

# Midsouth Entomologist

---

ISSN: 1936-6019

www.midsouthentomologist.org.msstate.edu

An on-line publication of the

**Mississippi Entomological Association**

and the

**Department of Entomology and Plant Pathology  
Mississippi State University**

## Instructions for Authors and Publications Policies

**Purpose and Scope:** In an effort to increase the prestige and visibility of the Mississippi Entomological Association (MEA), we have launched a research and general interest publication to serve the membership of the MEA and the entomologists of the Midsouth. Much of the work conducted by entomologists of the Midsouth (Alabama, Mississippi, Tennessee, Arkansas and Louisiana) is regional in nature, and at times is overlooked by the larger, international journals. With *Midsouth Entomologist (ME)*, we seek to provide a focused outlet for this research by publishing studies conducted by and of interest to entomologists in the Midsouth.

Also, there is much entomological work being conducted at the k–12 public and private school level in the form of science fair projects, senior theses, individual studies, etc. Much of this work would be of interest to Midsouth entomologists could it be made available. Therefore, educators are encouraged to prepare reports of school projects and submit them to *ME* as reports.

To add a bit of fun and popular interest, each issue of *ME* contains a Special Features section. Special Features can include anything related to entomology: editorials, book reviews, artwork, photography, short fiction, narratives of special events, etc.

**Submission Types:** We publish original contributions in 4 categories: **Research Articles** (peer reviewed), **Reports** (non-peer reviewed), **Abstracts** of MEA meeting posters and presentations, and **Special Features**. Based on received submissions, not every issue will necessarily include articles in each category.

**Research Articles** are reviewed by at least two peers. Research papers report primary scientific research in any field within entomology. Manuscripts submitted as Research Papers should report replicated studies with due diligence paid to methodology, statistical analysis and conclusions. They should conform to the style and format mentioned below and may be of any length (exceptionally long papers, however, may require additional time for publication).

**Reports** are not peer reviewed, and include topical reviews, efficacy trials, case studies and un-replicated scientific observations. Public and private k–12 educators are encouraged to submit reports of student projects (such as science fair projects) as Reports. Reports should conform to the style and format mentioned below and may be of any length (although exceptionally long reports may require additional time for publication). Manuscripts submitted to *ME* previously as Research Papers but rejected will NOT be considered for publication as a Report.

**Abstracts** of papers and posters presented at the MEA meetings should be submitted with the title in response to the Call for Papers issued by the MEA Program Committee. Abstracts of work not presented at an MEA function will not be considered.

**Special Features** include book reviews, editorials, artwork, photographs and stories of special events (such as 4-H Entomology camps). Inclusion in an issue is at the discretion of the Special Features editor.

**Who May Submit:** Submissions in any category should have at least one author who is an MEA member (either regular, student, honorary or sustaining) at the time of initial submission, and the article will be published free of charge. Non-members submitting manuscripts will be charged a publication fee of \$25 per article. This charge constitutes membership dues in the MEA for that membership year, and subsequent article submissions within the same membership year will be free of charge (the membership year begins with the fall meeting each calendar year). Student authors who are not MEA members will be charged a fee equal to the student membership fee for that membership year. Payment is due upon your return of the corrected manuscript and Transfer of Copyright form. Appeal for waiver of publications charges should be made to the Editor, in writing, at the time of initial submission, and waiver must be approved by the Executive Committee.

Articles from contributors outside the Midsouth will be considered as long as a portion of the research was conducted in the Midsouth, or is of interest to Midsouth entomologists (publication charges will apply for non-MEA members).

Submissions (including Special Features) must not have been previously published nor be currently under consideration for publication elsewhere. Written permission must be obtained to use quotations or excerpts from another work not in the public domain or covered by the fair use provisions of U.S. Copyright law. Proper acknowledgement must be given in the article for use of such material. Letters (or photocopies of) granting permission for use must accompany the manuscript when first submitted for publication.

All published material becomes copyrighted property of the MEA, and cannot be reprinted or republished, in whole or in part, without the written permission of the MEA. Work produced by U.S. or Canadian government employees on official time should be accompanied with a completed Transfer of Copyright form with the appropriate selection marked. The pdf version of the article may be posted on the authors' (or authors' employers') website as long as the citation and copyright information is not altered in the document.

**Submission Format.** We prefer email submissions in MS Word. Pdf and paper submissions are accepted, but the review might be delayed and we might request an editable version at a later time. See the journal's webpage for editor contact information.

Submissions of all types should be printed on one side of the page with 1-inch margins all around (top, right, bottom and left). Text should be in 10-point Arial font, and left-margin justified. Please see previous articles for examples, or contact the Editor for formatting requirements. All text should be double spaced, with continuous line numbers throughout. Tables and figures should be placed at the end of the manuscript. Please follow the most recent edition of the Council of Science Editors (formerly known as the Council of Biology Editors, CBE) *Scientific Style and Format* and *Chicago Manual of Style* for grammar and style.

Submissions of **Abstracts** will be in response to the Call for Papers, and will be formatted by the Program Committee.

Material submitted as a **Special Feature** should be typed in 10-point Arial font. Anonymous editorials will not be considered. Style and format of artistic contributions will be at the discretion of the Special Features editor.

## General Instructions

In light of changing stylistic conventions, please use only one space following a period.

**Order of elements.** The order of elements in Research Articles and Reports should be Abstract, Introduction, Materials and Methods, Results and Discussion (may be two different sections if warranted), Acknowledgements, and References. A Summary section may be included after the Results and Discussion for longer papers if necessary.

**Titles** should be in 16-pt bold Arial font, and all words in the title, headings and subheadings in the text should be capitalized except: a, an, and, as at, by, for, from, in, into, near, of, on, to, the, through, upon, without, within. Insert (Order: Family) immediately after the name of the organism when used in the title, abstract and at first mention in the text.

Authors should be listed by Surname, I. M. in 10-pt bold Arial font. For multiple authors, use the format "Surname, I. M., D. J. Lastname and J. Doe." For hyphenated surnames, spell out both surnames (for example, F. Gonzalez-Hernandez). For hyphenated personal names, use the format of "S-K. Lee." Designate author affiliations by using superscript numbers, with each affiliation on a separate line. Indicate the corresponding author with an asterisk (\*) and provide mailing and email addresses on a separate line following affiliations.

**Heading Levels.** First-level headings are in initial capital letters, are left justified in 10-pt bold Arial font on their own line. These are used to divide the manuscript into major sections (e.g., Materials and Methods, Results). Do not indent text on the first line following a first-level heading.

Second-level headings are in initial capital letters, are left justified in 10-pt bold Arial font, and followed by a period. The text of the paragraph follows immediately after (i.e. second-level headings are not on their own line).

Third-level headings are in 10-pt italic Arial font, have initial capital letters, and are followed by a period. Third-level headings are used to divide second-level sections into smaller sections.

Fourth-level headings are italicized, paragraph indented (five spaces), do not have initial capital letters, and are followed by a period. Fourth-level headings are used to divide third-level sections into smaller sections.

Additional levels (if needed) may follow a format of the author's choosing as long as they remain consistent throughout the paper.

There should be two blank lines preceding and one blank line following the first-level headings, one blank line preceding and no line following second or third (but not fourth or lower)-level headings. To avoid "orphan" headings (i.e. headings appearing at the bottom of a page and not followed by text), extra lines may be inserted before the heading if necessary to move it to the next page.

Paragraphs should have the first line indented five spaces, except for the first paragraph following a first-level heading or paragraphs beginning with a second- or third-level heading.

**Abstracts** should consist of fewer than 250 words and have no subsections. Give scientific name and authority at first mention of the subject organism. Do not cite references, figures, tables or statistical probability levels. Refer to results only in the general sense.

Place up to six **key words** on a line below the abstract.

The **Introduction** should provide relevant background to the study, illustrating any gaps in knowledge that the researchers seek to fill in the current study. The objective(s) of the current study should be clearly stated.

The **Materials and Methods** should provide enough detail so that a reasonably knowledgeable person with access to similar equipment and materials can accurately reproduce the experiment. Clear and concise descriptions of all equipment, procedures, experimental design and statistical analyses should be provided.

**Results and Discussion** may be presented either as one combined section or as two separate sections. Avoid repetition of results between tables, figures and text. Statistical results should be reported as described below. Cite tables and figures in numerical order as they appear in the text.

Inclusion of a **Conclusions** or **Summary** section is only justified for articles consisting of many separate parts or for very long review articles. If possible, include any conclusions or summaries in the Discussion or Results and Discussion section.

Place the **Acknowledgments** after the text and before the References. These should be in paragraph form and should only include persons, organizations, businesses, granting institutions, etc directly involved with the study. Mention of a serials publication number (if applicable) should be made here. Place any disclaimers (such as if the work is a product of the Federal government, etc) here as well.

**Citations in Text.** References cited in the text should be in the name-and-year format (Buffam 1971) and multiple references should be in chronological order and separated by commas (Kearns and Thompson 2001, Laidlaw et al. 2003). In cases where the same authors are cited for different publications in the same year, unique citations should be designated with a lower-case letter (for example, Cardale 1968a, Cardale 1968b). For articles in press, cite as (Peters, in press). Software used should be cited by user manuals in the text (e.g., Minitab 2000) and in References section (see above). Manuscripts making use of personal communication (from those other than the authors) should be accompanied, at initial submission, by a letter of permission from the person(s) quoted and should be cited in the text as follows: (Jones 2006, personal communication). If citing unpublished data from those other than the authors, a letter of permission to use the unpublished data must accompany the manuscript at initial submission and should be cited thusly: (Stewart, unpublished data). Unpublished data supplied by one of the authors should be cited by that author's initials (ABC, unpublished data). Manufacturers of equipment and materials should be identified by name, city and state in parentheses (e.g. Percival Scientific, Perry, IA).

Only material published or formally accepted for publication (in press) should be cited in the **References**. Include all references mentioned in text, and provide contact information for any individuals cited as providing "personal communication" and the date of the communication (see example below). List references in alphabetical order by the surname of the first author. Multiple references by the same author(s) should be listed in chronological order, from oldest to most recent. Abbreviate journal titles according to the most recent issue of BIOSIS Serial Sources. Please keep citations of web-based material to a minimum and provide the date of accession and the date of the last modification of the page (if available).

Please **DO NOT** use MS Word's automatic reference section features; type the references in fresh or copy and paste from another program. Reference sections composed by using this feature are difficult to edit, the alphabetizing feature does not work and the editor is unable to insert comments directly.

Please use the following examples in formatting your references. Variations of these formats are allowed if a reference does not fit exactly.

#### **Journal Articles:**

**Buffam, P. E. 1971.** Spruce beetle suppression in trap trees treated with cacodylic acid. *J. Econ. Entomol.* 64: 958-960.

**Cardale, J. C. 1968a.** Immature stages of Australian Anthophorinae (Hymenoptera: Apoidea). *J. Aust. Entomol. Soc.* 7: 35-41.

**Cardale, J. C. 1968b.** Nests and nesting behaviour of *Amegilla (Amegilla) pulchra* (Smith) (Hymenoptera: Apoidea: Anthophorinae). Aust. J. Zool. 16: 689-707.

**Laidlaw, W. G., B. G. Prenzel, M. L. Reid, S. Fabris, and H. Wieser. 2003.** Comparison of the efficacy of pheromone-baited traps, pheromone-baited trees, and felled trees for control of *Dendroctonus pseudotsugae* (Coleoptera: Scolytidae). Environ. Entomol. 32: 477-483.

#### **Books:**

**Kearns, C. A., and J. D. Thomson. 2001.** The natural history of bumblebees. University Press of Colorado, Boulder, CO.

#### **Article/Chapter in Book:**

**Buchmann, S. L. 1986.** Vibratile pollination in *Solanum* and *Lycopersicon*: a look at pollen chemistry, pp. 237-252. In: W. G. D'Arcy [ed.], Solanaceae: biology and systematics. Columbia University Press, New York.

#### **No Author Given:**

**Anonymous. 2004.** Pennsylvania tree fruit production guide. College of Agricultural Science, The Pennsylvania State University, University Park, PA.

#### **Proceedings:**

**Roe, R. M., W. D. Bailey, G. Zhao, H. P. Young, L. M. Carter, F. Gould, C. E. Sorenson, G. C. Kennedy, and J. S. Bacheler. 1999.** Assay kit for species and insecticide resistance diagnosis for tobacco budworm and bollworm in cotton, pp. 926-930. In: Proceedings, 1999 Beltwide Cotton Conferences. National Cotton Council, Memphis, TN.

#### **Theses/Dissertations:**

**Meagher, R. L., Jr. 1985.** Spatial patterns, predictive sampling, and techniques to measure azinphosmethyl resistance of *Platynota idaeusalis* (Walker) (Lepidoptera: Tortricidae). Ph.D. dissertation, Pennsylvania State University, University Park, PA.

#### **Software:**

**Minitab, Inc. 2000.** MINITAB Statistical Software. Minitab, Inc., State College, PA.

#### **URL Citations:**

**Jones, S. D. 2003.** Termite control. Ohio State University Extension Fact Sheet HYG-2092-03. On-line posting (<http://ohioline.osu.edu/hyg-fact/2000/2092.html>), accessed 30 May, 2006.

#### **Personal communications and unpublished data:**

**Jones, 2006.** Personal communication, May 12, 2006. A. B. Jones, Research Entomologist, USDA-Agricultural Research Service, Peanut and Sweet Potato Insect Unit, 123 Any St., Tipton, GA 12345. phone (123)123-4567; abjones@usda.gov

**Units of Measure.** All units of measure in Research Papers must be in the metric (SI) system of measurement. English units may be included in parentheses if they serve practical purpose. For pesticide

efficacy “spray and pray” trials (Reports), the English units may be used, with approximate metric equivalents noted in parentheses. Use “per” when the unit does not include an abbreviation (insects per plant), but use a slash when the unit does include an abbreviation (g/ha). Abbreviate the word “liter” with a capital letter “L” to avoid confusion with the capital letter “I.” Use the following abbreviations for units of time: h (hour), min (minute), s (second), yr (year), mo (month), wk (week), d (day). Do not repeat symbols or units of measure in a series (e.g., 30, 40, and 60%, respectively). Present dates in day-month-year format (e.g., 11 June 2005). Do not abbreviate names of months in text, although they may be abbreviated in a table.

**Numbers.** Numbers at the beginning of a sentence must be spelled out. Spell out also the numbers one through nine, but use numerals for numbers 10 and up. For example, use “five insects” and “12 insects,” because they are a number of objects. If, however, the numbers are used as units of measure, use the number. For example, use “3 g” and “25 g” in these cases. Spell out the ordinals first through ninth, but use numerals for 10th and higher. All numbers less than 1 must be preceded by a zero (e.g., 0.5 km). When a number is greater than 1,000, use a comma to separate hundreds from thousands.

**Reporting Requirements for Statistical Tests.** Due diligence regarding statistical analysis must be used in all Research Papers. Results of statistical tests may be presented in the text, in tables, or in figures. Authors are solely responsible for the statistical method selected and for the accuracy of their data. They should be able, at the request of the editor, associate editor or reviewer, to justify the use of a particular statistical test. Experimental designs and statistical methods should be described in Materials and Methods with the appropriate citations (if needed; only means, standard deviations, variances, t-tests and analyses of variance do not require citation). Descriptions should include such information as sample sizes and number of replications. Reporting of means should include the sample size and an estimate of the variance (or standard error) for each mean. When presenting the results of analysis of variance or a t-test, specify  $F$  (or  $t$ ) values, degrees of freedom, and  $P$  values. This information may be placed in parentheses in the text ( $F = 9.26$ ;  $df = 4, 26$ ;  $P < 0.001$ ). Place statistical statements in a table if repetition affects readability. Cite the computer program user’s manual in the References for any software used. When presenting the results of probit or logit analysis, include:  $n$ , slope + SE, LD (or LC), 95% confidence interval, and chi-square. Statistical tests showing which model best fits the data must be presented to justify the use of any model. In regression analysis, the model must be specified, all variables must be defined, and estimates of variances and the residual mean-square error (MSE) must be provided.

**Tables and Figures** should be embedded in the manuscript as soon as possible after first mention in the text. If a table or figure does not fit on the page directly after first mention, then it should be placed at the top of the following page. Figures may be in color or black-and-white. Although there is no additional charge for color graphics, the use of color should be kept to a minimum to reduce overall file size and simplify printing for those with grayscale printers. Figures should be inserted in the manuscript file in one of the following formats: TIFF, EPS, WMF, or JPEG, or as a “picture (enhanced metafile)”. Source graphics in one of these formats should be provided, each as their own file (this makes it much easier to display your figures on the Internet). GIF formats, such as from websites, should be avoided as they produce poor quality printouts because of low resolution.

Table and Figure legends should follow this format: **Table 1.** Text of table 1, showing the information to be conveyed. {note period at end of legend}.

Tables and figures should be no larger than one 8 × 10 inch printed page (portrait orientation), and should be as small as possible without compromising clarity. Both Tables and Figures should be centered on the page. Final lettering size in tables and figures should be 10 point Arial font. Letter locants on figures composed of more than one element should match those in the text (either upper- or lowercase). Use a scale bar in lieu of magnification, and define scale in the figure caption. Numbers within a table column should be centered within the column.

Figures may be embedded in the document for review purposes, but the source files for each figure (in .jpg, .tif, .bmp, .gif, or other format) must be supplied prior to publication. Failure to do so will result in delays and poor-quality html postings of the figures.

Photographs may be scanned from paper photographs, or submitted directly from a digital file, preferably in TIFF format. To minimize file size, scan black-and-white photographs as grayscale and not color. For color photos, use the CMYK color mode, not RGB. Again, the use of color should be kept to a minimum to reduce overall file size.

Abbreviations and symbols used in figures should match those in the text or be defined in legends. All captions should be in paragraph form. Do not cite references or statistical significance parameters in the figure caption. Use commas instead of equal signs to define abbreviations (e.g., Ap, barometric pressure).

If a table continues on more than one page, repeat the column headings on subsequent page(s). Table titles should be short and descriptive, and in 10-pt bold Arial font. Include "means  $\pm$  SEM" in the title if applicable. Do not footnote title, instead use an unlettered first footnote to include general information necessary to understand the table (e.g., define terms, abbreviations, and statistical tests).

Use horizontal lines to separate the table title from column headings, column headings from data field, and data field from footnotes. Do not use vertical lines to separate columns. All columns must have headings.

The following abbreviations are acceptable for use in a table without footnoted definition: amt (amount), avg (average), concn (concentration), diam (diameter), exp (experiment), ht (height), max (maximum), min (minimum), no (number), pop (population), prepn (preparation), temp (temperature), vs (versus), vol (volume), wt (weight). Use the following abbreviations for months: Jan., Feb., Mar., April, May, June, July, Aug., Sept., Oct., Nov., and Dec. Define any other abbreviations in a footnote. Repeat operational signs throughout data field, inserting a space on either side of the sign ( $9.8 \pm 1.25$ ). Leave no space between lowercase letters, such as significance indicators, and their preceding values (231.8ab).

Use superscript lowercase letters to indicate footnotes defining or clarifying column headings or specific datum within the data field (again, do not footnote the table title, use an unlettered first footnote). The use of asterisks is reserved to denote statistical significance only. Footnote letters should appear in the table in consecutive order, from left to right across the table then down the page.

Mathematical equations should be centered on the page, and the equations should be numbered by consecutive numbers in parentheses near the right hand margin. One blank line should be placed before and after equations. Equations should have no captions, and any variables should be defined in the text immediately following the equation. Equations may be inserted as figures or by using the Equation Editor function.

**Review of manuscripts. Research Articles** should initially be sent to the Editor, who will evaluate the paper for conformity to journal scope, format and style. It will then be forwarded to an Associate Editor who will arrange to have the paper reviewed by at least two reviewers who are qualified to assess the quality and significance of the manuscript. The Associate Editor will make a recommendation to the Editor to accept or reject the manuscript, but the Editor reserves the right to accept or reject manuscripts and his or her discretion. During the review and revision process, the Associate Editor serves as the point of contact between authors and the journal. **Reports** will be reviewed by the Editor (or designate), and **Special Features** will be reviewed by the Special Features Editor (or designate). **Abstracts** will be reviewed by the MEA Program Committee. Accepted manuscripts for Research Articles, Reports and Special Features will be returned to the author with the Editor's and reviewers' comments. Authors should then incorporate the reviewers' comments, or provide written justification for any suggestions not followed. The Editor may then accept, reject or send the manuscript out for a second review, at his or her discretion. Rejected manuscripts may be resubmitted six months after the decision date **and** after substantial revision. Research Papers that are rejected will **not** be considered for inclusion as a Report until after the six-month ban. The Editor retains copies of rejected manuscripts for two years. Manuscripts may be withdrawn at the request of the corresponding author at any time during the review and revision

process up to the time of decision by the Editor. The withdrawn manuscript may be resubmitted at any time.

**Appeal of a Rejection.** An author may appeal the Editor's decision to reject a manuscript for publication to the MEA Publications Committee. To appeal a rejection, contact the current MEA President or the chair of the Publications Committee. Please provide (copies are acceptable):

- A cover letter explaining why the author has chosen to appeal the rejection, including specific comments on the Editor's reasons for rejection
- The Editor's letter of rejection
- The Reviewers' comments
- The rejected, un-revised manuscript
- Any additional correspondence

The President/Publications Committee Chair forwards these materials to the Publications Committee for review (the Editor, although a member of the Publications Committee, does not take part in the appeal process). The Publications Committee gathers comments on the materials and rules on the appeal. The Publications Committee Chair then announces the decision, in writing, to the author, Editor, and MEA Executive Committee. The decision of the Publications Committee is final. Each manuscript is evaluated on a case-by-case basis, and appealing a rejection will have no bearing on subsequent submissions by the same author(s).

**Page Proofs.** Authors will receive electronic page proofs of the manuscript when they become available. Authors should review and return the page proofs within 3 business days of receipt, using the "track changes" option. A printed version may be submitted if the author does not have access to a word processing program with this option (printed versions should be returned within 7 business days). Only changes that are necessary due to printer or editor error and editor query will be accepted at the page proof stage. Substantial changes will result in withdrawal of the manuscript and re-review.

Paper **Reprints** of articles will not be available from the MEA. The author will be able to download and save the article and make unlimited copies, without alteration, for any purpose not in violation of the copyright. Written permission to reprint or republish, whole or in part, any journal article may be obtained by informing the Editor, in writing, of the nature of the request and the author's wishes. Any author on a published paper will be allowed to link to his or her article from other websites.

**Archival of Articles.** Articles published in *ME* will be archived by the Special Collections Department of the Mitchell Memorial Library. The EPP will maintain no less than three (3) copies of each issue on CD-ROM and no less than three (3) hard copies printed on archival acid-free paper. The EPP will retain or dispose of the archives at its pleasure should the MEA dissolve or decide to discontinue the journal.

**Membership Participation:** MEA members who wish to serve as peer reviewers for this journal should contact the Editor or one of the Associate Editors, indicating areas of expertise.