

Report Writing: Practical Reports for Level 5

School of Viticulture and Wine Science

You are required to make records of raw results or experimental data as you proceed through a practical experiment. For selected practical experiments you will need to prepare reports and consider questions. You may see the Course Coordinator or Lecturer during the course if you have any questions regarding the practicals, the results, and the reports.

The following points on the preparation of practical reports are intended as a guide that will be used throughout your programme. The following is what will be expected of a practical report in the first year courses, and this will be developed further in second and third year courses, using the guide by Emerson, L. and Hampton, J. (2005). Writing guidelines for science and applied science students. Please refer to this reference for further information.

Date / Name

Title: All reports must have a title, presented clearly and to the point. If experiments are combined, devise an appropriate title that encompasses the two or more projects.

Aim

In your own words, present a short statement of project aims.

Introduction

You will be required to prepare an introduction which will be a summary of the introduction that is in your practical manual, together with other relevant material from textbooks and journals and other resources (these will need to be referenced correctly).

Materials and Methods

There is no need to copy the details given in the manual. Simply refer in your report to the particular practical. However, modifications to methods must be described.

Results

This is where you report the information showing what occurred in the experiments. These results are based upon the data obtained, as previously noted in your laboratory records. Careful collection and compilation of such data are obviously required. The results section will draw your readers' attention to the salient features of your laboratory observations. You will use diagrams, charts, tables, and graphs to do so. Do not leave these tables and figures to "stand-alone", but use constructive, short and to-the-point sentences to introduce them.

Tables should be neat, numbered and titled. The title should be above the table, with any key below. They may require some re-listing of your raw or transformed data. They should be intelligible without too much reference to the text. The units of variables should be quoted and numerical data rounded off where appropriate.

Figures should be neat, numbered and titled. The title can come above or below the figure, depending on your preference, but be consistent. Illustrations (e.g., microscope drawings of cells, drawings of chemistry or physics apparatus, annotated photographs) should be simple line drawings. A scale for size should be given.

For graphs, axes should be labelled, both as to what they represent and the units used. A legend should be included if required. There are many ways to link up data points on a graph. The choice between drawing the line of best fit and "joining the dots" will often depend on the amount of data available and the nature of the data. There are no hard and fast rules. However, you should try to indicate the confidence you have in each data point, and thus the net results. Do not extrapolate without indicating that you have done so.

Calculations if you have performed any calculations on the results to yield calculated results, give an example detailed calculation in this section. Also include units and error analysis where appropriate.

Discussion

You are required to prepare a discussion section which incorporates your laboratory findings (results) into the body of existing knowledge. To write the discussion you will need to be familiar with the area (through other reading) so you will know if your results conform to, refute, or extend the existing body of knowledge. You should avoid repetition of material in the results section, unless you wish to make a particular point. Rather, you should concentrate on the importance of your findings in the context of the subject.

You may include the answers to questions selected by your lecturer for your report. These questions are designed to lead you to consider the implications and applications of the results.

Conclusion

The purpose of your conclusion is to relate your laboratory findings back to the aims of the experiment. It should make 2 - 3 main points but be concise. This should not be a discussion.

References

If you have used any written material (e.g., texts, journals) for writing your report, this should be correctly cited in the body of the report and referenced in an appropriate form here. There are a number of referencing styles available but in this programme you should use the APA Referencing Guide found in Guides provided by the EIT library.

Submission

It is important to submit practical reports on due dates as specified in the course schedule. If you are studying by distance you will need to submit your practical reports by email or by post. Please fill in and attach assignment cover sheet to your reports when you submit them. You will not need a signature on the form if you email your reports to EIT.

Other Comments

The report should be written in past tense – what was done and what was found.

Do not use personal terms in your report (e.g., I, we, our).

For example, rather than “I completed the experiment and my results indicated that...” use “The experiment was completed and the results indicated that...”

Be prepared to develop flexibility in your approach to different reports.