ASABE Guide for Authors

Style Guide for ASABE Technical Publications

All material should be written in clear, correct American English. All ASABE technical publications use the same editorial style. The best way to become familiar with the general style of ASABE technical publications is to review a recent issue of an ASABE journal.

Journal articles and books are edited and prepared for publication by ASABE staff. The ASABE templates provide a manuscript format that is suitable for review and later input into the ASABE production system. ASABE staff will do the layout for the PDF files of these publications, and also move the material into XML for the ASABE Technical Library.

Papers from meetings and conferences are not edited by ASABE staff. The ASABE templates for these publications help authors provide a uniform, professional appearance for the PDF file of these publications, and also facilitate moving the material into XML for the ASABE Technical Library.

Please use this Style Guide along with an ASABE template for your publication type. If you have questions about style, usage, technical terms, or reference citations, please contact Glenn Laing at laing@asabe.org or 269-932-7014.

Numbers

In general, use words for numbers one through nine, and use digits for 10 and over. For a series of numbers, any of which are over 10, use digits for all. Use digits for values followed by abbreviated units. For example:

There were five hens in the pen.
Use 5 mL of water.
The component consisted of 231 parts.
The mixture contained 2 parts magnesium, 12 parts copper, and 8 parts lead.

When two numbers occur as adjacent adjectives, spell out the first one:

There were thirty 9 mm holes in the first section.

When a number begins a sentence, spell it out or rewrite the sentence:

Fifty samples were prepared.
We prepared 50 samples.

Units of Measurement

Express all units of measure in SI (metric) units. You may include U.S. Customary units in parentheses in special instances, such as for specifications that were originally supplied in non-metric units. For a further explanation of units and conversions, refer to ASAE Standard EP285.7: "Use of SI (Metric) Units."

There should be a space between the number and the unit:

5 g
20 ha

except for percentages and degrees:

37%
27°C

In a series of measurements, indicate the unit at the end:

3, 6, and 8 cm.

except for percentages and degrees:

2°C to 10°C (not 2 to 10°C)
15% to 25% (not 15 to 20%)

Precede fractional decimal values with a zero:

0.0125 (not .0125)

A comma is optional for numbers consisting of four digits:

1000 kg or 1,000 kg

Use a comma for four-digit and larger numbers:

10,000 kg (not 10000 kg)

For publications other than journals, authors may use a space, e.g., 10 000 kg, if they prefer.

Express derived units in exponent form with spaces between the elements of the derived unit:

12 kg m^{-2}
32 MJ m^{-2} d^{-1}

Time

Use the 24-hour clock notation, in which hours are numbered consecutively 1 through 24. The day begins at midnight (00:00 h), and the last minute of the day is at 23:59 h. The notation "24:00 h on 14 January" is the same time as "00:00 h on 15 January."

4:00 a.m. = 04:00 h
12:00 noon = 12:00 h
10:43 p.m. = 22:43 h

Dates

Write all dates in day-month-year format, with no punctuation and with names, rather than numbers, for the months:

12 January 2002
29 April to 17 May
4 to 16 August

In tables, the names of months may be abbreviated to save space, as:

Jan., Feb., Mar., Apr., Aug., Sept., Oct., Nov., Dec.

Abbreviations in Text

In general, spell out abbreviations that that might be unfamiliar to the ASABE audience. Such abbreviations only need to be spelled out at their first occurrence.

Spell out the scientific name of an organism at its first occurrence in the text. After the first occurrence, you may use the first letter of the genus and spell out the specific epithet.

Form plurals for abbreviations without an apostrophe:

PCs, CVs, PhDs

Omit periods after abbreviated units (except "in." for inch):

5 m, 3.5 in., 30 cm

Abbreviate units only after a numeric value:

24 h
Several hours later

The following abbreviations are widely used in material published by ASABE:

alternating current	AC
ampere	A
bushel	bu
coefficient of variation	CV
cultivar	cv. (e.g., *Syringa vulgaris* cv. Mont Blanc)
direct current	DC
dry basis	d.b.
hectare	ha
hour	h
inch	in.
inside diameter	i.d.
joule	J
kilo-	k (as in kV)

liter	L
micro-	μ (as in μV)
milli-	m (as in mL)
minute	min
outside diameter	o.d.
pound	lb
second	s
standard deviation	SD
volt	V
watt	W
wet basis	w.b.

For more examples of abbreviations of units, see ASAE Standard EP285.7: "Use of SI (Metric) Units."

Abbreviations in References

Do not abbreviate any words in titles of articles, chapters, books, or dissertations.

Use conventional abbreviations (not postal abbreviations) for names of states and territories.

ASABE journals are abbreviated as *Trans. ASABE, Applied Eng. in Agric., J. Agric. Safety and Health,* and *Biol. Eng. Trans.*

For titles of other journals and conference proceedings:

- Drop all minor words from journal titles (the, of, and, etc.) unless their omission could cause confusion.
- Abbreviate similar words consistently.
- Use the abbreviations below for the titles of journals and proceedings that appear in bibliographic references:

Agriculture, Agricultural	Agric.
Agronomy	Agron.
Annals, Annual	Ann.
Applications	Applic.
Applied	Appl.
Association	Assoc.
Biology, Biological	Biol.
Chemistry, Chemical	Chem.
Communications	Comm.
Conference	Conf.
Conservation	Cons.
Cooperative	Coop.
Division	Div.
Ecology, Ecological	Ecol.
Engineers, Engineering	Eng.
Entomology	Entomol.
Environment, Environmental	Environ.
Experiment, Experimental	Exp.
Extension	Ext.
Federation	Fed.

Fundamentals	Fund.
Goverment	Gov.
Horticulture	Hort.
Industry, Industrial	Ind.
Institute	Inst.
International	Intl.
Irrigation	Irrig.
Journal	J.
Literature	Lit.
Management	Mgmt.
Mathematics	Math.
Mechanics, Mechanical	Mech.
Medicine	Med.
National	Natl.
Occupational	Occup.
Proceedings	Proc.
Processing	Proc.
Product, Production	Prod.
Publication, Publishing	Publ.
Research	Res.
Resource	Res. (except the magazine *Resource*)
Review	Rev.
Science	Sci. (except the journal *Science*)
Society	Soc.
Statistics	Stat.
Symposium	Symp.
System	Syst.
Technical, Technology	Tech.
Transactions	Trans.

Abbreviations of States and Territories

Spell out the full name in the body of the article, as:

The study was conducted on an experimental farm in Alabama.

Use conventional abbreviations (Ala.) in the references.

Use postal abbreviations (AL) only in postal addresses.

Full name	**Conventional**	**Postal**
Alabama	Ala.	AL
Alaska	Alaska	AK
American Samoa	Amer. Samoa	--
Arizona	Ariz.	AZ
Arkansas	Ark.	AR
California	Cal.	CA
Canal Zone	C.Z.	--
Colorado	Colo.	CO
Connecticut	Conn.	CT
Delaware	Del.	DE

District of Columbia	D.C.	DC
Florida	Fla.	FL
Georgia	Ga.	GA
Guam	Guam	--
Hawaii	Hawaii	HI
Idaho	Idaho	ID
Illinois	Ill.	IL
Indiana	Ind.	IN
Iowa	Iowa	IA
Kansas	Kansas	KS
Kentucky	Ky.	KY
Louisiana	La.	LA
Maine	Maine	ME
Maryland	Md.	MD
Massachusetts	Mass.	MA
Michigan	Mich.	MI
Minnesota	Minn.	MN
Mississippi	Miss.	MS
Missouri	Mo.	MO
Montana	Mont.	MT
Nebraska	Neb.	NE
Nevada	Nev.	NV
New Hampshire	N.H.	NH
New Jersey	N.J.	NJ
New Mexico	N.M.	NM
New York	N.Y.	NY
North Carolina	N.C.	NC
North Dakota	N.D.	ND
Ohio	Ohio	OH
Oklahoma	Okla.	OK
Oregon	Oregon	OR
Pennsylvania	Pa.	PA
Puerto Rico	P.R.	--
Rhode Island	R.I.	RI
South Carolina	S.C.	SC
South Dakota	S.D.	SD
Tennessee	Tenn.	TN
Texas	Texas	TX
United States	U.S.	--
Utah	Utah	UT
Vermont	Vt.	VT
Virgin Islands	V.I.	--
Virginia	Va.	VA
Washington	Wash.	WA
West Virginia	W.V.	WV
Wisconsin	Wisc.	WI
Wyoming	Wyo.	WY

Figures

ASABE applies the term “figure” to all types of illustration, including line drawings, graphs and charts, photographs, computer screen captures, etc. Include figures to emphasize points made in the text, not merely to illustrate tabular material graphically.

Make your figures the size you prefer. Design them to make efficient use of space, keeping in mind that large figures increase page charges. For *Applied Engineering in Agriculture* and *Transactions of the ASABE* figures are generally the width of a column (20 picas, ~8.5 cm), but may be as wide as a page (41 picas, ~17.4 cm). For the other publications, make each figure no wider than the page width (for *Journal of Agricultural Safety and Health* and *Biological Engineering Transactions*, this is 28 picas, ~11.9 cm).

Please observe the following points:

- Insert each figure into your manuscript after the paragraph that first mentions it. Every figure must be explicitly mentioned in the text of the article. Number figures in order of their citation in the text and refer to them as figure 1, figure 2, etc. Abbreviate the word “figure” only in parentheses, e.g., (fig. 1).
- Type a descriptive caption below each figure. The caption may be a sentence fragment or a few sentences long.
- Figures should not have titles.
- A figure may contain a legend, such as to define symbols. Place the legend either directly below the figure or within it.
- It is generally not necessary to show all the data points and coordinate rulings.
- If a point represents the mean of a number of observations, indicate the magnitude of the variability by a vertical line at each point.
- Use a sans serif font, such as Arial, for all lettering in figures. The type size within the figure should be six to eight points.
- Use boldface only for x- and y-axis titles. Use all capitals only when necessary (e.g., for acronyms).
- If a figure contains multiple elements, label them (a), (b), (c), etc., using eight point bold (as in the sample figure), and identify them in the caption.
- You may use horizontal or vertical type, but please avoid other angles.
- All lines must be at least one-half point to reproduce in print and distinct from each other in appearance.
- Color figures will display in color in the web version, but will be printed in grayscale. Please choose colors that reproduce as distinct gray values. Do not use yellow. Choose distinct line types (dashed, dotted, etc.) as well as different colors.
- Do not crop the figure in Word because the cropping will not be retained as the figure moves through our production process. Instead, open the figure and delete the unwanted elements, or crop the figure then cut it and “Paste Special” as a picture or metafile to eliminate the cropped material.
- Please provide .jpg or .tif files of photographs in case we need to enhance the images. When using a digital camera for your photos, use at least a medium setting for quality/file size.
- For scans, use 600 dpi for black and white line art, and 300 dpi for color or grayscale (including photos). Higher resolution will not increase the quality of the published image.

If you have questions about preparing figures for submission, please contact Pat Howard at pfhoward@asabe.org or 269-932-7008.

Sample figure and caption:

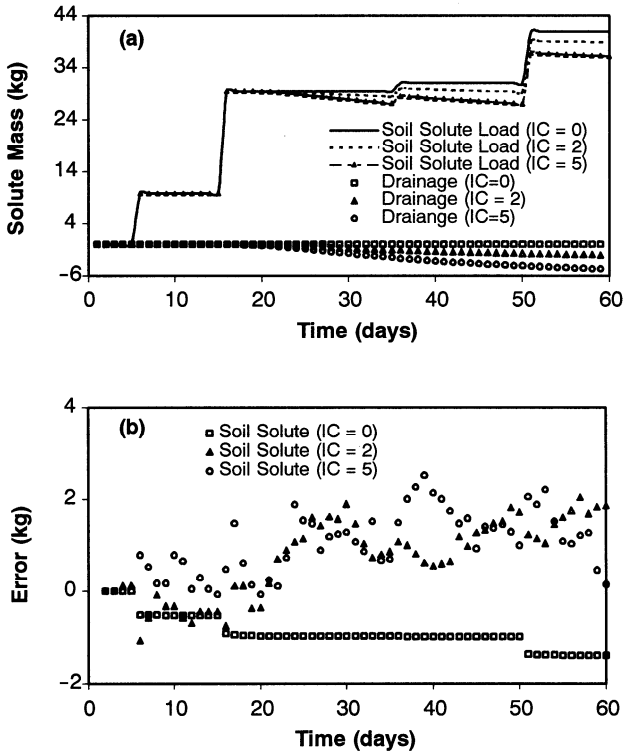

Figure 6. Sensitivity to initial solute concentration shown in terms of (a) soil solute mass and drainage and (b) error in soil solute balance. Irrigation water concentration is 2 kg/m^3. Negative values indicate loss of mass from control volume.

Tables

Tables are used for reporting extensive numerical data in an organized manner. The data presented in tables should neither be duplicated in figures nor reviewed extensively in the text.

Design your tables to make efficient use of space, because large tables increase page charges. For *Transactions of the ASABE* and *Applied Engineering in Agriculture*, prepare each table to fit either one column (20 picas, ~8.5 cm) or the page width (41 picas, ~17.4 cm). Tables in *Biological Engineering Transactions* and *Journal of Agricultural Safety and Health* should be no wider than 28 picas, ~11.9 cm. For meeting and conference papers, make them no wider than the page size in the template. If necessary, tables may be placed sideways on the page.

Please observe the following points:

- Number the tables consecutively and refer to them in the text as table 1, table 2, etc.
- Supply a descriptive caption for each table. The caption may be a sentence fragment or a few sentences long.
- Please make your table in MS Word. Do not submit tables in a graphic format.
- Do not include excessive text in the column headings. Place explanatory information in the table caption, in the manuscript text, or in a footnote at the bottom of the table.
- Do not include columns of data that can be easily calculated from other columns.

- Use horizontal rules to separate elements within a table. You may place additional rules under subheads or under heads that span two or more columns, and you may need to insert blank columns to achieve this (as in the sample table).
- Use bracketed superscripted letters ([a], [b], [c], etc.) for explanatory footnotes within the table (as in the sample table). Assign footnotes to elements within a table in a left-to-right, top-to-bottom sequence.
- Use asterisks (*, **) to indicate statistical significance, and explain the significance in a footnote.
- Use lowercase letters (a, b, c, etc.) to indicate statistical relationships among elements within a table, and explain the relationships in a footnote.

If you have questions about preparing tables for submission, contact Pat Howard at pfhoward @asabe.org or 269-932-7008.

Sample table and caption:

Table 2. Comparison of measured and simulated TGI values.

	Measured		Simulated	
Value	R^2	CV[a]	R^2	CV[a]
TGI initial	0.04	9.77	0.07	9.53
TGI final[b]	0.02	5.43	0.06	8.57
TGI average	0.03	7.64	0.65	8.02

[a] CV = coefficient of variation.
[b] Based on partial data.

Equations

Do not derive or reproduce recognized equations; rather, cite a reference to a source and refer to the equation by its standard name. State only those assumptions and initial boundary conditions needed to understand the development of the equation.

For new equations, state all assumptions and initial boundary conditions and give sufficient derivation for the reader to understand the development. Show only those mathematical steps required for comprehension. Interpret the significance of the mathematics, and indicate the accuracy and range of usefulness of the equations.

For *Transactions of the ASABE* and *Applied Engineering in Agriculture*, prepare each equation to fit within the width of a column (20 picas, ~8.5 cm). For the other publication types, make each equation no wider than the page width (for *Journal of Agricultural Safety and Health* and *Biological Engineering Transactions*, this is 28 picas, ~11.9 cm). When necessary, break an equation before an operational sign or at a major bracket.

Please observe the following points:

- Insert each equation into your manuscript at the point where you would like it to appear in the published article. Small equations may be incorporated in the text. Equations that are separate from the text are introduced by the preceding text and a colon (see the sample equation). These equations are numbered consecutively. Refer to numbered equations as equation 1, equation 2, etc., or in parentheses as, e.g., (eq. 1).
- When you can, prepare equations in using standard word-processing functions, superscripting, subscripting, and the Symbol font. Otherwise, use equation-editing software such as Equation Editor or MathType. Do not create equations that become graphic elements in Word as these cannot be edited.

- The type style in the equation must match the type style in the corresponding text. Italicize lowercase variables. Do not italicize Greek letters.
- Supply the equation number, in parentheses, to the right of the equation. Do not include the equation number within the equation editor box.
- Define variables and supply SI units. If there are more than two such elements in an equation, then list them individually after the equation (as in the sample equation).

Sample equation and equation number:

The mass transfer coefficient is calculated as follows:

$$h_{\mathrm{D}} = \frac{h}{\rho_a c_a} \qquad (1)$$

where
h_{D} = mass transfer coefficient (m s^{-1})
h = convection heat transfer coefficient (W m^{-2} K^{-1})
ρ_a = material density (kg m^{-3})
c_a = material specific heat (J kg^{-1} K^{-1}).

References

List all cited references at the end of the text in the References section. Arrange the list alphabetically by the name of the first author; for references with more than one author, further arrange the list alphabetically by the names of the second author, third author, etc.

- List two or more references by the same author (or authors) chronologically from oldest to most recent.
- Indicate two or more references by the same author(s) in the same year by adding letters after the year of publication, e.g., 2007a, 2007b.
- For use of abbreviations in references, see above.

Citation of Online Material—For material that is available only or primarily online, with no reference to a printed version, list the author's name, the title of the specific section from which you have drawn information, the name of the site, and the name of the publisher or sponsoring organization, the URL address, and the date you accessed the information.

MMWR. 2000. Morbidity and Mortality Weekly Report: 26 June 2000. Atlanta, Ga.: Centers for Disease Control and Prevention. Available at: www.cdc.gov/mmwr. Accessed 17 December 2001.

NSC. 2001. Injury Facts Online. Itasca, Ill.: National Safety Council. Available at: www.nsc.org. Accessed 17 December 2001.

USDA. 1999. Wheat Production in the Upper Plains: 1998-1999. National Agricultural Statistics Database. Washington, D.C.: USDA National Agricultural Statistics Service. Available at: www.nass.usda.gov. Accessed 23 April 2000.

Journal Article—References for journal articles list the author(s), the year of publication, the full title of the article, the journal title, the volume number, the issue number (if any), and the page range.

Thoma, D. P., M. S. Moran, R. Bryant, M. Rahman, C. D. Holifield-Collins, S. Skirvin, E. E. Sano, and K. Slocum. 2006. Comparison of four models to determine surface soil moisture from C-band radar imagery in a sparsely vegetated semiarid landscape. *Water Resources Res.* 42: W01418, doi: 10.1029/2004WR003905.

Waladi, W., B. Partek, and J. Manoosh. 1999. Regulating ammonia concentration in swine housing: Part II. Application examples. Trans. ASABE 43(4): 540-547.

If the journal article is not yet in print, indicate its current status instead of the page range as "submitted," "in review," or "in press":

Renard, C., and T. Van Loon. 2002. Use of power equipment by youth in the Midwest: 1999-2001. *J. Agric. Safety and Health* 7(3): (in press).

Book—Book references list the author(s), the year of publication, the full title, the edition if other than the first, the place of publication, and the publisher. If you need to cite specific pages of a book, list them in the parenthetical citation, for example: (Allen, 1988, pp. 67-71).

Coombs, T. R., and F. C. Watson. 1997. *Computational Fluid Dynamics*. 3rd ed. Wageningen, The Netherlands: Elsevier Science.

Gill, W. R., and G. E. Vanden Berg. 1968. *Soil Dynamics in Tillage and Traction*. Washington, D.C.: USDA-ARS. Available at: http://asae.frymulti.com/collections_p2.asp?confid=spc2001. Accessed 12 April 2011.

Griffin Jr., A. C. 1977. *Cotton Ginners' Handbook.* Agricultural Handbook No. 503. Washington, D.C.: USDA.

Part of a Book—Identify a part of a book by chapter or section title and by page range. List the book editor if different from the author. Note that *ASABE Standards* receive unique treatment.

ASABE Standards. 1989. S352.1: Moisture measurement—Grain and seeds. St. Joseph, Mich.: ASABE.

Havelock, T. F. 1995. Statistical methods. In *Practical Programming Applications*, 223-227. Holland, Mich.: Overstreet Technical Publications.

ISO. 2001. ISO 9613-1: Acoustics—Attenuation of sound during propagation outdoors—Part 1: Calculation of the absorption of sound by the atmosphere. Geneva, Switzerland: ISO.

Stratmeyer, H. A. 1965. Chapter 3: The goal of effective systems design. In *Systems Design: Principles and Practices*, 87-109. W. H. Pierre, ed. Chicago, Ill.: Graphics Publishing.

Bulletin or Report—Bulletins, reports, and other small, self-contained documents often do not have named authors. For the purpose of citing the document in your manuscript, use the name of the publishing organization as the author, abbreviated if necessary. Do not use "Anonymous."

CDC. 2000. Infection vectors for *E. coli* and intervention strategies. CDC Reference No. 9923. Atlanta, Ga.: Centers for Disease Control and Prevention.

Jesperson, D. 1995. United States fruit and vegetable harvest projections: 1996. USDA-1007. Washington, D.C.: GPO.

USDA-NASS. 1987. Soil erosion statistics. Washington, D.C.: USDA National Agricultural Statistics Service.

Meeting Papers and Conference Proceedings—A paper published independently or as part of a proceedings compilation must list all authors, the full title, the volume editors (if any), and the name and location of the publisher or sponsoring organization. Do not list the conference date and location.

Anthony, W. S. 1998. Performance characteristics of cotton ginning machinery. ASABE Paper No. 981010. St. Joseph, Mich.: ASAE.

Cundiff, J. S., D. H. Vaughan, and D. J. Parrish. 1985. Pith separation procedure for processing whole-stalk sweet sorghum. In *Proc. 5th Annual Solar and Biomass Workshop*, 133-136. Ukiah, Cal.: Center for Solar Energy Research.

Dissertation or Thesis—Include the name of the academic department granting the degree.

Campbell, M. D. 1991. The lower limit of soil water potential for potato growth. PhD diss. Pullman, Wash.: Washington State University, Department of Agricultural Engineering.

Lawrence, D. J. 1992. Effect of tillage and crop rotation on soil nitrate and moisture. MS thesis. Ames, Iowa: Iowa State University, Department of Soil Science.

Software—An author's name is rarely available for software products, so use a shortened version of the company name or product name, abbreviated if necessary, as the author. Do not use "Anonymous."

SAS. 1990. *SAS User's Guide: Statistics*. Ver. 6a. Cary, N.C.: SAS Institute, Inc.

SPSS. 2000. *SigmaPlot for Windows*. Ver. 3.2. Chicago, Ill.: SPSS, Inc.

Patent—Identify patents by the inventor's name, the year of issue, the full title, and the patent number.

Moulton, R. K. 1992. Method for on-site cleaning of contaminant filters in livestock housing facilities. U.S. Patent No. 3,2455,986.

Richarde, J. 1983. Process for protecting a fluid product and installations for the realization of that process. French Patent No. 2,513,087 (in French).

Unpublished Material—Include references to personal communication and other unpublished material in the text of your manuscript. Include the source, the date, the location, and any other available information that can establish the authenticity of the reference. Write such references as parenthetical citations:

... this was rare (Charles Brown, USDA-NRCS, personal communication, 23 November 2008).

According to James Smith (unpublished data, 2009. Gainesville, Fla.: University of Florida, Department of Botanical Science), ...

It is not necessary to list personal communications in the References section because they are not available to the reader.

ASABE Format for Journal Articles and Meeting and Conference Papers

Please use this guide along with the template for your publication type. Templates are available at the ASABE website.

The best way to become familiar with the format and style of an ASABE publication is to review recent examples. If you have questions about style, usage, technical terms, or reference citations, please contact Glenn Laing at laing@asabe.org or 269-932-7014.

Title

The title should briefly identify the subject and indicate the purpose of the document. A multi-part article should use a main title for the series and a unique subtitle for each part, even if the combination exceeds 10 words. Capitalize the first word of the title and the first letter of each word in the title except articles, prepositions, and conjunctions (the, beyond, about, and, etc.).

Authors, Affiliations, etc.

Follow the template for your publication type. Journal articles use the authors' initials and last names directly below the title, with the authors' full names and affiliations (either current or at the time the work was done) in a following section called the Article Notes. Meeting and conference papers may have each author's full name followed by their affiliation, or have the author's full information in a footnote. Article Notes or footnotes are also used to:

- Indicate if the information contained in the article was previously presented at a conference or meeting.
- Indicate manuscript approval by your sponsoring organization or employer, if necessary, and list any disclaimers.
- List the current contact information for the corresponding author, including the full mailing address, phone number, and e-mail address.

Abstract

The abstract should provide a clear and concise (aim for <250 words) summary of the article.

- State the purpose of the research. What was studied? What hypothesis was tested?
- Briefly tell the general approach used, to provide a context for the results.
- Include the major trends and the most important results of the study. Data may be given to emphasize the results, but group size, P values, etc., should not be included.
- Provide a concise statement of the conclusions. Provide perspective by stating whether the research confirms or extends the findings of previous researchers.
- Do not include literature citations or references to tables, figures, or equations, because the Abstract often is seen alone.

Keywords

This short list of keywords and/or phrases reflecting the content of your article is used for searches. ASABE maintains a keyword list for terms that occur frequently in technical material related to agricultural and biological engineering, but you are not limited to this list. Note that words in the title are not searchable as keywords unless they are also included in the keyword list.

Body of the Article

Indicate subdivisions of the main body with headings and sub-headings. Below are typical, but not mandatory, main headings used in ASABE technical publications.

The introductory section of the text should include a brief statement of why the research was conducted. It should also define the problem and present objectives (including a description of the subject, scope, and purpose) along with a plan of development of the subject matter. The introductory section also usually includes a brief survey of the relevant literature on the topic.

To cite a reference in the text, use the name-year system. For references with three or more authors, use the form Smith et al. (2008). Note that "et al." is not italicized and includes a period. The order of citing multiple references is up to you.

For example:

as described by Smith (2010)
as described earlier (Jones et al., 2007; Brown and Smith, 2010; Brown, 1995)

Materials and Methods—Provide sufficient detail so that the work may be repeated. Do not give details of methods described in readily available sources. Instead, cite the source and describe any modification. Figures that illustrate test apparatus and tables of treatment parameters or equipment specifications are appropriate here.

Results and Discussion (may be separate sections)—Here describe the solution to the problem stated in the introductory section. Use figures and tables to supplement the presentation of your results. The text must refer explicitly to all tables and figures. Present and discuss the evidence on which your conclusions are based. Do not omit important negative results.

In addition, relate your findings to previous findings by identifying how and why there are differences and where there is agreement. Speculation is encouraged, but it must be identified. Any controversies should also be presented clearly and fairly.

Conclusions (may be a subsection of the Discussion section)—In this section, summarize your results and state any conclusions that can be drawn from them. You may also include suggestions for future research. Do not introduce new information in the Conclusion section; everything here must have been stated previously in the article.

Acknowledgements—Acknowledgements are optional and short. Use them to thank individuals or organizations that provided assistance in materials, expertise, or financing.

References

All sources cited in the text must be listed in the References section, and all documents listed in the References must be cited in the text. Click here for sample References.

Appendix (optional)

Use an appendix for material that is too long to include in the main part of the article.

Nomenclature (optional)

A Nomenclature section is used to list and define the terms used in equations in manuscripts where they are so numerous that a list would be helpful to readers.