Reviewer
ASA, CSSA, and SSSA Position Description and Review Guidelines

Overview

The volunteer peer reviewer evaluates submissions for technical and intellectual content in a fair, unbiased, rapid, and confidential manner. The reviewer evaluates the manuscripts in terms of the appropriateness of the subject. In this connection, original research findings suitable for publication in the journal are interpreted as the outcome of scholarly inquiry, investigation, or experimentation having as an objective the development of new concepts; the revision, refinement, extension, or verification of existing concepts; the application of existing concepts to new situations; or the development of new or improved techniques. The reviewer also determines whether a manuscript meets the high standard of quality of the publication. Quality includes originality of subject or applications, appropriateness of methods, accuracy of mathematical equations and computations, validity of conclusions, organization of subject matter, clarity, and communicational competence. The reviewer understands that the reward of the review process is the circle of scientific communication shared by publishing and reviewing scientists. The reviewer performs their tasks with excellence, bearing in mind that they have benefited from this service in the past and are returning this service to the scientific community and advancing the profession.

To update your reviewer information, log in to the appropriate submission website(s).

Guidelines for Completing a Review in ASA, CSSA, and SSSA Journals

Thank you very much for agreeing to review a manuscript. Of primary importance is your recommendation as a reviewer. The reviewer's job is to help the author(s) improve the scientific quality of their manuscript. Please provide appropriate, professional, and helpful comments for the author. The Associate Editor, Technical Editor, and (co)Editors appreciate and rely on your recommendation.

In addition to these general guidelines and instructions, manuscripts must conform to requirements set forth in the Publications Handbook and Style Manual, which is available at https://www.agronomy.org/publications/journals/author-resources/style-manual. Another useful source in the review process is the individual journal's Instructions to Authors (https://www.agronomy.org/publications/journals/author-resources).

Guiding Principles in the Decision Process

An acceptable manuscript will meet the following general criteria:

- It advances the science by presenting either new knowledge in an area or information toward a better understanding of existing processes and concepts.
- Sound methodology was used and is explained with sufficient detail (and can be replicated).
- Conclusions are supported by data.

The ideal review will be fair, unbiased, prompt, and confidential without derogatory comments and should be constructive in nature. The reviewer's job is not to find reasons to reject a manuscript but to help the author improve the manuscript so that the author, journal, and reader all benefit. 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?"

Possible Conflicts of Interest

Depending on the journal, there will be a single or double blind review. Excuse yourself from reviewing a manuscript if there is a conflict of interest and you can answer "yes" to one or more of the following questions (adapted from the USDA–ARS).

- 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?
- Do you work at the same location as the authors?
- Are you close friends with one or more of the authors? Or have you had significant and acrimonious disagreements with the authors in the past?
- 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?

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.

Suggested Guidelines to Evaluate the Abstract

Abstracts are required for most articles published in ASA, CSSA, and SSSA journals (see journal instructions to authors for exceptions). They are often repub-

lished as printed by secondary abstracting services and journals. The abstract, therefore, should meet two requirements. A reader should be able to readily determine the value of the article and whether to read it completely. It also should provide the literature searcher with enough information to assess its value and to index it for later retrieval. The abstract consists of one to two sentences each for the (a) justification or rationale for conducting the work, (b) objective, (c) significant results (present quantitative results), (d) discussion of results, and (e) conclusion.

The abstract should:

- Stand on its own and give a clear idea of the research and the most important findings in the paper.
- Give a clear, grammatically accurate, exact, and stylistically uniform treatment of the subject.
- Provide a 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.
- State primary 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 were used, state what they were.
- Never cite references, tables, or figures.
- Contain about 250 words or fewer for all articles.

Suggested Guidelines to Evaluate the Remainder of the Manuscript

General Content

- Does the title of the paper clearly reflect its contents, and does it use impactful words to capture the reader's attention? Note: Most journals suggest the title should be 12 words or less.
- Is the content useful or does it advance the science? Is there a segment of the journal's readership that would find it useful?
- Did the author(s) review the existing literature adequately? Are all references needed or are some extraneous? Are references listed according to the style manual?
- Some journals may have word limits for certain paper types. Such articles are checked before review, but if the article you are reviewing has a submission word limit, be aware if asking the author to add text. While adding text may be necessary, take care not to ask the author to add an excessive amount of new material.

Quality of Writing

- Clarity is important. Manuscripts with sound science must also be well written to be acceptable.
- Whether you are an expert in the subject discussed or not, you should understand the paper's content. Read each paragraph carefully. Is there likely to be confusion? If so, request that the author clarify. Suggested revisions are often appreciated by authors, but reviewers should not rewrite the manuscript.
- Do the paragraphs flow smoothly? Is the manuscript readable? Can you make suggestions for improvement?
- 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 may want to include in their revision?
- What parts of the manuscript do you really like? Let the author(s) know. Your comments should be constructive and never derogatory.

Technical

- Is the paper acceptable in terms of methods, procedures, and so forth? If not, how would you have done it?
- SI units are required by most of our journals.
- The following should be given at first mention in the main text: Latin names for plants, insects, or pathogens; soil nomenclature; chemical names of pesticides.

Statistical

- Is the experimental design sound? Has the statistical analysis been conducted properly?
- Does the experiment have true replication of treatment combinations?
- Did the authors appropriately declare fixed and random factors in their experiment?
- Does the experimental design include enough details so that the results can be judged for validity and the experiments may serve as a basis for the design of future experiments?
- Did the authors use means separation procedures correctly?

Tables and Figures

- Are all the tables and figures necessary? If so, are they understandable? If not, could you suggest another format? Are the tables and figures self-explanatory with sufficiently detailed captions?

Supplemental Material

A one- or two-sentence description of the supplemental material should be included in the main manuscript directly preceding the reference list. All supplemental material should be reviewed. The same standards of format and quality apply to supplemental tables and figures.

Additional Editorial Concerns

- Additional concerns may be addressed in the Publications Handbook and Style Manual: https://www.agronomy.org/publications/journals/author-resources/style-manual or
- ASA, CSSA, and SSSA Editor's handbook (see submissons site for link).

Remember...

- Please return your comments and recommendations to the Associate or Technical Editor before the deadline.
- Do not allow the manuscript to be reproduced while in your custody.
- Do not rewrite a poorly written manuscript, but suggestions to improve clarity are extremely helpful and appreciated. Manuscripts can and should be released if the clarity or quality of the English grammar prevents a clear understanding of the work.
- Reviewers will remain anonymous.
- Prompt attention to manuscripts is appreciated both by the authors and by the Editors.

Professional and Ethical Conduct of the Review Process of ASA, CSSA, and SSSA Journals

Scientists agree that peer review is a cornerstone of scientific progress. As such, participating in the peer review process of ASA, CSSA, and SSSA journals is both a privilege and a responsibility. A professional, objective, and thorough review process will benefit us as publishing researchers, improve the professionalism of our community, and enhance the quality of our published research. In agreeing to serve, one agrees to the following code of conduct, with the understanding that failure to serve in this capacity may lead to dismissal:

- I will take responsibility for understanding the function of my office and executing to the best of my ability all tasks that are within my area of responsibility.
- In my capacity, I will work to maintain the integrity of the peer review process to ensure that the manuscript receives a thorough, quality review in accordance with the high scientific standards of the journal.
- I will handle my share of manuscripts, understanding that this is an obligation of the peer review process.
- I agree it is my responsibility to handle those manuscripts in the areas of my expertise and assist in finding persons qualified to handle papers in those areas outside my expertise.
- I will execute my role within the specified schedule of the journal, understanding that failure to do so would detract from the quality of the journal and impact the professional development of the authors affected by a delay.
- I will communicate with authors only in the capacity as defined by my role.
- I will communicate with authors in a respectful and professional manner, including substantiating comments with published sources and understanding that I represent the journal and the Society(ies) through my tone and attitude. I understand that criticism of a manuscript should not extend to personal criticism of the author(s).
- I will review each manuscript with impartiality, without regard to gender, race, ethnicity, religion, nationality, institutional affiliation, or other similar bias.
- I will evaluate manuscripts on the basis of scientific merit, with the understanding that there may be many acceptable ways to prove a hypothesis. I will respect the independence of authors and their creativity and understand that differences of opinion can be addressed in published comments within the journal as a forum for scientific debate.
- I will treat the manuscript in review as a confidential document and neither disclose its contents outside the context of the review process, nor use its contents in my own work.
- I will avoid conflicts of interest and the appearance of conflicts of interest stemming from my relationship with the author or professional and financial circumstances that may bias my approach to a manuscript.