

Figure S1. WGM retains the complete chorismate and folate biosynthesis pathways. The sequential chorismate and folate biosynthetic pathways are represented by arrows, indicating steps catalyzed by the enzymes named. Enzymes in red are only retained within WGM, while those in black are also found in WGB.



Figure S2. WGM chorismate biosynthesis loci expression differs between gonotrophic cycles. Graphs represent normalized transcript abundance with error bars signifying 1 S.E.M. In addition to *aroA* expression, the last step in chorismate biosynthesis, *aroC*, was also examined using Wgm-specific qPCR primers (aroCqPCRFor: 5' - GCA GTG AAA GGT ATT GAA ATT GG – 3' and aroCqPCRRev: 5' - AAG CAG GTT TAA TGG CAA GAG – 3') with a Ta = 50.5 °C. Significant differences are indicated above bars. n = sample size.



Figure S3. Survival curves, created in JMP 7.0 using the Kaplan-Meier method, of WT or aposymbiotic *G. morsitans* maintained on 20 mM glyphosate supplemented blood for 60 days. $n \ge 30$ individuals per treatment. Significant differences between treatment groups, determined using the log-rank test, are indicated (* $p \le 0.0001$).