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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

Experiments that are sensitive to environmental interactions, such as crop performance, usually should be repeated over time or space or both.

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

- Use a comma before the final item in a list of three or more items. For example: "Cores were inside plastic liners, capped, and stored on ice..."
- Define all abbreviations at first mention in the abstract or text and again in the tables and figures. Once an abbreviation is used, it should be used throughout the entire article, except at the beginning of a sentence.
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- Both the common and chemical name of pesticides must be given when first mentioned. For example: "Atrazine (2-chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine) was included..."

- Identify soils at the series and family level, or at least the Great Group, at first mention. For soils outside the United States, give both the local identification and the U.S. equivalent. Up-to-date U.S. soil descriptions may be checked online (<http://soils.usda.gov/technical/classification/osd/index.html>).
- SI units must be used in all manuscripts. Non-SI units may be added in parentheses.
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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.

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Title

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

Abstract

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.

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References

- ASA, CSSA, and SSSA. 2004. Publications handbook and style manual. Available at www.agronomy.org/publications/style/. ASA, CSSA, and SSSA, Madison, WI.
- Carmer, S.G., and W.M. Walker. 1985. Pairwise multiple comparisons of treatment means in agronomic research. *J. Agron. Educ.* 14:19–26.
- Chew, V. 1976. Comparing treatment means: A compendium. *Hort-Science* 11:348–357.
- Chew, V. 1980. Testing differences among means: Correct interpretation and some alternatives. *HortScience* 15:467–470.
- Little, T.M. 1978. If Galileo published in *HortScience*. *HortScience* 13:504–506.
- Miller, R.G., Jr. 1981. Simultaneous statistical inference. Springer-Verlag, New York.
- Nelson, L.A., and J.O. Rawlings. 1983. Ten common misuses of statistics in agronomic research and reporting. *J. Agron. Educ.* 12:100–105.
- Petersen, R.G. 1977. Use and misuse of multiple comparison procedures. *Agron. J.* 69:205–208.

Revised October 2010