ABBREVIATIONS

Use abbreviations sparingly. If we have to abbreviate, try to find a standard abbreviation given in Ulrich, Abacus or CABI abstracting agencies rather than making up one specific to our paper. If the use of an ad hoc abbreviation is necessary, avoid letter groups that already are familiar abbreviations but with a different meaning. For a fictitious example, do not abbreviate leaf appearance interval as LAI, even if we are not going to discuss leaf area index. Some commonly used abbreviations and acronyms (an acronym is an initialism or abbreviation that can be pronounced as a word) have become words in themselves; DNA and ELISA, for example, are rarely spelled out.

Avoid using abbreviations at the beginning of sentences and in titles. Never begin a sentence with a single-letter abbreviation (I instead of iodine, for instance). Let the context decide whether to use an abbreviation. What makes sense in the dense presentation of Materials and Methods or the quantitative presentation in Results may be clumsy in the introduction or the conclusions. Abbreviations could be used in the text provided it is written in full where it appears first time in text. The following are exceptions to this rule:

1. **Titles:** Such as Mr., Mrs., Ms., M/S, Sr., Jr. etc. are always abbreviated.

2. **Lengthy Words:** Acceptable abbreviations for lengthy words and phrases are used separately throughout the text. Such abbreviations must be presented in parentheses immediately after the words or phrase for which they stand. For example “Phosphate buffered saline (PBS) was used in all dialysis operations”. In succeeding sentences throughout the thesis, initials PBS could be used in place of words phosphate buffered saline.

3. **Commonly Used Abbreviations:** Abbreviations such as “mm” and “cm” which do not require a period, or an “s” to make a plural, are acceptable. The very form must agree with the quantity, e.g. “one mm is…., but Three mm are …”

4. **Space and Time:** To save space and time, it is sometimes convenient to use abbreviations for lengthy words or phrases used separately throughout the text. Abbreviations must be presented in parenthesis immediately after the words or phrases for which they stand.

In “Discussion” and “Summary” parts of a Thesis, while discussing the results, students often fail to mention the exact nature of treatment and give only symbols such as A , B , C & D or I, II, III & IV or T1, T2, T3 & T4 etc. This often confuses the reader(s) and he/she finds it difficult to fully grasp the idea meant to be clarified. If the reader has to refer to the previous pages again and again, for the explanation of notations and symbols, the very interest in the publication is lost. It is therefore, essential that treatments should be explained very briefly within parenthesis whenever the symbols are used. Alternatively use symbols for treatments which are very much self explanatory. However, always try to use internationally accepted abbreviations throughout the thesis. A list of commonly used and nationally/internationally accepted abbreviations is given (Table 1, Appendix 6)**.** In addition to this list and all of the above statements, it is preferred to prepare a list of abbreviations and symbols used in the thesis and to place it before the acknowledgement page.

Common abbreviations that do not need definitions. Use may be restricted in tables and figures (T), with numeric values (N) or in addresses (A)

Abbreviation	Meaning (restriction)	Abbreviation	Meaning (restriction)
a.i.	active ingredient	Inst.	Institute, Institution (A)
Agric.	Agriculture, Agricultural (A)	Int.	International (A)
ARS	Agricultural Research Service (A)	Max.	Maximum (T)
ASA	Am. Society of Agronomy	Min.	Minute (N)
Avg.	Average (T)	Min.	Minimum (T)
CI	Cereal Investigation	Mo	Month (N)
Coef.	Coefficient (T)	No.	Number
CSREES	Cooperative State Res., Edu. and Extension Service (A)	NRCS	National Resources Conservation Service (A)
CSSA	Crop Sci. Society of America	o.d.	Outside diameter (N)
cv. or CV.	Cultivar	PI	Plant Introduction, Plant Identification
d	Day (N)	Res.	Research (A)
Dept.	Department (A)	S	Second (N)
Diam.	Diameter (T,N)	Sp., spp.	Species
Dry wt.	Dry weight (N,T)	SSSA	Soil Sci. Soc. Am.
EC	Electrical conductivity	Stn.	Station (A)
SCS	Soil Conservation Service	TVA	Tennessee Valley Authority
ELISA	Enzyme-liked immunosorbent assay	Univ.	University (A)
Eq.	Equation, Equations (N)	USA	United States of America

Expt.	Experiment (A, N)	USDA	US Dept. of Agriculture
Fig.	Figure (number), Figures (range of numbers)	US-EPA	US Environmental Protection Agency
Fresh	Fresh weight (N,T)	VS., vs.	Versus
Gt.	Gravity constant	Wk	Week (N)
i.d.	Inside diameter (N)		

The CI must be followed by a two-letter abbreviation for applicable in cereal genus: Cl*av* for oat, CI*ho* for barley *(Hordeum),*CI*tr* for wheat *(Triticum),* etc.

Use cv. only before a cultivar name, and preferably only if also after a scientific name.

§ Abbreviate only with values ≥ 6; otherwise, spell out both number and month, with sonic indication that the value is approximate.

Despite the strictures of the CBE style manual (CBE, 1994, p. 187), do not use “nr” as an abbreviation for number; do end this abbreviation with a period (No.).
Use this symbol only after a genus name.