

Guidelines for Bhutanese Journal of Agriculture, Department of Agriculture; MoAF

Content

The **Bhutanese Journal of Agriculture** focuses on original and innovative scientific research relevant to sustainable development of agriculture sector in Bhutan.

Target audience

Papers should comprise original research work that address issues and interest of the scientific community and professional segments interested in agriculture, and should strive to cover cross-cutting themes including; markets, biodiversity, irrigation/water, soils, farming systems, and climate change aspects of sustainable agriculture development in Bhutan.

Types of contribution

Research articles: (5000 – 7000 words) the articles should not have been previously published elsewhere.

Papers should

- Present original and innovative research insights;
- Be well researched and documented
- Clearly describe the research methodology including design and statistical analysis used where appropriate;
- Results should be presented based on sound facts, scientific procedures and wellfounded arguments;
- Be embedded in the relevant local, national or international debate;
- Refer to the most recent academic literature on the issues discussed;
- Be presented in a clearly structured and comprehensible manner; in the interest of disciplinary and interdisciplinary communication.

Short communication (2000-4000 words): A concise and complete description of an investigation. The bulk of the text should be organized in a continuous form with separate sections such as Introduction, Materials and Method, Results and Discussion. It should however, include a short Abstract and a list of keywords at the beginning of the communication, and Acknowledgements (if any) and References at the end. These components are to be prepared in the same format as used for full-length research papers.

Preparing your submission

Manuscripts submitted to the Bhutanese Journal of Agriculture should strictly conform to the following instructions and technical guidelines:

Total length of the article:

Maximum **5000-7,000** words including spaces and list of references for full length articles and **2000-4000** words for short communication.

Title

The first page of each manuscript starts with the title of the paper which should be typed in bold-faced print using both upper and lower case letters and set in the centre of the page. The

title should be as concise and catchy to reflect what the paper is all about. Abbreviations are not permitted in the title. The title should be in Times New Roman with **14** point bold.

Author(s) and agency

The names of the author(s) should be written in full. Indications of titles, professorial ranks or other professional titles should not be used. The address of the agency to which the author belongs to shall be written as footnote. Please provide the email address of the first corresponding author only in italic, **8** point, Times New Roman.

Abstract and key words:

The abstract consists of **150 – 300** words in one paragraph. The abstract should summarize pertinent results in a brief but understandable form. The abstract should start with a clear statement of rationale, brief objectives of the experiment/research/study and methods, results and must conclude with one or two sentences that highlight important conclusions. References are never cited in the abstract. Abstract should be indented by **0.2** inch on left and right, and centre justified with **12** point italic, Times New Roman. Below the abstract, list three to five key words that best describe the nature of the research.

The term "**Keywords**" is typed in bold-faced print followed by a semicolon. The first letter of each key word is capitalized and key words are separated by semicolon. Keywords should include the main attributes of your papers; should be between 3-5 keywords; font **12** point italic, Times New Roman.

Introduction

The introduction starts on a new page following the abstract. The introduction briefly justifies the research and specifies the hypotheses to be tested. Discussion of relevant literature should be cited to support/justify your research in the introduction. Introduction should be divided into concise paragraphs, each paragraph dealing with a topic of your research theme. Mention of the objectives of the study or research shall not be done under separate heading. If at all necessary, it can be included in the introduction. Objectives should be clear, concise and realistic.

Materials and Method

Materials and Method should be clearly described in a step-by-step guide for others to understand and follow.

General:

Study area, location and their description must be given with illustration if possible. Authors may supply latitude and longitude coordinates for the study area/location referred to. For any equations used in the papers, standard equation format should be followed. Equations must be numbered and placed directly in the text with serial number. Figures, tables, and boxes must be referred to in the text, in numerical order.

Statistics: Data should be analysed using standard statistical model. The use of incorrect or inadequate statistical models to analyze and interpret data is not acceptable. The statistical model, classes, blocks, and experimental units used must be described. Statistical test (S)

used should be clearly stated. Both confirmatory inferential statistics such as LSD, *r*-value, 95% CI, etc, should be at P-value of 95% confidence level and descriptive statistics such as standard error, standard deviation, CV%, etc, should be provided where appropriate.

Results and Discussion

Results should be presented in tabular or graphical form with description of key results in the text. The text should explain or elaborate on the tabular/graphical data, but numbers should not be repeated extensively within the text. Sufficient data with index of variation should be presented to allow the reader to interpret the results of the experiment.

Discussion should interpret the results clearly and concisely and should integrate similar literature results with the research findings to provide the reader with a broad base on which to accept or reject the hypotheses tested.

Conclusion

This section should consist of **300-500** words. Conclusion section should highlight key findings and their implications to relevant users of the information. It should explain in lay terms, without abbreviations, acronyms, or citations, what the findings of research/study are. Do not repeat statements made in the result and discussion sections.

Acknowledgement

Acknowledgement should be made to key persons other than authors and co-authors including the anonymous reviewers and funding agencies. However, it should not be lengthy.

References

Tables and Boxes

Tables are used to present numerical data in a self-explanatory manner. They should be intelligible without consulting the text and should not duplicate data already given in the text or in illustrations. Any abbreviation used in a table must be defined in that table. All tables should be cited in the text. Arabic numerals are used to number tables. The table number (i.e. Table 1.) is typed followed by a period. The title of the table should be given just above the table with only the first letter capitalized; font 12 Times New Roman. Do not use a period at the end of the title. Column headings should have the first letter of each word capitalized while the names of variables are typed with only the first letter capitalized (i.e. Average growth rate). For numerals less than 1, insert a zero to the left of the decimal point (columns should be set up so that decimal points are aligned). If there are no data for a particular entry, insert a dash. If an explanation is necessary, use an abbreviation in the body of the table (e.g. NA) and explain clearly what the abbreviation means.

- In boxes, include caption in a title bar (topmost line across entire box)
- Your submission may have no more than 5 tables or boxes in total
- Very large tables and long lists should be avoided.
- Tables should be inserted as enhanced metafiles
- No border lines, only boundary lines will be used, 10 point, Times New Roman and no colours

- Text in tables must always be horizontal; no bold.

Example

Table 1. Mean growth rate of chilli plants

Treatments	Plant height (cm/plant)	No. of leaves per plant	Stem girth (mm/pant)	Yield (kg/plant)
Poultry manure	145	78	10.5	144
NPK	132	76	9.2	128
Cow manure	128	64	8.9	121
None	93	21	9.8	108

Figures

- Possible file formats: .JPG, PDF, .XLS, .GRF.
- The figures should be inserted as enhanced metafiles
- Figures should be black and white print
- The submission should not have more than 5 figures (including photos, diagrams, maps)
- Put captions below the figures; 12 point Times New Roman
- No color, but choose different shade (s) that is appropriate for black/white printing
- Photos, illustrations, flow charts can be used if necessary

Example (Figure 1)

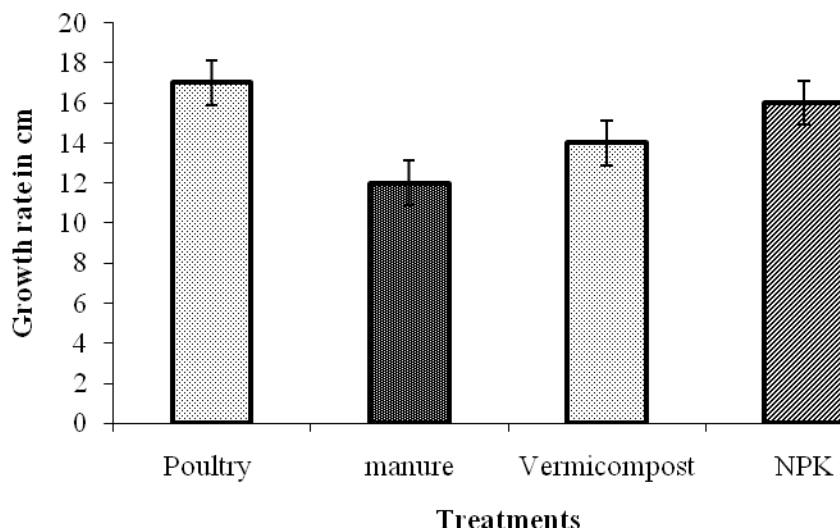


Figure1. Effect of treatments on growth rate of broccoli plant

Note: For editorial convenience, authors are also required to submit charts (figures) and tables as separate files with appropriate corresponding file references as they appear in their manuscripts.

Referencing

All literature cited in any part of your paper should be listed at the end of the body text file in a section entitled “References,” without numbering. The references should be arranged in alphabetical by author and then chronologically, giving the complete unabbreviated source citation.

General rule

For convenience and ease of use for our contributing colleagues in the research centres and our field personnel, BJA has adopted the APA (6th) style of referencing.

In-text references

Use author–year style in chronological, then alphabetical, order. Use “et al” with three or more authors. Use colon and number to indicate page reference.

Examples:

- Karma (1993, 1995a, 1995b)
- Yuden and Dorji (2004)
- (Sonam et al., 1975)
- (Stremlow 1998; Antrop 1999; Tress and Tress 2001; Backhaus et al., 2007a, 2007b)
- (see figures 4 and 5 in Keen et al., 1971)
- Wangchuk et al. (2014)
- Campbell (1993: 55)

- **Three or four authors:** Where there are three or four authors, all surnames should be used the first time the in-text reference appears in the document. For all subsequent citations, include only the surname of the first author followed by “**et al.**”
 - First mention:
 - Smith, Grierson, Malthus, and Nicholson (2015) found . . .
 - According to evidence . . . (Smith, Grierson, Malthus, & Nicholson, 2015).
 - Subsequent mention:
 - Smith et al. (2015) suggest . . .
 - The study concluded . . . (Smith **et al.**, 2015).

- **Five, six or seven authors:** Where there are five, six or seven authors, use the first surname only followed by et al.
 - According to Abercrombe et al. (2008) . . .
 - It was shown that . . . (Abercrombe et al., 2008).

- If there are several works by the same author(s), they should be arranged chronologically by year of publication with oldest reference first; if several works by the same author were published in the same year, arrange them alphabetically and add a letter to the year of publication, e.g. 1999a, 1999b, etc

- For a group, the name of the group is written in full the first time they occur in an in-text citation. However, the names of the group or organizations should appear in full with their abbreviations in parenthesis in the reference (end-text) section.

□ In-text

- (NBC, 2014); NSB (2015)

□ End-text

NBC. (2014). Biodiversity Action Plan. Thimphu: National Biodiversity Centre (NBC), Ministry of Agriculture & Forests.

MoAF. (2017). Agriculture Statistics 2017. Thimphu: Ministry of Agriculture and Forests (MoAF), Royal Government of Bhutan.

- **Place of publication:**

Use English version of cities and other place names

For books published within the United States, use the name of the city with the two official US postal service abbreviations.

For all other publications, follow the name of the city with the name of the country.

End with the name of the publisher. For example:

- New York, NY: Harper & Row.
 - Washington, DC: Author
 - Cambridge, MA: MIT Press.
 - London, England: Wildwood House.
 - Melbourne, Australia: Puffin.
 - Thimphu, Bhutan: Department of Agriculture.
- All items listed under **References** must be publicly available, i.e. in a library or on the Internet; personal communications, or unpublished data can be included; exception: unpublished articles can be listed if you provide an address at which a copy can be requested; ideally, this will be your own address; example: “available from corresponding author of this article”
 - “In press” items should include webpage or doi;
 - If you translate the title of a publication written in another language into English, indicate the original language in square brackets following the title (see examples below). The format of references is different depending on the type of literature (e.g. journal article, book chapter, conference proceedings, etc);
 - References should contain: author’s last name followed by author’s initial (s) with periods, year, and title of article, volume and inclusive page numbers. Book and reports must include the name and location of the publisher: Please see the following examples.

Sample References

Journal article

Antrop, M. (1999). Background concepts for integrated landscape analysis. *Agriculture, Ecosystems, and Environment*, 77, 17–28.

Semwal, J. K., Gaur, R. D., & Purohit, A. N. (1981). Floristic pattern of an alpine zone, Tungnath, in Garhwal Himalaya. *Acta Botanica Indica*, 9, 110–114.

Journal article published online

Albrecht, U., & Bowman, K. D. (2012). Tolerance of trifoliolate citrus rootstock hybrids to Candidatus *Liberibacter asiaticus*. *Scientia Horticulturae*, 147, 71–80. <http://doi.org/10.1016/j.scienta.2012.08.036>

Dorji, K., Lakey, L., Chophel, S., Dorji, S. D., & Tamang, B. (2016). Adoption of improved citrus orchard management practices: a micro study from Drujegang growers, Dagana, Bhutan. *Agriculture & Food Security*, 5(1), 3. <http://doi.org/10.1186/s40066-016-0050-z>

Ha, D. T., & Shively, G. (2008). Coffee Boom, Coffee Bust and Small Holder Response in Vietnam's Central Highlands. *Review of Development Economics*, 12(2), 312–326. <http://doi.org/http://dx.doi.org/10.1111/j.1467-9361.2007.00391.x>

Lakey, & Dorji, K. (2016). Ecological status of high altitude medicinal plants and their sustainability: Lingshi, Bhutan. *BMC Ecology*, 16, 45. <http://doi.org/10.1186/s12898-016-0100-1>

Journal article published online without doi

Where there is no DOI, provide the home page URL of the journal/periodical (see below)

Panoyan, L., Lee, S., Arar, R., Abboud, H., & Arar, N. (2008). The informed consent process in genetic family studies. *Genomics, Society and Policy*, 4(2), 11-20. Retrieved from <http://www.gspjournal.com/>

Book

Print Book

Brown, W. H. (2014). *Introduction to organic chemistry*. Hoboken, NJ: Wiley.

Roder, W., Nidup, K., & Chettri, G. B. (2008). *The Potato in Bhutan*. Thimphu, Bhutan: Bhutan Potato Development Program, DoA, MoA.

Edited book

Guzys, D., & Petrie, E. (Eds.). (2014). *An introduction to community and primary health care*. Port Melbourne, Australia: Cambridge University Press.

Chapter in edited book

Davies, F. T. J., Davies, T. D., & Kester, D. E. (1994). Commercial importance of adventitious rooting. In T. D. Davies & B. E. Hasting (Eds.), *Biology of Adventitious Root Formation* (pp. 53–61). New York, NY: Plenum Press.

Thesis or Dissertation

- Kershaw, L. H. (2016). *Journeys towards expertise in technology-supported teaching* (Doctoral dissertation). Retrieved from <http://ro.ecu.edu.au/theses/1776>
- Walz, A. (2006). *Land Use Modeling for an Integrated Approach to Regional Development in the Swiss Alps* (Doctoral dissertation). Zurich, Switzerland: University of Zurich.

Conference Proceedings

- Mahat, K., Loday, P., & Lakey, L. (2017). Field evaluation of attractive lures for *Bactrocera minima* (Enderlein) (Diptera:Tephritidae), for use in bait sprays in Tsirang, Bhutan. In *Proceedings of the 9th International Symposium on Fruit Flies of Economic Importance*. Vienna, Austria: International Atomic Energy Agency.
- Smith, C. L. (2003). Understanding concepts in the defence in depth strategy. In *Proceedings of the IEEE 37th Annual 2003 International Carnahan Conference on Security Technology* (pp. 8-16). doi:10.1109/CCST.2003.1297528

Poster presentation

- Mahat, K., Loday, P., Lhendup, D., Lakey, L., & Sanderson, G. (2017, May). *Area-Wide Management of Chinese Citrus Fruit Fly in Tsirang, Bhutan Using Protein Bait Sprays and Orchard Hygiene*. Poster session presented at Third FAO/IAEA International Conference on Area-wide Management of Insect Pests, Vienna, Austria.

Report

- Australian Bureau of Statistics. (2016). *Land management and farming in Australia, 2014-15* (Cat. No. 4627.0). Retrieved from <http://www.abs.gov.au>
- Stewart, J., Hedwards, B., Richards, K., Willis, M., & Higgins, D. (2014). *Indigenous youth justice programs evaluation*. Retrieved from Australian Institute of Criminology website: <http://www.aic.gov.au>

Reference works

Print dictionary

- Park, C., & Allaby, M. (2013). *A dictionary of environment and conservation*. Oxford, England: Oxford University Press.

Encyclopaedia entry

- Robinson, A. (1994). The principles of genetics and heredity. In *The new encyclopedia Britannica* (Vol. 19, pp. 699-740). Chicago, IL: Encyclopedia Britannica.

Online encyclopaedia entry

- Jensen, R. (2015). Advocacy journalism. In W. Donsbach (Ed.), *The concise encyclopedia of communication* (pp. 94-95). Malden, MA: Wiley Blackwell. Retrieved from <http://ebookcentral.proquest.com>

Newspaper article

Print

Harlan, C. (2013, April 2). North Korea vows to restart shuttered nuclear reactor that can make bomb-grade plutonium. *The Washington Post*, pp. A1, A4.

Online

Cater, N. (2016, December 27). Since Davos, only the climate remains unchanged. *The Australian*. Retrieved from <http://www.theaustralian.com.au/>

Brochures or Fact sheets

Treat brochures, fact sheets, templates etc. like books. As with any reference list entry, the four elements you'll need are the *author*, the *date*, the *title* and *source*. Indicate the type of publication in square brackets after the title, *unless the publication type is included in the title*

For example:

DoA. (2014). *The National Citrus Repository* [Brochure]. Thimphu, Department of Agriculture (DoA), Royal Government of Bhutan.

Images or Figures

Applies to maps: For example:

Figure 1. Altitude zones in Bhutan (Roder, Nidup, & Chettri, 2008, p. 15)

Reference List (end-text):

Roder, W., Nidup, K., & Chettri, G. B. (2008). *The Potato in Bhutan*. Thimphu, Bhutan: Bhutan Potato Development Program, DoA, MoA.

Spelling and other style details

- Use A4 paper size
- Format margins at 1" all round
- Text font 12 Times New Roman, 1.5 space between lines
- Use British English consistently throughout the paper;
- Use italics for local words; example *Pangtse oil*
- As a rule, spell out all abbreviations when they first occur in your manuscript; example: CIP (International Potato centre)
- All numerical units should conform to the International System of Units (SI)
- Use the metric system for all measurements
- The monetary unit should be Nu.; please indicate the US\$ equivalent in brackets or provide the current official conversion rate
- Use italics in the following way for Latin names of species: Genus species *Solanum tuberosum* or *Solanum* sp.

Manuscripts for publication in the Bhutanese Journal of Agriculture, DoA should be submitted in digital version addressed to:

Member Secretary, Bhutanese Journal of Agriculture, DoA, MoAF of Bhutan at bj@moaf.gov.bt. Caption your emails as “BJA: Article Submission” for convenience. Alternately, you can also visit the journal’s website www.bja.gov.bt where manuscripts can be uploaded.