



Model Answer

BENHA UNIVERSITY,
FACULTY OF SCIENCE



ENTOMOLOGY DEPARTMENT

تصميم و كتابة الرسائل العلمية (٦٠٧ ش)	Academic Year 2015/2016
تمهيدي ماجستير حشرات	80 Marks
Wednesday, 29/8/2016	Time Allowed: 2 Hours

1. What are the general considerations in writing the acknowledgments? (10 Marks)?

- Acknowledge significant help from any individual, in your lab or anywhere, e.g. the source of special equipment's, cultures, materials, ideas, the help of anyone who contributed significantly to the work or to the interpretation. There is not anything really scientific about this section of the paper, but it is a sort of being courteous & having ethics.
- It is often wise to show the proposed wording of the acknowledgments to the person(s) who helped you, because sometimes these words may displease them, e.g. being insufficient or hazy.
- Acknowledge any outside financial assistance as grants, contracts, fellowships, etc.
- Be very specific when acknowledge an idea, suggestion or interpretation of some body; don't endorse him in your conclusions.

2. What are the general considerations in writing the discussion? (10 Marks)

The discussion is the hardest section to write. Many papers are rejected by editors because of faulty discussion, even through the data are valid & rich. The discussion:

- Interprets the data presented in the results section, giving particular attention to answer the question posed in the introduction.
- Presents the principles, relationships & generalizations shown by the results. Don't restate the results as written in the section of 'results', but just discuss them.
- Points out any exception or lack of correlation & defines unsettled points.
- Shows if the results & interpretations agree or contrast with previously published work, & consider reasons for disagreement.
- Discusses the theoretical implications of the work, as well as any possible practical applications.
- States the final conclusions as clearly as possible.
- Summarizes the evidence for each conclusion.
- Ends with a short summary or conclusion regarding the significance of the whole paper.

To reach the goal of the discussion, it is not necessary to reach big conclusions. It is difficult to reach the whole truth in a single paper, so you have to “shine a spotlight on one area of the truth”. When you describe the meaning of your little bit of truth, do it simply. If you extrapolate to a bigger picture than that shown by your data, you may appear foolish.

3. Extract the criteria for writing the materials and methods in a thesis. (10 Marks)

This section should contain enough details of the materials & methods used, so that a competent worker can repeat the experiments and obtain similar results (reproducible). Many readers of your paper will skip this section, because they already know, from the introduction, the general methods used. However, careful writing of the materials & methods is crucial, because good scientific results are reproducible by other authors.

Materials:

- a) Should include the technical specifications, quantities used & source or method of preparation.
- b) Sometimes it is necessary to list the chemical & physical properties of the reagent used.
- c) Avoid the use of trade names; use of generic or chemical names is usually preferred (to avoid advertising).
- d) Non-proprietary names are usually known throughout the world, whereas proprietary names may be known only in the country of origin.
- e) Experimental animals, plants & micro-organisms should be identified accurately, usually by the genus, species & strain names. Sources & special characteristics should also be listed, e.g. age, sex, genetic \ physiological status, etc.
- f) Human subjects are characterized appropriately (age, sex, diseases, etc.).

Methods:

- a) If your method(s) is new (unpublished), then all details should be given. If the method has been previously published in a standard journal, only the literature reference should be given. If the journal is not at the International level, the full details must be written.
- b) If several alternative methods are commonly employed, it is better to refer briefly to the method & cite the reference, e.g. “Cells were broken by ultrasonic treatment as previously described by ----- (1995).

4. Discuss the methods used to list the authors and addresses in the title. (10 Marks)

- a) Listing authors is not agreed upon in all cases.
- b) Some British journals list them alphabetically.
- c) The logic tendency defines the 1st author as the 1^{ry} motivator of the work and did most of the research, even if the 1st author is a graduate student.
- d) The 2nd author is the 1^{ry} associate, who may be the head of the laboratory or has Nobel Laureates.
- e) The 3rd author may be equivalent to the 2nd or having a lesser role.

- f) This encourages young scientists & is probably the best system.
- g) Some journals use full names rather than the initials to prevent confusion in the literature & avoiding problems that may arise in bibliographic data bases.
- h) The preferred form of writing the author's name is the 1st name, middle initials & last name, e.g. Abdelwahab A. Ibrahim.

5. Mention the advantages and disadvantages of the Alphabet–number (Harvard Reference Style) for writing references, then arrange the following references according to this system (10 Marks)

Advantages:

- a) Convenient to the author, as the references are not numbered.
- b) References can be added / omitted easily.
- c) If 2 or more papers for the same author(s) are quoted, they are numbered “a, b, c ...”, e.g., Ibrahim (1950, a) Ibrahim (1950, b), etc.

Disadvantages:

- a) As to the reader when a large number of references must be cited within one sentence or paragraph (often in the introduction), the reader sometimes jump over several lines of references.
- b) As to the publisher, it means increased cost.

B

Read the given paper, and comment on the following sections taking into consideration the criteria of each section: abstract, introduction, materials & methods and references.(40 Marks)

Title,

- Not specific.
- Contains “hanging title” arrangements.
- The word studies can be removed.
- The work is in Giza not Egypt.

Abstract,

Missing important data as:

- The national income gains more than 30 million dollars/ year from these plants. (Where is the reference?)

- Scales suck plant juices and inject toxic secretions into plant tissues. (Where is the reference?).
- the most common and important scale insect attacking citrus trees and ornamental plants in Egypt since 1922 (Hall, 1922). I(t is not statement of Hall but another author)
- No mention of the previous studies made on this subject.
- It doesn't include the aim and significance of work.

Materials and methods,

Examples of mistakes

- Number of trees sampled and site of sampling on the tree.
- Collected leaves were collected (syntax error).
- Size of the bag.
- Method of preservation and transportation.
- Method of examination.
- Name and version of the statistical program.

Arrangement of References,

Hall, D. G. (1948).

Hall, M. J. R. (2008).

Hall, M. J.; Farkas, R.; Kelemen, F. and El-Khoga, J. M. (1995).

Hall, R. D. (1990).

Hall, R. D. and Doisy, K. E. (1993).

Hall, R. D. and Huntington, T. E. (2010).

Houk, E. J. (1977).

Houk, E. J.; Chiles, R. E. and Hardy, J. L. (1980).

Morgade, C. and Barquet, A. (1982).

Smith, K.G.V. (1975)

Wall, R. and Fisher, P. (2001).

Wall, R.; French, N. and Morgan, K. L. (1992).

Wall, R.; Green, C. H.; French, N. and Morgan, K. L. (1992).