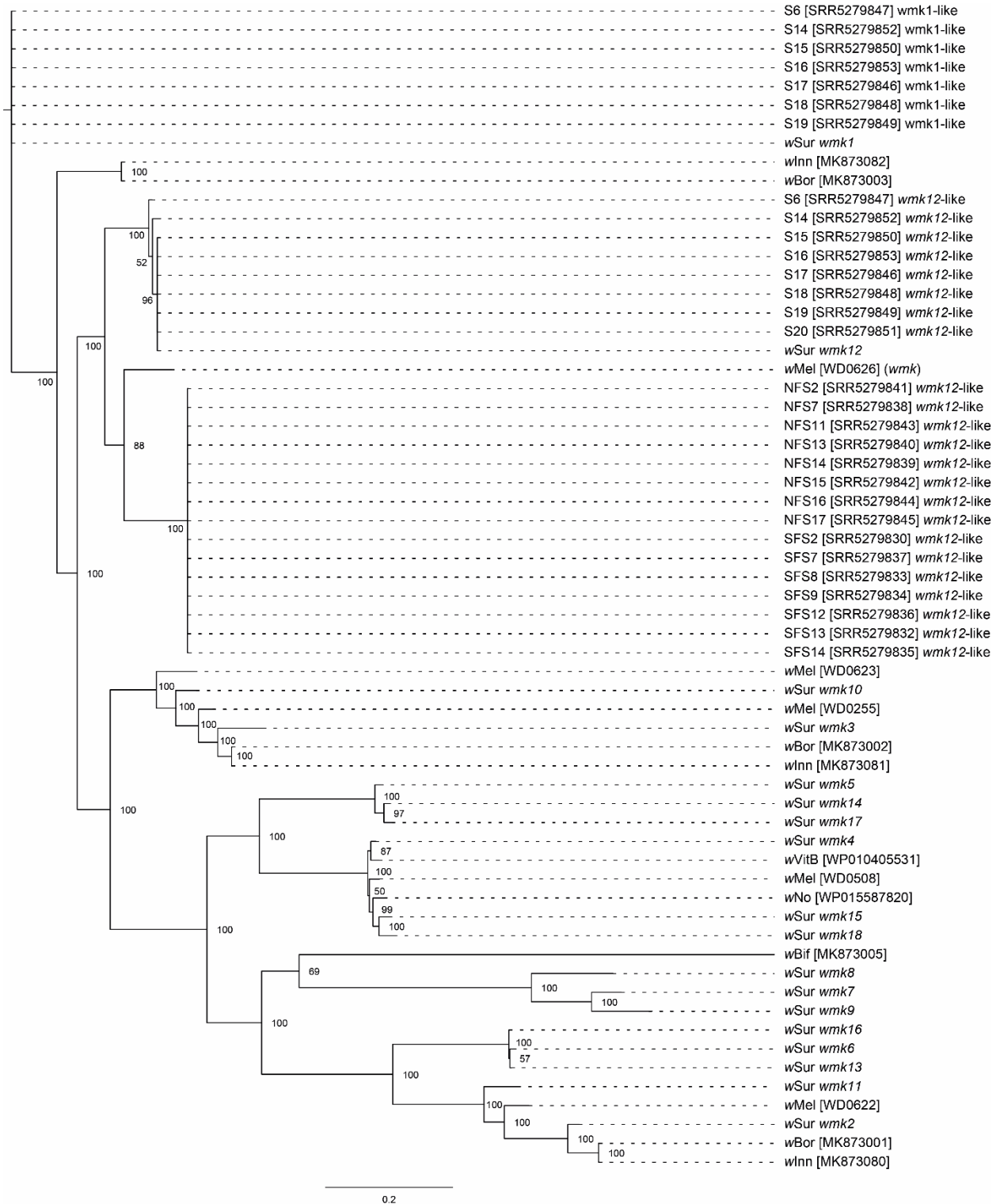
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Supplementary Table 1. Results of Dunn's Test assessing the impact of glyphosate exposure on *w*Sur titer in one-week-old *O. surinamensis*. Significant results ($P_{adj} < 0.05$) are highlighted in bold. Apo = aposymbiotic, Sym = symbiotic, 1% AA = addition of 1% (w/w) of each aromatic amino acid (tyrosine, phenylalanine, tryptophan), 0.1 / 1% G = addition of 1% (w/w) glyphosate

Comparison	Z	p	Adjusted p
Apo - Apo + 1 % AA	1.17E-01	9.07E-01	9.07E-01
Apo - Sym	-3.85E+00	1.16E-04	5.41E-04
Apo + 1 % AA - Sym	-3.97E+00	7.13E-05	3.99E-04
Apo - Sym + 0.1 % G	-3.17E+00	1.52E-03	4.24E-03
Apo + 1 % AA - Sym + 0.1 % G	-3.29E+00	1.01E-03	3.13E-03
Sym - Sym + 0.1 % G	6.83E-01	4.95E-01	6.29E-01
Apo - Sym + 1 % G	-4.51E+00	6.53E-06	4.57E-05
Apo + 1 % AA - Sym + 1 % G	-4.63E+00	3.73E-06	3.49E-05
Sym - Sym + 1 % G	-6.54E-01	5.13E-01	6.25E-01
Sym + 0.1 % G - Sym + 1 % G	-1.34E+00	1.81E-01	2.99E-01
Apo - Sym + 1 % AA	-3.52E+00	4.39E-04	1.54E-03
Apo + 1 % AA - Sym + 1 % AA	-3.63E+00	2.84E-04	1.14E-03
Sym - Sym + 1 % AA	2.36E-01	8.13E-01	8.43E-01
Sym + 0.1 % G - Sym + 1 % AA	-4.28E-01	6.68E-01	7.20E-01
Sym + 1 % G - Sym + 1 % AA	8.73E-01	3.83E-01	5.10E-01
Apo - Sym + 1 % AA + 0.1 % G	-2.55E+00	1.09E-02	2.53E-02
Apo + 1 % AA - Sym + 1 % AA + 0.1 % G	-2.66E+00	7.72E-03	1.96E-02
Sym - Sym + 1 % AA + 0.1 % G	1.31E+00	1.91E-01	2.97E-01
Sym + 0.1 % G - Sym + 1 % AA + 0.1 % G	6.25E-01	5.32E-01	6.21E-01
Sym + 1 % G - Sym + 1 % AA + 0.1 % G	1.96E+00	4.98E-02	9.96E-02
Sym + 1 % AA - Sym + 1 % AA + 0.1 % G	1.04E+00	3.00E-01	4.20E-01
Apo - Sym + 1 % AA + 1 % G	-5.06E+00	4.09E-07	5.72E-06
Apo + 1 % AA - Sym + 1 % AA + 1 % G	-5.18E+00	2.20E-07	6.15E-06
Sym - Sym + 1 % AA + 1 % G	-1.21E+00	2.26E-01	3.33E-01
Sym + 0.1 % G - Sym + 1 % AA + 1 % G	-1.89E+00	5.83E-02	1.09E-01
Sym + 1 % G - Sym + 1 % AA + 1 % G	-5.56E-01	5.78E-01	6.47E-01
Sym + 1 % AA - Sym + 1 % AA + 1 % G	-1.41E+00	1.57E-01	2.75E-01
Sym + 1 % AA + 0.1 % G - Sym + 1 % AA + 1 % G	-2.52E+00	1.18E-02	2.54E-02



Supplement Figure 1: Titer of *wSur* in *O. surinamensis* adults reared on different food compositions. The data distribution is visualized with violin plots and an additional horizontal line depicting the median. Filled circles represent specific target amplification, empty circles off-target amplification during late qPCR cycles, identified by melting curve analysis. Different letters indicate significant differences between experimental treatments (Dunn's Test, adjusted $p \leq 0.05$).



Supplement Figure 2 (previous page): Phylogeny of *wmk* homologues including *wmk1* and *wmk12*-like homologues from *O. surinamensis* sequencing libraries from different collection sites in Israel, including two feral field populations (SFS, SRR-52779830 – SRR5279837 and NFS, SRR5279838 – SRR5279845) and a storage facilities population (S, SRR5279846 - SRR5279853). *wmk1*-like homologues only occurred in *w*Sur from *O. surinamensis* JKI and Israeli storage populations (S). *wmk12*-like homologues from storage populations (S) clustered strictly with *w*Sur *wmk12* and exhibited the same frame shift mutation as *wmk12* in *w*Sur from the *O. surinamensis* JKI population, while the respective homologues clustered separately and do encode a complete proteine analougous to *wmk* from *w*Mel.