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VIEWPOINT

What Every Author and Reviewer Should Know about the Publication Process in the *Journal of Nematology*

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Abstract: The *Journal of Nematology* is a publication of the very highest quality for communicating the most recent discoveries in the science of nematology. The authors of this Viewpoint article desire to maintain the status of the journal while lessening the burden placed on the editorial staff. A few simple steps taken by authors during the manuscript preparation phase can greatly improve the quality of their papers. Authors should carefully review the "Author's Publication Handbook and Style Manual" before and during the preparation of a manuscript intended for publication in the *Journal of Nematology*. In addition, authors should submit a completed "Author's Checklist for Preparation of Papers" with each manuscript submitted to the journal. Reviewers should provide thorough reviews, return manuscripts in a timely manner, and clearly define statements regarding revisions.

Key words: editor, manuscript, publication, reviewer, style manual.

If someone told you that you could make the publication process in the *Journal of Nematology* (JON) easier, would you take the time to investigate? That is the offer made to you here. Read this brief article, follow the advice, and we assure you that you will reap benefits because publishing your paper will be simpler. In addition, the publication will improve and move along more rapidly through the editorial process with less frustration for all concerned. The submission of a properly prepared manuscript saves considerable effort and time for reviewers, editors, the editor-in-chief (EIC), the technical editor, and even the printer.

PREPARATION OF MANUSCRIPTS

The problem: Readers may ask "What can you tell us that will help with the publication process in the *Journal of Nematology*?" First, all must acknowledge that writing a polished publication is not an easy task, and few scientists excel at this important responsibility. Although all of us may have trouble writing scientific papers, why is it necessary to convey this viewpoint message emphasizing excellence in manuscript preparation? The answer is simple: most editorial board members desire improvements in the quality of manuscripts that they are asked to edit. All too frequently editors must spend long hours (as much as 40 hours) editing a single manuscript. Unfortunately, this situation is not abnormal. Indeed, sometimes editors get sidetracked from the scientific content of papers containing numerous grammatical and format errors. Editors occasionally become so frustrated that they lay the manuscript aside, postponing the arduous task of editing and thus holding up the process of publishing your paper. There is no question

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that an editor is more prone to editing a manuscript that has been well prepared and carefully edited by you and two colleagues than one that has nearly every possible mistake in it. If we are to continue to maintain a volunteer editorial board for the *Journal of Nematology*, we must improve the quality of manuscripts submitted. Few scientists wish to devote their time to the unsatisfying task of correcting innumerable stylistic and grammatical errors of other scientists.

The editorial process: It is important to mention portions of the editorial process that ensure the quality of papers published in the *Journal of Nematology*. A detailed description of this process has been published (Chitwood, 1993). Perhaps if we outline the process, authors will realize the great investment of time and effort in every paper published—and sometimes not published. Redundancy of editing is the key to the quality of our journal. Every submission receives a stylistic and format review by the EIC before two reviewers and an editor are selected to provide an in-depth review. (Often the EIC designates himself as the editor responsible for editing the manuscript.) If the reviews are favorable and the paper is accepted, the editor stipulates to the author the revisions that are required. The author then revises the manuscript accordingly and returns it to the editor, who makes another careful review of the manuscript to ensure that revisions meet expectations. The manuscript is then passed to the EIC, who checks it again for style and correct figure and table format. The EIC may require authors to revise tables or figures, or occasionally even retype the manuscript, if the necessary changes are so profound that a clean copy is needed for the technical editor. The manuscript then goes to the technical editor, who reviews it, inserts printing instructions, and returns it to the EIC. The EIC makes another review, and if the manuscript is without problems it is finally ready for printing. The printer mails page proofs to authors and to the technical editor. Page proofs for international authors are sent to the EIC, who faxes them to the contact author. Authors mail or fax corrected page proofs back to the technical edi-

tor, who edits the corrections and then sends edited page proofs to the EIC. The EIC reviews each page proof in order to answer technical editor and printer queries, then sends them to the printer. The next step in the publication process is for the printer to provide the EIC with a second set of page proofs that incorporates the changes made by authors and the technical editor. After the second set is approved, the printer prepares and sends a third set of proofs (referred to as the blue line copy) to the EIC. The blue line proofs are presented exactly as the issue will appear, and are the last chance for the EIC to examine the issue before the press run begins. Although this editing process may seem excessive, we are convinced it is necessary to maintain the quality of a respected, refereed journal. The result is a near absence of mistakes in articles published in the journal.

Quality science: The most important step in the production of an excellent manuscript is to have conducted experiments using sound scientific principles. Lead normally cannot be converted to gold; likewise, one cannot produce an excellent manuscript without sound scientific data. Sound data are reproducible data; reproducibility is fundamental to the scientific method. It is necessary in most instances to validate experimental results through repetition. The accompanying sheet with the manuscript review form requests that reviewers address whether the experimental results presented in papers demonstrate reproducibility. The exceptions to this statement are papers dealing with nonrepeated nematocide evaluations, variety trials, and certain types of single tests, which may be publishable in the *Supplement to the Journal of Nematology (Annals of Applied Nematology)*.

Also, papers should present experimental data that have been subjected to proper statistical analyses. For information on this subject, refer to a viewpoint article by Mihail and Niblack (1991). Ideally, authors should consult with professional statisticians and mention this fact in their cover letters attached to the manuscripts. The fact that a statistics computer program is used does not

obviate author responsibility to establish a sound statistical footing for the conclusions.

Style and format conventions: This is the area in which many authors fail in preparation of manuscripts. The JON Editorial Board, like all editorial boards, follows a set style and format process for every article published in JON. We say this perhaps with some sarcasm intended. If you occupied the EIC's seat for a short while, you would soon realize that too many authors disregard JON format convention or are ignorant of it. Stylistic conventions have been developed over the course of many years, and while they may evolve over time, they must be followed as currently prescribed. The purpose of these conventions is to ensure accurate, consistent communication of scientific information. Without these conventions in style and format, we would have chaos. Imagine trying to edit manuscripts without any rules for their preparation. Preparation of a manuscript without following rules and guidelines would be like a coach preparing a team for a big game without any knowledge of the game rules.

Undoubtedly, one problem facing authors is the diversity in style and format conventions among scientific journals. Indeed, one 20-year-old study of 52 scientific journals identified 33 different styles in literature citations alone (Day, 1988)! Although organizations of journal editors have attempted to minimize such variation by publishing style manuals (Council of Biology Editors, 1994), each scientific journal continues to have its individual style and format.

For many years the *Journal of Nematology* editorial board worked with an abbreviated version of a style and format guide; however, it was never made generally available to authors. The abbreviated version was a compilation of items mostly gathered by a former technical editor, Kathy Leabo. Immediately upon assuming the role of EIC, David Chitwood published a more complete version of the style and format guide in the *Nematology Newsletter* "by popular demand of several past and present Editorial Board members" (Chitwood, 1990).

In early 1994, we began the task of pulling

together this useful information into a manual. The intent is to put this manual on the desk of every member of the Society of Nematologists (SON). We plan to have the manual printed and mailed to the membership in early 1998. The manual, which is titled "Author's Publication Handbook and Style Manual," is currently available on the SON web site (<http://ianrwww.unl.edu/ianr/plntpath/nematode/son/jon.htm>), or it can be requested from the EIC. No author should prepare a manuscript without first thoroughly reading the style manual, and it should be referred to often during the manuscript preparation phase. Do not guess or assume that you know the correct style or format conventions. All incorrect items will have to be corrected, and it is easier for all concerned if they are done correctly in the beginning.

Author's checklist for preparation of papers: A checklist for manuscript preparation, which was patterned after one required for publishing in *Mycologia*, was prepared in 1996. Editors enclose a copy of the checklist with every manuscript returned to authors, and authors complete the checklist and return it with their revised manuscripts. Authors should retain a blank copy and use it every time they prepare a new paper. Also, the checklist can be obtained from the SON web site. In fact, a copy of the completed checklist is required with every manuscript submitted to the *Journal of Nematology*. The checklist should be considered as a guide or aid to help everyone remember the conventions in style and format required for manuscripts.

References—ensuring correctness: Our editorial experience regarding literature citations is similar to that of Baker (1982), who stated, "... references are held in low esteem by many authors." Many times, earlier citations pertaining to important research may be omitted, perhaps leaving readers to assume that the research reported in the manuscript is essentially new (Baker, 1982). A high proportion of citations are incorrect, often not in alphabetical order, with wrong volume or page numbers, sometimes referring to the wrong journal, or with the wrong author or a misspelled author's name. Many

times they will be listed in the text and not in the literature cited section or vice versa. One review of several studies of literature citation errors reported a range of 15% (in two information science journals, which one would presume to be accurate) to 57%, with reference errors in individual papers as high as 90% (Yankauer, 1990). These were merely errors in technical citation; in another study, errors in which statements were attributed to authors who had not made the statements were found in 22% of the examined references (Eichorn and Yankauer, 1987). It is not uncommon for JON submissions to have significant errors in more than half the citations. All of these have to be corrected by the Editorial Board, and it is a thankless, frustrating, and tedious exercise best remedied by authors during manuscript preparation.

Citations are useful to readers only when they are accurate. The only people who can easily verify the accuracy of citations are the authors, who have complete responsibility for the correctness of literature citations. Citations must be in alphabetical order and in the correct format (see the style manual for details on format style).

A "must" step in manuscript preparation: Two vital aspects of manuscript preparation often are neglected by authors. The first is that all authors listed on a paper should critically review the manuscript. Some manuscripts with multiple authors are so replete with problems that it seems unlikely that anyone but the first author has seen the manuscript. Each author has an identical responsibility for the correctness and clarity of the paper. Second, each manuscript is required to have been reviewed by two colleagues, who are not among the authors, before submission. Unfortunately, only about 50% of manuscript cover letters mention whether the manuscript received this review. Authors should identify the reviewers in the accompanying cover letter. Even if manuscripts receive pre-submission reviews, these reviews often tend not to be thorough or critical (because of lack of reviewer anonymity), and the individuals making the reviews may not know JON style and format conventions.

It remains the responsibility of all authors to ensure their manuscripts are properly prepared before submission.

We suggest that every author do the following during the manuscript preparation phase. After the manuscript is prepared, lay it aside for several days, then pick it up, re-read it carefully line by line, and check that you have followed all conventions and that you have made all the necessary corrections. This simple step will greatly improve your manuscript and make some editor(s) very happy. Laying a manuscript aside for a second time also is helpful.

REVIEWING MANUSCRIPTS FOR THE *JOURNAL OF NEMATOLGY*

Technical reviews of manuscripts for the Journal of Nematology: Reviewing papers may seem like a simple duty, but for many reviewers there is much room for improvement. During these times of "publish or perish," we are frequently called on to provide peer reviews. Unfortunately, too many reviewers provide no useful comments. They may reject the manuscript but give no explanation as to why they did so. Some will say that a section of a manuscript needs to be changed but yet provide no information as to what they have in mind. Others return manuscripts 2 or 3 months late. Others seem to regard the review process as a recreational opportunity and take apparent delight in composing wittily sarcastic or caustic comments. It behooves reviewers to treat each manuscript as though it were one of their own.

Reviewers are ethically obligated to keep the content of the manuscript in complete confidence. Chitwood (1991a) listed numerous ethical and other suggestions for reviewers: "The attitude of a reviewer must be one of unconditional fairness and lack of bias. Reviewers must remember that they are evaluating a manuscript, not the career of a scientist. An internationally recognized scientist is perfectly capable of submitting a manuscript that deserves rejection or substantial revision. Conversely, a poor scientist (in the reviewer's opinion) is often capable

of producing satisfactory research and manuscripts. Any reviewer who believes that he cannot overcome his strong bias for or against an author should return the manuscript immediately to the Editor-in-Chief. Perhaps the best attitude for a reviewer would be one in which the reviewer acts as a partner with the author in creating a clear, scientifically valid manuscript."

Most reviewers take their task seriously and return manuscripts in a timely manner with thoughtful and helpful reviews. An excellent review is one in which criticisms have been documented. For example, a statement that the authors have ignored relevant research should be accompanied by the appropriate literature citations. A statement that methodology is inadequate should include reference to better methodology. Poorly documented criticisms present a weaker case to the editor and make it rather easy for an author to rebut such criticisms.

Sometimes reviewers are expected to judge a paper that may be on a subject outside their realm of expertise; differs from their experiences or opinions; is unrelated to their work; is badly written or boring or both and of little interest; or may be written by an author whom they dislike, distrust, or regard as a competitor (Baker, 1982). All too often, papers are returned with one reviewer rejecting and another praising and perhaps a third called on to provide additional advice. While we are aware that diversity of opinion abounds and is good for our science, we encourage all reviewers to provide thoughtful, fair, and timely reviews, and to avoid unnecessary and bothersome remarks. Some have suggested that names of reviewers be published with the paper (Nelson, 1980), but we maintain that confidentiality is necessary and beneficial to the maintenance of JON as a highly regarded refereed journal.

Reviewer and editorial philosophy: The following point of view regarding what we refer to as the rewriting of papers by editors or reviewers may be surprising to some who have submitted manuscripts to JON. Indeed, there is some disagreement among the authors of this article about the specific mes-

sage to be conveyed herein; Chitwood in particular is a strong advocate of condensed, specific language written in the active voice. However, the authors do enjoy reading older papers from previous decades when language was colorfully descriptive and entertaining and when publication costs were low.

The following opinion is predicated on experiences and ideas formed over many years as former or current editors and EICs. When working with a large number of papers over a short period of time, one becomes attuned to reviewers and editors who assume that their writing style is superior to the author's. Without question, there are many different ways something can be said, some more succinct and clearer than others. We do want papers to be written in concise and correct English, but we agree with the point of view raised by Baker (1982). A paper should reflect the author's own unique personality and personal writing style. The paper is the author's, whose reputation, not the editor's, is at stake. The author's writing ability is one of the things on which the author will be judged; the author's thoughts in someone else's words would distort the record. Thus, Baker (1982) proposed that reviewers and editors modify sentences only to prevent misinterpretation, not to make them sound better to the reviewers and editors. In fact, most editorial rewordings in the *Journal of Nematology* are designed to increase clarity, not to be agreeable to the editor. A major exception is the problem of redundancy. Often, statements of results are repeated, materials and methods are restated in the results section, and tabular data are reiterated at length in the text.

OTHER MATTERS

After provisional acceptance of a manuscript, authors have the responsibility of addressing every point made by the editor and each reviewer of the manuscript, using the cover letter written by the editor as a guide. Any items left unchanged without accompanying documentation may cause delay in publication. If the paper is accepted, then

the next process to occupy the author's attention will be the correction of the page proofs. Guidelines for proof correction are not found in the JON Author's Publication Handbook but can be found in the Nematology Newsletter (Chitwood, 1991b).

Authors also are advised to carefully evaluate figures submitted to the journal. Figure preparation guidelines are contained within the JON Author's Publication Handbook; more detailed descriptions are also available (Council of Biology Editors, 1988; Kennedy and Kennedy, 1990; Seddigh and Jolliff, 1988). Probably every scientist could benefit from a perusal of guides on scientific writing (Council of Biology Editors, 1986; Day, 1994, 1995). No style guide can be all-inclusive. Matters of style not found in the JON Author's Publication Handbook can be found in the CBE style manual (Council of Biology Editors, 1994).

The editorial system that serves the *Journal of Nematology* largely results from the fact that its publisher, the Society of Nematologists, is a nonprofit organization that has decided to maintain low member and subscriber fees in order to promote the exchange of nematological information throughout the world. Although some other journals may have large, professionally paid staffs to convert crudely prepared manuscripts into works of art, the small size of the Society of Nematologists precludes such a financial investment. Consequently, it is the responsibility of authors, reviewers, and editors to work in harmony to create a publication of technical and scientific excellence.

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