Effects of Alcohol on Drosophila Behavior

Your Name

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Notes: Title should be descriptive but concise, containing some key words Title page should include only the information shown here Use no smaller than 12 pt font Capitalize words in title (except "of", "the", "in",) **ABSTRACT** (Capitalized with bold face, underline or all caps)

A simple summary of the important points of the paper. Usually a 1-2 paragraphs. It includes the hypotheses, a brief description of the types of experiments done, the major results found and conclusions.

Example

Drosophila (fruit fly) is a well-studied organism which has been used as model to understand higher-order organisms both at the behavior and nolecular levels. Because this organism reproduces rapidly a number of mutants phenotypes exit, Drosophila has proven to be very useful tool. Because high alcohol levels has been shown to have an effect of development of the human fetus, we asked whether similar effects are observed and to what extent in the Drosophila. In order to test this hypothesis, Drosophila were treated with varying levels of alcohol at various times during embryogenesis. Our results demonstrate that as little as 10% alcohol treatment has profound effects on Drosophila development. In addition, embryogenesis was delayed and abnormal wing development was observed. These results suggest that alcohol affects many aspects of Drosophila embryogenesis.

INTRODUCTION

Write a 1-2 paragraph introduction to the subject matter to give the casual reader a sense of what is being studied, and what questions the experiments are addressing. Your mom should be able to read this and make some sense out of it. When you make a claim, cite the source (for this class, it will be the lab text or the Campbell/Reece Biology book). The last sentence of two should describe the experiment actually done. Lastly, state the outcome of your experiment.

Blah....Blah...B

MATERIAL and METHODS

Provide a detailed account of the materials used and the methods carried out. It should include enough detail so that a classmate could repeat the experiment just by reading your description. *Always use past tense*. Avoid outline form or numbered. For experiments in Bio1100, this section will likely be 1-2 pages in length.

RESULTS

This section should also be a narrative. Your first sentence should set up the reader for what is to follow.

Example

The previously published results demonstrating a high rate of deformations in newborns of alcoholic mothers led us to ask questions about alcohol effects on development of a model organism, Drosophila.

Present data in a organized, readable form. If data cannot be said in a few words (and most cannot), use a table or a graph. Hand-drawn graphs and table are *not* acceptable. These should be produced on a computer. Tables should be labeled consecutively (Table

1, Table 2,) and figures (graphs, drawings) labeled as Figure 1, Figure 2,.....). All figures and tables should have a descriptive title and a legend to allow the reader to make sense to the table/figure without reading the test in the results.

Each time a result is described, reference should be made to the figure.

EXAMPLE

The treatment of Drosophila with 20 % ethanol resulted a 30% increase in heart rate (Table 2)" However, although the heart rate increased, it quickly returned to normal 10-15 minutes after removal of the alcohol (Figure 2).

Do not explain why the results turned out the way they did, only describe the results.

DISCUSSION

Use a few sentences to restate your experiment and your hypothesis. Then mention the results and describe what you think they mean.

EXAMPLE

Alcohol exposure in humans has been demonstrated to result in multiple errors in development. The experiments described here examined the effect of alcohol of development of a drosophila Although we predicted that, our results showed that Surprisingly, although thethe effects were minimal. However.....

Describe what may have gone wrong, variables that could have affected your results, nd interpretation of results. List how the experiment might be done for more reliable results. What would you change? Could these results be applied to other creatures? State any conclusions.

Total length should be 1-2 pages in length.

LITERATURE CITED

List references, usually in the order they were cited in the text. See appendix 2 of your Bio1100 lab manual for examples of how to enter references.