# PART II. PREPARATION OF THESIS

## 1. The Volume of Thesis

The bulk of a thesis is no criterion for the excellence of a piece of work. A student must keep in view the economy of space, labour, time and clarity of presentation. Padding with lengthy descriptions and avoidable discourses do not add to the standard of scholarship. The study of science enjoins on us a forthright, objective description of phenomenon and interpretation of results. It is therefore, essential that the bulk of a thesis must be carefully controlled, e.g. around 75-100 pages for M.Sc. (Hons.) or M.Phil. thesis and 150-200 for Ph.D. dissertation in experimental, social and descriptive sciences including appendices and tables (excluding illustrations) may be a reasonable volume to incorporate and digest a lot of scientific information.

## 2. English Usage and Grammar

The students will be responsible for correct English usage and grammar. Small sentences comprising 25-30 words may be good practice to follow. A good sentence is one which describes or addresses one thing at a time in minimum words. Such straightforward sentences are easy to construct (e.g. “There has been an increase in the amount of milk consumed by teenagers” and “Teenagers are drinking more milk” ─ compare the two sentences to say the same thing). The students may seek help of other competent persons in this regard. The brief description given below will help the students in correct expression. The following few rules address usages that have given many authors trouble in the past; any standard grammar book may be consulted for details. A good flow and consistency of language in statements and paragraphs should always be maintained which makes the presentation attractive.

### a. Punctuation

- Use a comma before 'and' or 'or' in a series of three or more items, e.g. "0.8, 2.1, and 3.9 kg $ha^{-1}$"; "shoot biomass, root biomass, leaf blade or leaflet length and width, and plant height"; but "nodule weight and size and $N_2$ fixation."
- Use a semicolon to separate a series of items within a list if any one of them itself includes a comma, e.g. Treatments in the second fertilizer study were @ 56, 112 and 448 kg $ha^{-1}$ N; 25 and 49 kg $ha^{-1}$ P; and 47, 93, 139, 186 and 279 kg $ha^{-1}$ K.

- Punctuation in display lists (where each item starts on a new line) depends on the content and context. If all the items are short, independent phrases, use no period. If anyone of the items is a complete sentence, end each item with a period. If the list is functionally part of the introductory sentence, punctuate with commas or semicolons and a final period, just as we would if the sentence had no line breaks.
- Use no comma in dates, e.g. May 2000; 14th May 2000.
- Commas and periods come before a closing quotation mark, an asterisk, or a superscripted footnote number; semicolons and colons come after. Do not double periods at the end of a quotation: "Once is enough."
- Use single quotes around cultivar names the first time these are introduced in the abstract or text; however, do not use both single quotes and the abbreviation cv. or the word 'cultivar'. Place punctuation outside of the single-quote marks. Do not use cultivar quotes with landraces or experimental lines.
- For parentheses within parentheses, substitute brackets for the inner pair. For example: "---- declared the problem solved (Lloyd-Jones, 1873 [as cited by Andrews. 1996])." Professional Societies publications require two exceptions in prose:
  - Use brackets to enclose scientific names that already contain parentheses, as in "soybean [*Glycine max* (L.) Men.]" was ------- "An alternative is to use commas, as in "soybean, *Glycine max* (L.) Men., was -------."
  - Put equation numbers within brackets, regardless of other parenthetical marks. For example: Eq. [1], Eq. [3] to [9].
  - For mathematical usage, fences are used inside out in the order [{( )}].
- To form the plural of most abbreviations without periods, add a final s (e.g. RFLPs. PIs, SEs). To form plurals of abbreviations with periods, lowercase letters used as nouns, upper case letters that might be confused for something else, and for abbreviations or symbols ending in a superscript or subscript, put an apostrophe before the ‘s’. For example M.S.’s, A’s, F2’s.
- It is advisable to follow anyone English dictionary consistently throughout the text in general or where no explanation is provided in this manual regarding the punctuation. The common dictionary in use is one published by M/S Longman or Oxford.

## b. Hyphens, Spaces, and Dashes

A word containing a prefix, suffix, or combining form is a derivative and is almost always written as one word. Compound words used to express an idea different from that expressed by the separate parts are usually written as one word. Hyphens and en-dashes are used to avoid a confusing sequence of letters, a confusing sequence of adjectives, a jumble of ideas, or possible confusion with a word of the same spelling without the hyphen, e.g. co-op, as distinct from coop. Comprehensive rules for compounding words can be found in dictionaries, books of usage, and style manuals. Most of the compounds and derivatives fall under the following general rules:

- Derivatives are usually written solid, e.g. antiquality, clockwise, fourfold (but 10-fold or 1.5-fold), nonadditives, nonsignificant, postdoctoral, preemergent, reuse, shortwave.
- Where several usages are acceptable, choose one and use it consistently throughout the manuscript, e.g. winter hardiness or winterhardi-ness, but not both; likewise, main stem or mainstem, but not both.
- Use hyphens with prefixes to words that begin with a capital and sometimes in a few awkward combinations that bring like vowels together, e.g. un-American, semi-independent.
- Hyphenate a compound adjective when used before, but not after, the word it modifies, e.g. a winter-hardy plant; the plant is winter hardy.
- Hyphenate two-word verbs but not phrasal verbs. The distinction is not always obvious, but two-word verbs usually have the modifier first and the main verb second; phrasal verbs have the verb first. It may be easier to memorize a few often-used forms. Common examples include air-dry, heat-shock (but 'heat shock' as a noun), out-cross (but 'crossing out'), winter-kill (but 'winterkill' as a noun).
- Compounds in 'cross' are so many and varied that a reference list drawn from a good dictionary can help: cross-check, cross-country, cross-examine, cross-eyed, cross-fertile, cross-fertilization, cross-fire, cross-grained, cross-hair, cross-index, cross-legged, cross-link, cross-linkage, cross-linked, cross-multiply, cross-pollinate, cross-pollination, cross-product, cross-purpose, cross-reaction (antigens), cross-reference, cross-section, cross-sectional, cross-sterile, cross-tolerance, crossbred, crossbreed, crosscut, crosscutting, crosshatch, crossing-over (in genetics), crossover, crosspiece, crosswalk and crosswind.