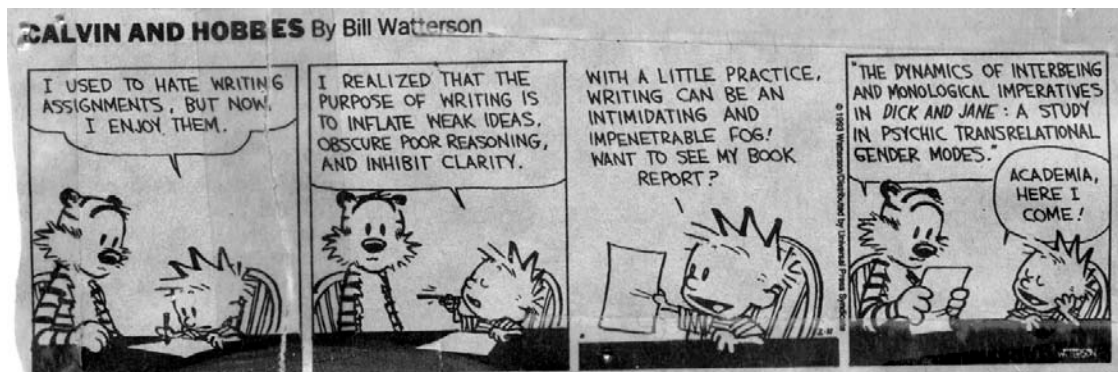


A Quick and Easy Guide to Science Writing



Abstract	<p>Outline of your entire paper 200-250 words in length Avoid fluff Provide key components of each of the sections: Intro, Methods, Results, Discussion/Significance Usually written <i>last</i>, after completing the rest of the paper <i>Note: Every sentence should contain crucial information</i> Active voice</p>
Introduction	<p>Provide a basic literature review summary of previous studies relating to your research Introduce the relation of your research to this body of existing literature Introduce and explain your research project Explicitly state the aims of your particular research project <i>Note: This, in addition to the discussion, is the only section that cites sources</i> Active voice</p>
Methods	<p>Most mechanical section of the paper Describe the design / model of the experiment, the materials used (quantities, concentrations), preparation, equipment and procedure Describe how the data was recorded <i>Note: This section should allow other experimenters to reproduce your study</i> <i>Note: It is acceptable to use the first person, e.g. "We poured solution in a beaker"</i> Passive voice</p>
Results	<p>Should include graphs, tables and figures (refer to the backside of this sheet) The text of the results section should present <i>only</i> the data, without any analysis Use proper measurements and units while presenting your results Refer to your tables and figures within the text of the section Focus on what worked, not things that did not work (unless they are interesting or provide some insight) <i>Note: Since this section will most likely have a lot of numbers, it is important to present the data with clarity</i> Passive voice</p>
Discussion/ Conclusion	<p>Analyze and interpret all the results in detail Still refer to graphs, tables and figures when necessary Voice any uncertainties about your results: mention any human or machine error, contaminated substance, etc. Explain the significance of your results for the larger scientific community Explore possibilities for further research Express a broader vision Express your conclusions explicitly and humbly, not claiming too much <i>Note: Give your results credibility by citing other studies that yielded similar results</i> Active voice</p>

Table, Graphs and Figures

Tables, graphs and figures should be presented in the results section. Each illustration should have a title, labels on each axis (with units of measure), a legend (if necessary) and a descriptive caption explaining what the results indicate. This is somewhat confusing because, although the text in the results section is supposed to only give data (without analysis), the captions should be somewhat descriptive and explain the significance of each respective illustration.

Also, please note that Tables are labeled/captioned above the illustration and Figures are labeled/captioned below the illustration. Below are some examples.

Table 1: This table displays the average and standard deviation of each spice's zone of inhibition according to its respective solvent, water or etoh. If the standard deviation is close to one, the results are not reliable. This is the case for chili in the solvent etoh; however, the controls, coriander in etoh and cinnamon in etoh appear to be reliable based on their low standard deviation.

Spice and Solvent	Average Zone of Inhibition (mm)	Standard Deviation
cardamon etoh	0.5	0.224
cardamom h2o	0.7	0.583
chilih2o	0.4	0.187
Chli etoh	1.24	0.958
Cinnamon Etoh	2.6	0.187
Cinnamon h2o	1.7	0.2
Control Etoh	0	0
Control H2O	0	0
coriander etoh	0.2	0.122
coriander h2o	0.9	0.678

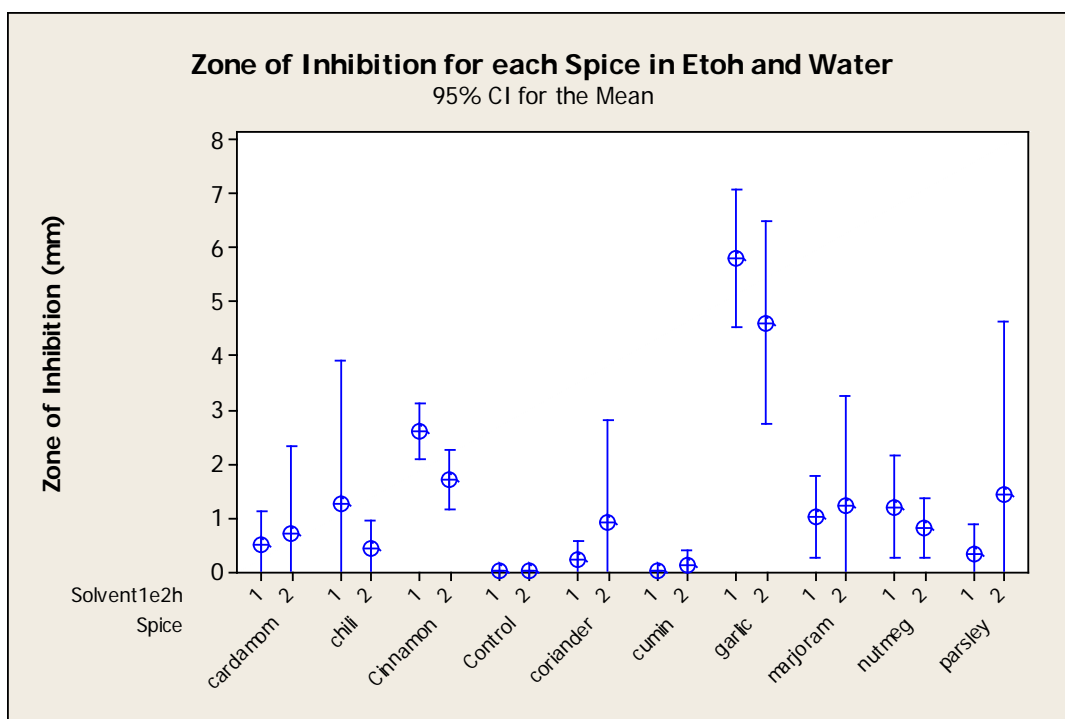


Figure 4: This plot portrays the average zone of inhibition for each spice in both ethanol and water, which is indicated by the circled points, and the standard deviation, indicated by the vertical lines at each point on the graph. More trials would decrease the standard deviation. Some of this data appears to be unreliable based on the high standard deviation (i.e. chili in etoh and parsley in water).