

Instructions to Authors: *Agronomy Journal*

Articles must be original reports of research not simultaneously submitted to or previously published in any other scientific or technical journal and must make a significant contribution to the advancement of knowledge or toward a better understanding of existing agronomic concepts. The study reported should be applicable to a sizable geographic area or an area of ecological or economic significance, and of potential interest to a significant number of scientists. Membership is not a requirement for publishing in *Agronomy Journal* (AJ). Consult the ASA–CSSA–SSSA (1998) style manual and recent issues of AJ for guidance. For questions not answered in the style manual (<http://www.asa-cssa-sssa.org/style/>), consult Susan Ernst, Managing Editor (sernst@agronomy.org), or Matt Nilsson, Assistant Editor (mnilsson@agronomy.org).

Scope

After critical review and approval by the editorial board, AJ publishes articles reporting research findings in soil–plant relationships; crop science; soil science; biometry; crop, soil, pasture, and range management; crop, forage, and pasture production and utilization; turfgrass; agroclimatology; agronomic models; integrated pest management; integrated agricultural systems; and various aspects of entomology, weed science, animal science, plant pathology, and agricultural economics as applied to production agriculture. Notes are published about apparatus, observations, and experimental techniques. Observations usually are limited to studies and reports of unrepeatable phenomena or other unique circumstances. Review and interpretation papers are also published, subject to standard review. Contributions to the Forum section deal with current agronomic issues and questions in brief, thought-provoking form. Such papers are reviewed by the Editor in consultation with the editorial board.

Statistical Methods

Report enough details of your experimental design so that the results can be judged for validity and so that previous experiments may serve as a basis for the design of future experiments.

Means separation procedures are frequently misused. Such misuse may result in incorrect scientific conclusions. Pairwise multiple comparison tests (LSD) should be used only when the treatment structure is not well understood (e.g., studies to compare cultivars). Authors should be aware of the limitations of multiple comparison tests when little information exists on the structure of the treatments (Carmer and Walker, 1985; Chew, 1980; Little, 1978; Nelson and Rawlings, 1983; Petersen, 1977; see also Chew, 1976; Miller, 1981). When treatments have a logical structure, orthogonal contrasts among treatments should be used.

Validation of Field Results

Field experiments that are sensitive to environmental interactions and in which the crop environment is not rigidly controlled or monitored, such as studies on crop yield and yield components, usually should be repeated (over time or space, or both) to demonstrate that similar results can, or cannot, be obtained in another environmental regime.

Symposia Series

Manuscripts resulting from symposia having appropriate subject matter will be considered for publication as a compilation in a single issue of AJ. Sets of manuscripts considered may originate from ASA, CSSA, or SSSA sponsored symposia or from appropriate subject matter symposia sponsored by other organizations. Symposia organizers desiring to publish a compilation of manuscripts in AJ must solicit the Editor with the following prospectus materials: (i) title, location and date of the symposium; (ii) the organization affiliated with the symposium; (iii) names, addresses, telephone numbers, and email addresses of the solicitors; (iv) a short abstract (250 words) outlining the overall purpose of the symposium and reasons justifying why the manuscripts should be published as a compilation; and (v) titles and abstracts, written according to the *Publications Handbook and Style Manual*, for each paper to be considered for publication. Prospectus materials may be submitted to the Editor during any time of the year. Symposia papers are subject to the usual page and production charges for the journal.

Style

Language must conform to accepted standards of English style and usage, with American spelling and punctuation. For guidance, see the ASA–CSSA–SSSA style manual (SM), especially p. 1 and Chapter 2.

Nomenclature [SM ch. 3]

For plants, insects, and pathogens, give the Latin name (in italics) and the authority at first mention in the abstract or text [SM p. 47–49]. Check nomen-

clature against a reliable source, such as the GRIN database (<http://www.ars-grin.gov/npgs/searchgrin.html>), the WSSA list of weeds (<http://www.wssa.net/weednames/common.asp>), the ESA's book of insect names (Bosik, 1997), and the APS on-line list of plant diseases (<http://www.apsnet.org/online/common/top.asp>).

For crop cultivars, but not landraces or experimental lines, use single quotation marks at first mention, unless cultivar status is already identified by the word *cultivar* or the abbreviation *cv*.

For chemical compounds [SM p. 50–51], give both the common name and the full chemical name at first mention; thereafter, just the common name. Check names against the WSSA (1994) *Herbicide Handbook* (preferred), or the current edition of the *Farm Chemicals Handbook*.

Identify soils at the series and family level, or at least the Great Group, at first mention [SM p. 44–46]. For soils outside the USA, give both the local identification and the U.S. equivalent. Up-to-date U.S. soil descriptions may be checked on-line (<http://ortho.ftw.nrcs.usda.gov/osd/osd.html>).

Numbers and Numerals [SM ch. 6, p. 71–72]

Reported data should include no more significant digits than the precision of the experimental methods warrants. Treatment means should be rounded to 1/10 of their estimated standard error. For example, if the estimated standard error is 1.43, the means should be rounded to the nearest 0.1.

Numbers one through nine are spelled out, except with units and except when the context includes larger numbers (e.g., “six irrigations” but “6, 9, and 12 irrigations”). For decimal quantities <1, place a zero before the decimal point. Use spaces instead of commas for the decimal separator. In text, the space is not necessary for four-digit numbers (e.g., 73 722 but 7372).

For ranges of quantities or years, use the word *to* between numerals in text; an en-dash may be used in tables and in parentheses, or for a single season spanning calendar years (e.g., the 1999–2000 growing season).

Units of Measurement [SM ch. 7]

The International System of Units (SI) is required. Other units may be reported as well if this helps understanding, serves the primary intended audience, or is needed for replication of the work.

Abbreviations, Symbols, and Variables [SM ch. 2, p. 31–35; ch. 6, p. 70]

Abbreviations save space, but excessive use impedes understanding. Use standard symbols for chemical elements. Ad hoc abbreviations specific to a topic may be used when they promote readability. Provide a list of such abbreviations, with their definitions. Some widely understood abbreviations do not need defining [SM, Table 2–1].

Define variables at first use. Single-letter variables are set in italics (exception: boldface for vectors). Use subscripts for modifiers, reserving superscripts for powers. For variable naming, consistent mathematical style is preferred to ad hoc or language-specific computer style. Thus, for example, A_{leaf} is preferred to LEAFA for leaf area. Avoid redefining standard variable names, such as t for time or T for temperature, to ad hoc meanings unique to your paper.

Time and Dates [SM ch. 7, p. 76, 82]

Use the 24-h time system, with four digits for hours and minutes (e.g., 1430 h for 2:30 p.m.); specify daylight vs. standard time if solar radiation is relevant. Report dates with the day first, then the month, and the year last. Abbreviate months with more than four letters (e.g., 14 May 1997, 7 June 1983, 10 Aug. 1996, or 26 Sept. 1974).

Manuscript Preparation [SM ch. 1]

All accepted manuscript files will be edited in Microsoft Word. Therefore, authors should compose manuscripts in Word. Corel WordPerfect is also acceptable although authors should be aware that errors are occasionally introduced during the conversion process. Authors should avoid using word processing features such as automated bulleting and numbering, head and sub-head formatting, internal linking, or styles. Avoid using more than one font and font size. Limited use of italics, bold, superscripts, and subscripts is acceptable. Manuscript text and tables should be double-spaced, with line numbering.

Agronomy Journal has a double-blind review in that the reviewers do not know the author names and the authors do not know the reviewer names. Therefore, authors should prepare the manuscript with no author information (e.g., no byline, addresses/affiliations, acknowledgments, etc.; these will be added after a manuscript has been accepted—see Accepted Manuscripts). Take care to label tables and figures with reference to the paper's title, not author names. Any identification in headers or footers should be similarly anonymous. As a last consideration, authorship may be unintentionally revealed through such software features as document summaries. If this is a con-

cern, consult your local software experts. When authors submit a manuscript electronically via Manuscript Tracker (see Submitting Manuscripts), they will be asked to enter contact information into the system database, and the Editor and Technical Editors will have access to this information so that they can contact the authors about the outcome of the review.

The typical sequence for a paper is title, abstract, a list of abbreviations, introduction (without any heading), materials and methods, results, discussion, summary or conclusions, references, figure captions (without any heading), and tables last of all. Some papers may have a theory section, a few have no materials and methods; the results and discussion section may be combined, and the summary may be incorporated into the discussion. If an appendix is needed, it comes before the references.

Title [SM ch. 1, p. 10–11]

A good title briefly identifies the subject and indicates the purpose of the study or the major findings. Use common name of crops where possible, and avoid abbreviations. The recommended length is 12 words.

Abstract [SM ch. 1, p. 12–13]

Each paper must have an abstract, a single self-contained paragraph of 250 words or less for papers and 150 words or less for notes. State the rationale, objectives, methods, results, and their meaning or scope of application. Be specific. Identify the crops or organisms involved, as well as soil type, chemicals, or other details important to interpretation of the results. Do not cite figures, tables, or references. Avoid equations.

Tables [SM ch. 1, p. 16; ch. 5, p. 55–60]

Number tables in the order in which they are cited. For table notes, use the following symbols: †, ‡, §, ¶, #, ††, etc. Use single, double, and triple asterisks (* ** ***) to indicate statistical significance at the 0.05, 0.01, and 0.001 levels, respectively. For other significance levels, use the next available note in the regular symbol sequence [SM p. 58]. Spell out abbreviations on first mention in tables, even if the abbreviation is defined in the text (i.e., a reader should be able to understand the table content without referring back to the text).

Figures [SM ch. 1, p. 16; ch. 5, p. 55–56, 60–68]

Figures in accepted manuscripts are prepared for publication by scanning printed copies of the figures. Therefore, although authors will be asked to submit an electronic file for the review process via Manuscript Tracker (see Submitting Manuscripts), authors should prepare all figures keeping in mind that ultimately they will need to provide high quality printed copies (see Accepted Manuscripts).

To maintain clear contrast, use line patterns instead of shading and avoid thin, light lines. As feasible, plan for reduction to one-column width (84 mm, or ≈3.25 inches). The original should be one-third to one-half larger than the intended final size. You can test the reduction quality on a copier. Keep relative sizes in mind when adding symbols, letters, and numbers [SM p. 63].

Label each figure along the top or bottom margin with its number and the title of the article—but not the author's name, to preserve anonymity. If there could be any doubt at all, indicate orientation (which way is up).

Agronomy Journal will publish four-color images. Authors may publish color illustrations such as photos, figures, or maps in papers, but at their own expense. The cost is \$1000 per journal page.

References [SM ch. 1, p. 16–30]

The reference section is typically limited to published literature and unpublished but available reports, abstracts, theses, and dissertations. Alphabetize the list by author [SM p. 21]. Author–year citations are required. Cite unpublished data, personal communications, and reports not available to the public in the text only (in parentheses; state the year) [SM p. 17].

For journal articles, give the authors, year, complete article title, abbreviated journal title, volume number, and inclusive pages. For book chapters, give the authors, year, chapter title, pages, book editor (if any), complete book title, publisher, and place of publication. For proceedings, give also the place and date of the conference. For electronic references, see the style manual [SM p. 20–21, 30].

Submitting Manuscripts

Authors should submit manuscripts electronically via our Manuscript Tracker system (<http://www.manuscripttracker.com/aj/>). Manuscript Tracker allows authors to track the status of their manuscript through the review process. To ensure a double-blind review, authors should not include any iden-

tifying information in the manuscript (e.g., no byline, addresses/affiliations, acknowledgments, etc.); these will be added after a manuscript has been accepted—see Manuscript Preparation and Accepted Manuscripts). Detailed instructions for using Manuscript Tracker can be found on the web site above.

Potential Reviewers

When authors submit manuscripts through the Manuscript Tracker system, they will be prompted to provide a list of potential reviewers. These reviewers must not have a conflict of interest involving the authors or paper, and the editorial board has the right to not use any reviewers suggested by authors.

Accepted Manuscripts

Once a manuscript has been accepted, authors should prepare a cover page that includes the title, byline (all authors, with an asterisk identifying the corresponding author), author–paper documentation, and acknowledgments (if any). The author–paper documentation [SM ch. 1, p. 11–12] should be a single paragraph that lists all authors with their complete current addresses. It should include any applicable documentation for the paper, such as the institutional article number, contributing institutions, or a brief statement of financial support. It should end with “Received ---. *Corresponding author” and that author’s email address. The corresponding author is the one who works with the editors during review and production and acts as the primary contact for reprints and information requests after publication.

Authors should attach the cover page to a printed copy of the final version of the manuscript (text, tables, and figures) and send it to Headquarters, along with a word processing file for the text and tables (Word preferred). The printed copy and word processing file must match exactly in all parts of the manuscript. Do not submit files for the figures; do submit high quality copies (glossy prints preferred). Authors are also invited to submit color photos or computer graphics for possible use on the cover at no added expense. An ideal cover combines scientific meaning and visual beauty. It should be related to the subject of your paper. Please send slides, prints, or electronic TIF or EPS files with at least 300 dpi in the finished size. See current issues for examples, size, and shape.

Send the printed copy, disk/CD-ROM with the manuscript file, and cover submission (if any) to: Susan Ernst, Managing Editor, *Agronomy Journal*, American Society of Agronomy, 677 South Segoe Road, Madison, WI, USA 53711 (sernst@agronomy.org).

Publication Charges

For manuscripts submitted in 2004 or later, authors who are members of ASA, CSSA, or SSSA will pay a flat-rate production charge of \$450.00; non-members will pay \$700.00. The cost for non-color figures is \$8.00 per figure, less \$15.00 (amount contributed by ASA–CSSA–SSSA). Color figures will cost \$1000 per journal page. Author alterations after a paper has been typeset are \$3.00 per line (\$8.00 for figures).

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