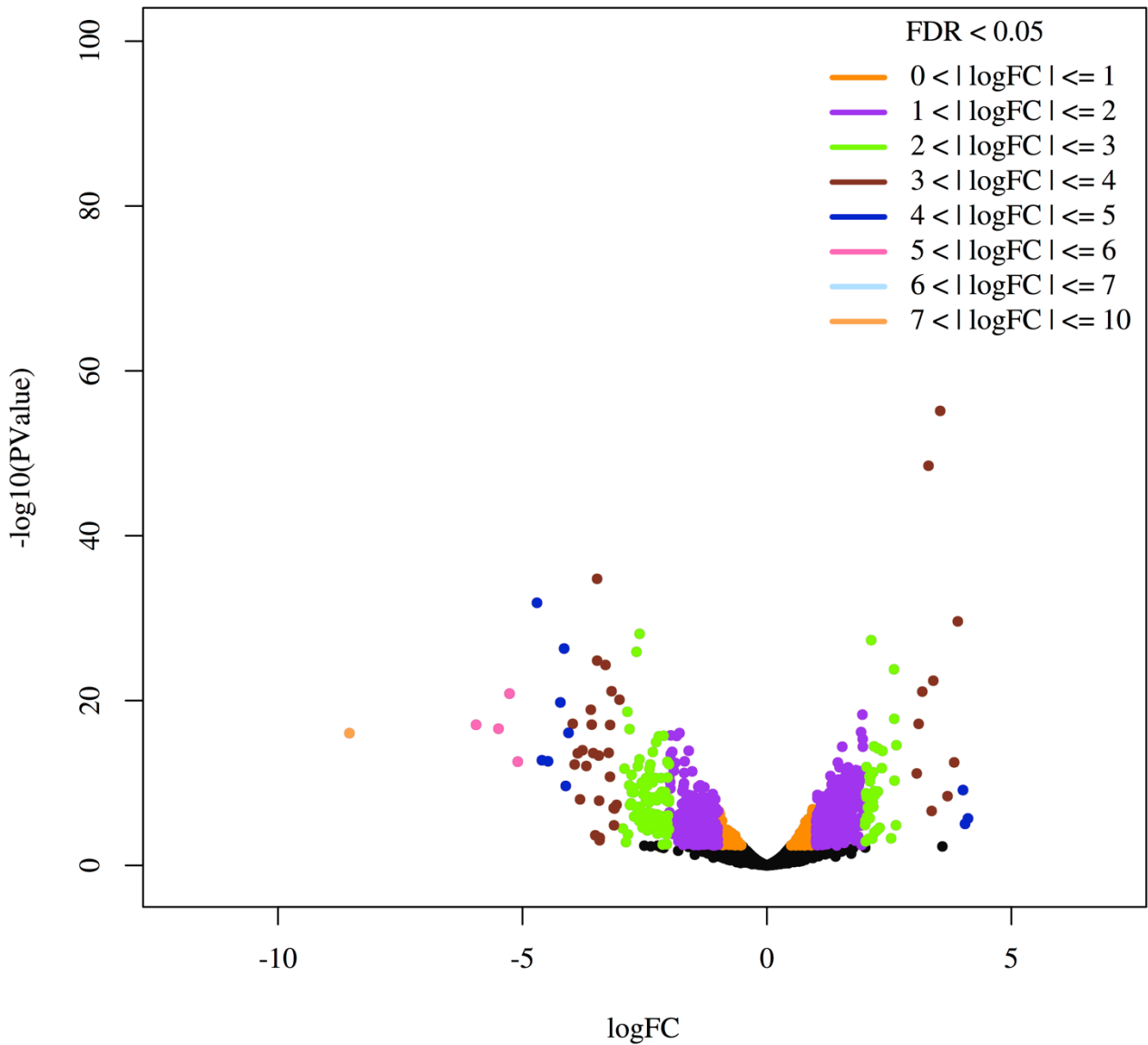


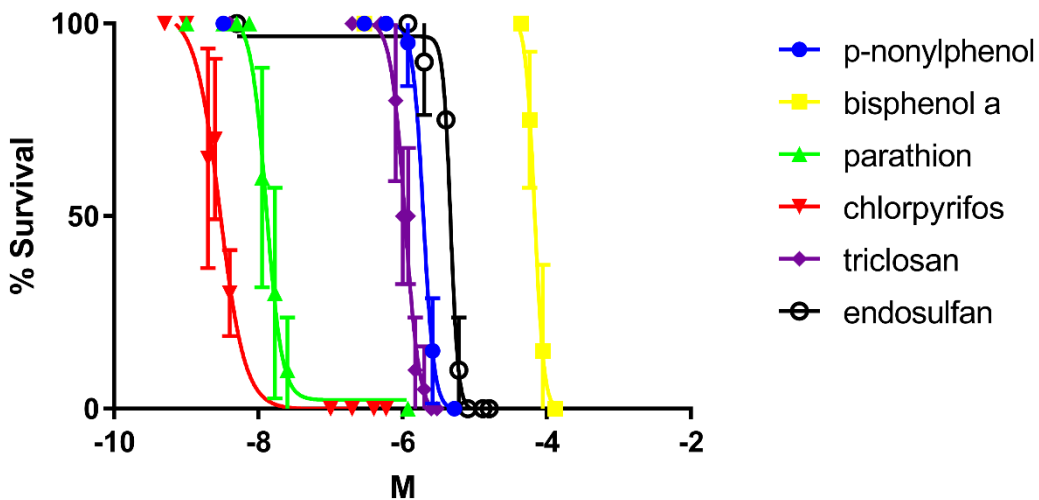
Supplementary Fig. 1. Differentially expressed genes. Genes without significant differences in fold change or without significant p-value are represented with black dots. Dots of other colors represent the 675 significantly upregulated and 441 significantly downregulated genes found during RNA-sequencing.

Volcano plot of differentially expressed genes due to atrazine exposure



Supplementary Fig. 2. Individual toxicity of six environmentally relevant chemicals. *D. magna* neonates were exposed to varying concentrations of each compound individually for 48 hours, and survival was measured.

Transform of Combined of individual chemicals



Supplementary Fig. 3. Area under the curve (AUC) for individual chemicals, atrazine containing mixtures, and CATAM predictive dose-response curves. AUC was calculated for each chemical's individual dose-response, atrazine mixture, and CATAM dose-response curve using Graphpad Prism 7.0. The CATAM model's AUC was calculated based on the upper and lower limits of the 95% CI from the LC50 and Hillslope's used to determine the dose-response curve of the model as described in the Materials and Methods. AUCs were compared using one-way ANOVA followed by Fisher's LSD test. Bars that are significantly different have different letters. Asterisks denote p-values for comparison to the CATAM model: * = ≤ 0.05 ; ** = ≤ 0.01 ; *** = ≤ 0.001 .

