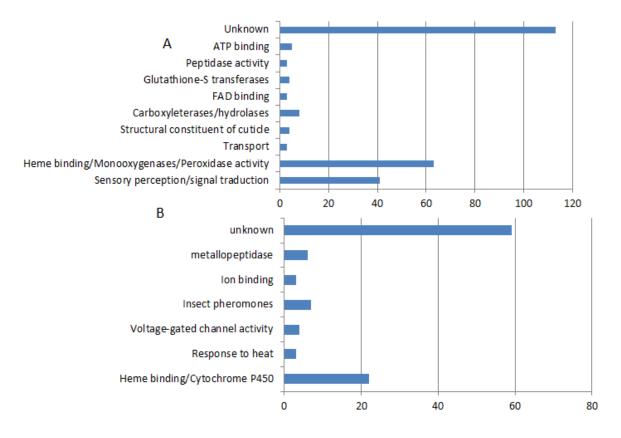


**Figure S1:** Impact of *Ace-1* mutation on mating success: Distribution of *Ace-1* alleles (A) and genotypes (B) between coupled and uncoupled males in comparison to control mosquitoes.



**Figure S2:** Functional annotation clustering of the classes of genes enriched among the genes upregulated in mated (A) and unmated (B) males in VK. The DAVID software was used to define these gene groups enriched with Fisher's exact test applied to determine the *P* values.