

USING CHARTS & GRAPHS IN SCIENTIFIC WRITING

This handout will examine when the use of charts and graphs is appropriate and when it is not. It will also discuss the proper formatting and placement of charts and graphs within scientific writing assignments

Charts, graphs, and other images are visual media used in scientific writing to illustrate concepts or convey meaning that would be difficult or cumbersome to explain fully in text. Furthermore, important relationships among variables or trends in data are easily represented via charts and graphs.

Charts (tables) are typically used to present quantitative data that would be too excessive to explain in text. They are numbered sequentially in the paper, have distinct titles, and sometimes contain notes explaining the statistical techniques used for that particular data set.

Table 1: Experimental Design: 2x4 two-way factorial experiment

		Detergent Concentrations			
		0 mg/kg soil	10 mg/kg soil	20 mg/kg soil	30 mg/kg soil
Nitrates	Nitrates Absent	N = 9	N = 9	N = 9	N = 9
	Nitrates Present	N = 9	N = 9	N = 9	N = 9

Graphs (figures) are used to show significant trends in data or to demonstrate a clear comparison between variables or results. Like charts, they are also numbered sequentially in the paper and have specific titles. The axes should be clearly labeled. Each graph should contain a figure legend that explains the data presented by the graph and any statistical techniques used.

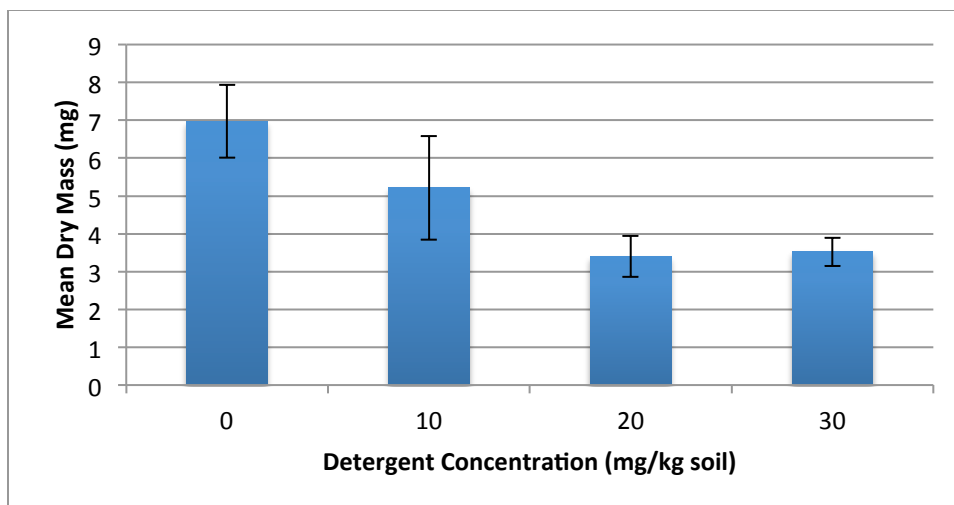


Figure 1 – Mean dry mass (mg) for *P. cuspidatum* under differing detergent concentrations. Standard error bars are shown.