

Table S1. GO analysis for significant ANOVA transcripts

<u>ANOVA Term</u>	<u>Number of Transcripts Significant at FDR 0.05</u>	<u>Top 3 GO Functional Categories (# of genes in cluster, enrichment score)</u> <u>Genetic effect is only the 500 most significant genes</u>	<u>Kegg</u>
Genetic	9908	Metal ion binding/Oxidation reduction (122, 9.47) Metabolism of xenobiotics by cytochrome P450 (23, 4.68) Hydrolysis/peptidase (79, 4.53)	Limonene and pinene degradation Metabolism of xenobiotics by cytochrome P450 Drug metabolism Glutathione metabolism Retinol metabolism
Diet	311	Phospholipase activity/lipase activity (14, 2.94) CHK/choline kinase like (7, 2.65) Oxidation reduction (35, 2.59)	Glycerophospholipid metabolism Limonene and pinene degradation alpha-Linolenic acid metabolism Tyrosine metabolism Biosynthesis of unsaturated fatty acids
Genetic* Diet	40	Puparial adhesion/salivary gland (8, 4.45) Phagocytosis, engulfment (4, 1.53)	none