

Guidelines for *Agronomy Journal* Editors and Reviewers

Thank you very much for agreeing to review a manuscript for *Agronomy Journal* (AJ). Of primary importance is your recommendation as a reviewer. Please provide appropriate, professional, and helpful comments to the author. The Technical Editor and Editor appreciate and rely on your recommendation.

This document serves as a set of general guidelines, not strict rules, for you to evaluate manuscripts for AJ. In the end, our editorial role is to work with authors to get their papers in print.

Remember that in addition to these general guidelines, manuscripts, and therefore editor comments, must conform to requirements set forth in the *Publications Handbook and Style Manual*, which is available online at <https://www.agronomy.org/publications/style/>. Another useful source in the review process is the AJ Instructions to Authors, which is available at <https://www.agronomy.org/publications/aj/instructions-to-authors>.

Scope of *Agronomy Journal*

Agronomy Journal publishes peer-reviewed articles reporting original research findings and technological information on all aspects of agriculture, natural resources, and life sciences. Submission of manuscripts that enhance application, transfer, and synthesis of agronomic information on agriculture, natural resources, climatology, and environmental concerns is encouraged. *Agronomy Journal* is focused on the transfer of production-oriented information to a wide range of professional agriculturalists, including other disciplines such as ecology, environmental science, animal science, weed science, agricultural economics, entomology, plant pathology, horticulture, climatology, forestry, and range science.

Vision of *Agronomy Journal* Editorial Board

To enhance the manuscript review process making Agronomy Journal the outlet of choice for authors to publish cutting-edge science.

Guiding Principles in Decision Process

An acceptable manuscript will meet the following general criteria:

- It reports a worthwhile contribution to science.
- Sound methodology was used and is explained with sufficient detail so that other capable scientists could repeat the experiments.
- Conclusions are supported by data.
- It is concise, well written, and understandable.

The ideal review will be fair, unbiased, prompt, and confidential, and will provide constructive criticism as needed. Reviewers should approach the paper in terms of questions such as: "Is the science good?" and "Is it understandable?" or "What is needed to make it clear?" rather than "What are all the little things that annoy me in style or presentation?"

Updated October 2014

The AJ Editorial Board conducts a double blind review process as it strives for unbiased reviews of papers. You should probably excuse yourself from reviewing a manuscript if you recognize the author(s) of the paper and you can answer "yes" to one or more of the following questions (adapted from the USDA-ARS).

- Have you had significant and acrimonious disagreements with the authors in the past?
- Are the authors and you co-investigators on a current research project?
- Have the authors and you jointly published an article in the past 5 years?
- Are you close friends with one or more of the authors?
- Are you working in the same area of research with the authors so that you might be considered to be a competitor or gain an advantage by reviewing the manuscript?
- Do you work at the same location as the authors?
- Did you review the manuscript as a peer reviewer prior to its submission to the journal?

In summary, ask yourself if there is a possibility or appearance of a conflict of interest by you reviewing this manuscript and if so then you should decline an invitation to review.

Use the following Guidelines to Evaluate the Abstract

Abstracts are required for all articles in AJ. They are often republished as printed by secondary abstracting services and journals. The abstract, therefore, should meet two requirements. (1) A reader should be able to determine readily the value of the article and whether or not to read it completely. (2) It also should provide the literature searcher with enough information to assess its value and to index it for later retrieval.

The abstract should:

- Stand on its own and give a clear idea of the research and the most important findings in the paper.
- Strive for an impersonal, noncritical, and informative account.
- Give a clear, grammatically accurate, exact, and stylistically uniform treatment of the subject.
- Provide rationale or justification for the study by briefly stating the purpose, need, and significance of the investigation (hypothesis or how the present work differs from previous work).
- State the objectives clearly, as to what is to be obtained.
- Give a brief account of the methods, emphasizing departures from the customary. Be specific.
- Identify scientific names of plants, other organisms, and chemicals.
- State results succinctly.
- State conclusions or recommendations and link this to the significance of the work. Including new theories, interpretations, evaluations, or applications is encouraged.
- Be as quantitative as possible and avoid the use of general terms, especially in presenting the methods and reporting the results. For example, if two rates of a treatment are used, state what they are.
- Never cite references or figures.
- Contain about 200 to 250 words for all articles.

Use the following Guidelines to Evaluate the Remainder of the Manuscript

General Content

- Does the title of the paper clearly reflect its contents, and is it from 6 to 12 words in length? The title should begin with high impact words rather than words such as “Effects of” or “Influence of.”
- Is the content of the manuscript worthwhile? If not to you, is there a segment of the journal's readership that would find it worthwhile? (Sometimes more experienced and established reviewers underestimate the value of manuscripts that might prove invaluable to those in new areas of agronomy and related sciences.)
- Do you feel that the author(s) reviewed the existing literature adequately but not exhaustively? Do you know of any references the authors might want to refer to and discuss? Are references listed according to the style manual? Are all references cited listed in the reference list and vice versa?
- The manuscript should conform to instructions in the Publications Handbook and Style Manual, available online at <https://www.agronomy.org/publications/style/>.

Quality of Writing

- Clarity is vitally important. Manuscripts with sound science must also be well written to be acceptable. Whether or not you are an expert in the subject discussed, you should understand the paper's content. Read each paragraph carefully. Is there likely to be confusion? If so, request that the author clarify. If you have some suggested revisions, these are usually appreciated by authors, but please do not feel obligated to rewrite the manuscript.
- Do the paragraphs flow smoothly? Is the manuscript readable? Can you make suggestions for improvement? (Suggest using active voice.)
- Is there unnecessary repetition? Can you suggest deletion of sentences, phrases, or words that add little to the paper?
- Are enough examples provided to assist readers in relating to the author's ideas? Can you suggest some examples that the author might want to include in his or her revision?
- What parts of the manuscript do you really like? Let the author(s) know. We all need a pat on the back for what we do well! This is critically important, in that some authors may be a little shocked to note the quality standards we strive to adhere to in AJ.

Technical

- Is the paper acceptable in terms of methods, procedures, and so forth, even if not how you would have done it?
- Have all measurements been reported in SI units? (Corresponding metric units may be shown in parentheses after each SI unit.)
- Are Latin names shown for all plants, insects, or pathogens when first used?
- Is nomenclature given for soils when first used?
- Are full chemical names given for pesticides when first used?

Statistical

- Does the experiment have true replication of treatment combinations? A replication is the smallest unit to which a treatment combination is applied randomly.
- Did the experiment include environmental replication (i.e. multiple sites and/or years) for measured variables, which are sensitive to environmental effects?
- Did the authors appropriately declare fixed and random factors in their experiment? A fixed factor can be repeated exactly if the experiment were to be run again. Examples of fixed factors are fertilizer rates or selection of a specific cultivar. A random factor is best thought of as coming from a distribution and thus cannot be necessarily repeated exactly. Years and locations are usually, but not always, considered as random factors.
- Did the authors use mixed model methodology for mixed model experiments?
- Did the authors inappropriately use a simple mean separation test such as the LSD when other procedures would have been preferable?

Tables and Figures

- Are all the tables and figures necessary? If so, are they understandable? If not, could you suggest another format? Would you suggest additional tabulated data? (Keep in mind that tabulated data are not mandatory.) Are the tables and figures self explanatory with sufficiently detailed captions?
- Are figures (or photographs) of good enough quality for reproduction in the journal? Are the numbering and lettering large enough to be readable when reduced? Are image files at least 300 dpi at the finished size (8 point final size)?

Additional Editorial Concerns

- Is there an abbreviations list? All abbreviations used in a paper (except chemicals, SI units, and commonly accepted abbreviations), should be listed and defined in a separate, unnumbered footnote—placed after the Abstract—that will appear in the journal at the beginning of the paper.

Possible Decisions

- Accept
- Accept with minor revision. The manuscript is acceptable but you have some suggestions for the authors to consider. The revised manuscript does not need to be reviewed again.
- Accept with major revision. The manuscript can be acceptable but only if the authors address your proposed revisions and concerns. This decision also means that you recommend to the Technical Editor that the revised manuscript needs to be reviewed by at least one member of the Editorial Board.
- Reject. The manuscript either is not within the scope of this journal, has some sort of fatal error that cannot be fixed within the acceptable revision time, or does not make enough of a contribution to the literature to warrant publication.

Remember...

- Return your comments and recommendations to the Technical Editor before the deadline.
- Do not allow the manuscript to be reproduced while in your custody.
- Reviewers are not asked to rewrite a poorly written manuscript.
- Reviewers will remain anonymous.
- Prompt attention to manuscripts will be appreciated both by the authors and Editors.

Thank you for your time and expertise!