STEVEN SNEDEGAR and HEATHER ARNETT, Dept of Biology, University of Charleston, Charleston, WV, 25304. Fatal and Behavioral Effects that Household Cleaners Pose to Pets.

Frequent cleaning of a household is necessary to maintain sanitation; however, houses are not well ventilated and cleaning products may contain eye, skin, and respiratory irritants. Pets spend the majority of their time on the floor of the home, so they are potentially at risk of chemical exposure by cleaning products up to two times per week. These irritants may affect pets due to their paws walking on surfaces, and them licking themselves clean; this makes it easy for pets to ingest chemicals. *Gryllodes sigillatus* (cricket) were used as a model organism to mimic the behavior that a pet would exhibit such as walking and resting. The crickets were exposed for five days to low, medium and high concentrations of the cleaner, Formula 409. Food accumulation was measured, and crickets with no exposure to Formula 409 consumed the least amount of food. Activity levels were measured for ten minutes, and the crickets from the control group experience the highest increase of activity. Death rate was measured, and there were no fatalities throughout the experiment. ANOVA was utilized to determine a difference in means, if a difference was found, a Tukey test was used. Unaccumulated biomass was found significant with chemical concentration ($F_{(3,24)}$=14.7, p<0.001). For Unaccumulated biomass, Concentration 0% was significant with 25% ($t_{(3,24)}$=5.69, p<0.001), 50% ($t_{(3,24)}$=4.94, p<0.001), and 100% ($t_{(3,24)}$=5.56, p<0.001). Activity change was significant with chemical concentration ($F_{(3,24)}$=3.23, p=0.04). The only significant difference was between 0% and 50% concentration ($t_{(3,24)}$=-2.86, p-0.04).