

Winter 1997

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Recommended Citation

Kristof, Cindy (1997). Accuracy of Reference Citations in Five Entomology Journals. *American Entomologist* 43(4), 246-251.
Retrieved from <http://digitalcommons.kent.edu/libpubs/11>

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Accuracy of Reference Citations in Five Entomology Journals

Cindy Kristof

ABSTRACT The bibliographical reference citations in 5 core entomology journals were examined for accuracy to determine if error rates were similar to those of other fields. The journals selected included *Archives of Insect Biochemistry*, *Ecological Entomology*, *Insect Biochemistry and Molecular Biology*, *Journal of Insect Physiology*, and *Pesticide Biochemistry and Physiology*. Citations printed in the 1st issue of each journal in 1992 were compared with the original publications to determine their accuracy. An average of 30.1% of citations in the journals contained 1 or more errors. Most errors appeared in journal article titles, followed by errors in authors' names and in pagination. Of the 49 articles examined, only 3 had completely error-free reference lists.

THE PROBLEM OF INACCURATE BIBLIOGRAPHICAL CITATIONS HAS EXISTED as long as authors have cited other authors. Probably the most notorious case of an inaccurate citation is that of "Dr. O. Uplavici." "O uplavici" literally translates from Czech as "On dysentery"; however, the article with this title written by Czech medical professor Dr. Jaroslav Hlava in 1887 mistakenly was attributed to "Uplavici, O." This error was repeated in various forms by authors for years until 1938, when Clifford Dobell wrote the life story of this famous foul-up (Dobell 1938). This humorous anecdote illustrates a number of things, foremost that authors, even respected researchers, make mistakes in citing others more often than we would like to imagine. Furthermore, these errors easily can be perpetuated, become embarrassing, and hinder scholarly communication.

Bibliographical citations are used for many purposes. Citations often are "called upon to locate papers" not yet indexed (Place 1916, p. 697); they "provide a method of evaluating the article; [and] assist in assessing an author's credibility" (Foreman and Kirchhoff 1987, p. 177). Accurate citations are necessary to the

success of bibliometric studies, citation indexes and databases, and the interlibrary loan and document delivery processes (Pandit 1993).

Some authors do not actually check the primary document before citing it, but rather take "a reference from another's bibliography as though it were thereby Gospel truth itself" (Place 1916, p. 699). This is supported by Broadus' study (1983) of 180 papers, whose authors cited both a famous book by Edward O. Wilson and 2 articles that Wilson himself cited incorrectly. Although Broadus found that "23% of these citing papers made the same error" as Wilson did, he asserted that "further perusal of the evidence raises considerable doubt as to whether fraudulent use was intended" (Broadus 1983, p.132).

Currently, studies of citation accuracy have been conducted primarily in the fields of medicine and library science (Table 1). Studies in other scientific fields and in areas such as the humanities are limited. In this study, the citations in 5 core entomology journals were examined for accuracy to determine if the error rates were similar to

Table 1. Comparison of reference citation accuracy studies in biological, physical, and social sciences

Author	Subject scope	No. citations verified	No. citations found with errors	Most errors found in	Citations with errors, % ^a
Benning and Speer (1993)	Library Sci./Medicine	525	152	Author names	29.0
Boyce and Banning (1979)	Social Sciences	1,012	150	Numerical data	14.8
de Lacey et al. (1985)	Medicine	279	71	—	25.5
Doms (1988)	Dentistry	475	186	Article titles	39.2
Eichorn and Yankauer (1987)	Public Health	150	46	Author names	30.7
Evans et al. (1990)	Surgery	150	72	—	48.0
Foreman and Kirchhoff (1987)	Nursing	112	35	—	31.3
George and Robbins (1994)	Dermatology	240	99	Author names	41.3
Goldberg et al. (1993)	Emergency Medicine	145	40	—	27.6
Goodrich and Roland (1977)	Medicine	2,195	634	Article titles	28.9
Hinchcliff et al. (1993)	Veterinary Medicine	295	88	Author names	29.8
McLellan et al. (1992)	Anesthesiology	348	175	Article titles	50.3
Nuckles et al. (1993)	Dentistry	298	64	Article titles	21.5
Pandit (1993)	Library Science	1,094	193	Numerical data	17.6
Pope (1992)	Library Science	100	30	Author names	30.0
Poyer (1979)	General Sciences	2,448	367	Author names	15.0
Putterman and Lossos (1991)	Medicine	374	118	Author names	31.6
Stull et al. (1991)	Physical Education	973	457	Author names	47.0
Average					31.1

—, Data not available from study.

^aPercentages may not be those reported by authors because some included unverifiable citations in their analyses.

Table 2. Unverifiable citations in 1st issues of 5 entomological journals for 1992

Category	Journal title abbreviation					Total
	AP	EE	IB	JP	PB	
Conference proceedings	0	0	1	1	3	5
Dissertation unavailable through interlibrary loan	0	2	0	0	0	2
Book or journal unavailable through interlibrary loan	0	1	0	0	0	1
Unidentifiable	1	3	1	0	1	6
Total	1	6	2	1	4	14

AP, *Archives of Insect Biochemistry and Physiology*; EE, *Ecological Entomology*; IB, *Insect Biochemistry and Molecular Biology*; JP, *Journal of Insect Physiology*; PB, *Pesticide Biochemistry and Physiology*.

those of other fields. An attempt was made to answer the following 3 questions: (1) What percentage of citation errors typically occur in the most cited entomology periodical literature? Overall, are the citations in these entomology journals more or less accurate than those in medical and library science journals? (2) What types of errors typically occur, and how do they compare with the results of other studies? (3) What types of publications do authors make the most mistakes in citing? Are book chapters, for example, more problematic for authors to cite than are regular journal articles?

The combined average error rate of 18 previous studies, in both medical and library sciences was 31.1% (Table 1). Although 8 of these studies found the most errors in the spelling or initials of authors' names, 4 found that errors occurred most often in article titles, and 2 found the most mistakes in numerical data. How do entomology journals compare?

Materials and Methods

The journals chosen for this study were selected based on their impact ranking in the Institute for Scientific Information, Incorporated, (ISI) 1992 *Science Citation Index Journal Citation Reports*. According to ISI, a "high impact" journal is defined as having the highest "average number of current citations to articles [the] journal published in the previous two years" (Garfield 1993, p. 5). The 6 entomology journals with the highest "impact factor" for 1992 (Garfield 1993, p. 101) were as follows: (1) *Annual Review of Entomology*, (2) *Insect Biochemistry and Molecular Biology*, (3) *Journal of Insect Physiology*, (4) *Pesticide Biochemistry and Physiology*, (5) *Archives of Insect Biochemistry*, (6) *Ecological Entomology*. The highest impact journal, *Annual Review of Entomology*, was excluded from this study because of its nature as an annual review periodical; the large number of citations in annual review publications is disproportionate to the smaller amount found in typical monthly or quarterly journal issues.

The sampling technique used was based on previous studies of this kind (Poyer 1979, Eichorn and Yankauer 1987, Doms 1989,

Evans et al. 1990, Pope 1992, Benning and Speer 1993, Nuckles et al. 1993). The 1st issue published in 1992 for each journal was chosen because these journal issues were representative of typical issues for these publications. Every citation at the end of each article in each issue was examined ($n = 1,337$), excluding citations designated "in press" ($n = 15$) and patents ($n = 3$). Patents were excluded from this study because of a lack of a standard form of citation. This sampling technique might have introduced some error because the first 1992 issues may have been, by chance, particularly "good" or "bad" issues for these journals.

A "correct," or "accurate," citation was defined as one in which all included citation elements were "identical to the source" (Doms 1989, p. 442). "Errors," for the purposes of this study, were defined as "deviations from the source" (Doms 1989, p. 442) and consisted of incorrect, incomplete, and omitted (where required by journal style guides for contributors) citation information. Errors were recorded specifically either as "incorrect/incomplete" or as an "omission." Two of the journals, *Archives of Insect Biochemistry and Physiology* and *Pesticide Biochemistry and Physiology* required that authors note only the 1st page number of journal articles; end page numbers were not required. None of the journals required, or included, journal issue numbers or months. Also, none of the journals required series titles as part of book citations; therefore, these were not recorded even if they were included. If any citation elements, such as volume, year, and pages, were out of order, following journal style (for example, if the year was listed after the journal title instead of after author names), they were not counted as errors unless the element was incorrect (Key and Roland 1977).

Also not counted as errors were differences in abbreviation styles. For example, if a journal required that contributors use *Chemical Abstracts Service Source Index* journal title abbreviations (such as *J Biol Chem*), and an author made an error in abbreviation (such as *Journ Biol Chem*), the error was not counted unless it made identification of the journal title difficult. An example of this difficulty is the frequently seen mistaken abbreviation for the journal

Table 3. Citation accuracy in 1st issues of 5 entomological journals for 1992

Journal title	No. articles in 1st 1992 issue	No. citations examined ^a	Total citations verified	Total no. errors	Total no. citations with error(s)	Citations with ≥ 1 errors, %
<i>Archives of Insect Biochemistry and Physiology</i>	5	155	154	70	43	27.9
<i>Ecological Entomology</i>	15	377	371	115	98	26.4
<i>Insect Biochemistry and Molecular Biology</i>	11	311	309	141	108	35.0
<i>Journal of Insect Physiology</i>	8	249	248	110	80	32.3
<i>Pesticide Biochemistry and Physiology</i>	10	245	241	84	69	28.6
Totals	49	1,337	1,323	520	398	30.1

^aExcludes items "in press" ($n = 15$) and patents ($n = 3$).

Table 4. Types of citation errors found in 1st issues of entomological journals for 1992 (n = 1,323 verified citations)

	AP		EE		IB		JP		PB		Subtotals		Total Errors ^b	
	Incorrect	Omission	Incorrect	Omission	Incorrect	Omission	Incorrect	Omission	Incorrect	Omission	% ^a	Omission		% ^a
Author(s)	30	7	22	0	47	1	31	0	16	1	146	28.1	9	1.7
Article title	19	0	36	0	46	0	28	0	28	0	157	30.2	0	0.0
Journal title	0	0	8	0	5	1	5	0	1	0	19	3.7	1	0.2
Volume number	2	0	5	0	5	1	5	0	2	0	19	3.7	1	0.2
Pages	3	0	11	0	12	1	7	0	2	0	35	6.7	1	0.2
Year	0	0	4	0	1	0	2	0	5	1	12	2.3	1	0.2
Subtotals	54	7	86	0	116	4	78	0	54	2	388	74.6	13	2.5
Citations to journal articles														
Chapter author(s)	0	0	1	0	3	0	5	3	1	0	10	1.9	3	0.6
Chapter title	3	0	0	0	2	0	3	0	3	0	11	2.1	0	0.0
Book editor	3	0	3	3	6	0	4	2	5	0	21	4.0	5	1.0
Book title	2	0	2	0	4	0	1	0	2	0	11	2.1	0	0.0
Place of publication	0	0	0	2	1	0	0	0	0	2	1	0.2	4	0.8
Publisher	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
Volume number	0	1	0	0	0	1	0	3	0	3	0	0.0	8	1.5
Pages	0	0	5	3	2	0	5	1	5	4	17	3.3	8	1.5
Year	0	0	0	0	0	0	1	0	0	1	1	0.2	1	0.2
Subtotals	8	1	11	8	18	1	19	9	16	10	72	13.8	29	5.6
Citations to book chapters														
Book author(s)	0	0	3	0	1	0	2	0	0	0	6	1.2	0	0.0
Book title	0	0	0	0	0	0	2	0	1	0	3	0.6	0	0.0
Place of publication	0	0	1	5	0	1	0	0	0	0	1	0.2	6	1.2
Publisher	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
Volume number	0	0	0	1	0	0	0	0	0	0	0	0.0	1	0.2
Year	0	0	0	0	0	0	0	0	1	0	1	0.2	0	0.0
Subtotals	0	0	4	6	1	1	4	0	2	0	11	2.1	7	1.3
Totals	62	8	101	14	135	6	101	9	72	12	471	90.6	49	9.4

AP, *Archives of Insect Biochemistry and Physiology*; EE, *Ecological Entomology*; IB, *Insect Biochemistry and Molecular Biology*; JP, *Journal of Insect Physiology*; PB, *Pesticide Biochemistry and Physiology*.

^aPercentage of total (520) errors (incorrect/incomplete and omissions).

^bIncorrect/incomplete plus omissions.

Biochimica et Biophysica Acta: Biochem Biophys Acta. Correct Chemical Abstracts Service abbreviation for this title is *Biochim Biophys Acta*. If the word *Biochemica* is entered in a library's online catalog, the search for this journal title will not be successful (underlining added for emphasis).

Of the 1,337 citations examined, 1,323 were verifiable. Of these, most ($n = 1,309$, 98.9%) were verified by comparing the citation to the original article, book, or a photocopy or facsimile obtained through interlibrary loan. For the 14 that could not be verified as above, an attempt was made to verify them through indexes, online databases, or library catalogs. Because indexes and databases, themselves, may contain errors, an attempt was made to use 2 or more indexes or databases. Ten of them were verified in 2 or more databases or catalogs, but 4 were verified in only 1. Three of these 4 were dissertations, and 1 was a booklet published by a park administration.

The 14 citations that could not be verified included conference proceedings, dissertations, and books unavailable through interlibrary loan; and unidentifiable publications that could not be found in any database (Table 2). Without database verification, interlibrary borrowing is rendered impossible. These unverifiable citations were counted in the total number of citations examined but were not considered errors nor were they used to calculate percentages of errors.

Of the 1,323 verifiable citations, 1,130 were journal article citations, 138 were book chapter citations, and 55 were book citations. This information was used to determine which of 3 types of publications—journal articles, book chapters, or books—were most difficult for authors to cite correctly. Types of books cited included government documents, dissertations, and conference proceedings. Citations to books in a series were classified as “books” or “journals,” depending on how the author cited them. For example, a citation to an article from

the series *Methods in Enzymology* was classified as a book citation if the author included the distinctive volume title, publisher, and location and constructed it as a book citation; if the author used the series title, did not include the publisher and location, and configured the citation as a journal citation, it was classified as a journal citation.

Results and Discussion

A total of 520 errors, involving 398 citations, occurred in 1,323 verifiable citations (Table 3). The overall percentage of citations with errors was 30.1%, slightly below the average of 31.1%. This is not a statistically significant difference at the 0.05 level ($t = 0.21$). The journal *Ecological Entomology* had the lowest, and *Insect Biochemistry and Molecular Biology* the highest percentage of errors, at 26.4 and 35.0%, respectively.

Most of the 520 errors (30.2%, $n = 157$) appeared in journal article titles (Table 4) and were minor. Often, the plural form of a word was used or not used by mistake. Words were omitted, added, misspelled; scientific names were omitted; and errors were made in punctuation within phrases. The latter may seem trivial and almost never caused retrieval problems. However, consider the difference in meaning between these 2 phrases: “. . . ascorbate-free radical. . .” (found in an incorrect citation) versus “. . . ascorbate free-radical. . .” (found in original publication). A simple typographical error in a seemingly small word can change the whole meaning of a phrase. Consider the difference in meaning between the following 2 article titles: “Delta-endotoxins **from** cation-selective channels. . .” (found in incorrect citation) versus “Delta-endotoxins **form** cation-selective channels. . .” (found in original publication). Less often, article titles were paraphrased; this can cause delays when attempting to locate

Table 5. Comparison of journal article, book chapter, and book citations in 1st issues of 5 entomological journals for 1992

Journal	No. citations verified	No. citations containing errors	No. errors	Citations with ≥ 1 errors, %
<i>Archives Insect Biochemistry and Physiology</i>				
Citations to journal articles	130	38	61	29.2
Citations to book chapters	19	5	9	26.3
Citations to books	5	0	0	0.0
<i>Ecological Entomology</i>				
Citations to journal articles	310	76	86	24.5
Citations to book chapters	31	12	19	38.7
Citations to books	30	10	10	33.3
<i>Insect Biochemistry and Molecular Biology</i>				
Citations to journal articles	280	91	120	32.5
Citations to book chapters	27	16	19	59.3
Citations to books	2	1	2	50.0
<i>Journal of Insect Physiology</i>				
Citations to journal articles	209	61	78	29.2
Citations to book chapters	24	15	28	62.5
Citations to books	15	4	4	26.7
<i>Pesticide Biochemistry and Physiology</i>				
Citations to journal articles	201	49	56	24.4
Citations to book chapters	37	18	26	48.6
Citations to books	3	2	2	66.7
<i>Total citations [and avg % with error(s)]</i>				
Citations to journal articles	1,130	315	401	[28.0]
Citations to book chapters	138	66	101	[47.1]
Citations to books	55	17	18	[35.3]

an article by title online. An example of this is the incorrectly cited article title, "Interaction of fluridone with phytoene desaturase of *Aphanocapsa*." The correct version, found in the original publication, is, "Interference of fluridone with the desaturation of photoene by membranes of the cyanobacterium *Aphanocapsa*."

Incorrect/incomplete names of journal article authors were the 2nd most frequently occurring error. Of the 520 errors, 28.1% ($n = 146$) were in this category (Table 4). These errors included omitted, reversed, or incorrect initials, and misspelled names. An example of the latter: "D. L. Coppage" was cited as "D. L. Coopage." Sometimes, authors had been incorrectly added to citations; however, this was rare. As with many article title errors, these errors can impede article location, especially if a reader of a bibliography writes down or memorizes only the name of 1 author, with the intention of locating that article later. Omissions of the authors' names were infrequent (1.7%, $n = 9$) but the consequences are similar.

Incorrect/incomplete journal article page numbers were the 3rd most frequently occurring error. Of 520 errors, 6.7% ($n = 35$) were in this category (Table 4). Often, they seemed to be typographical errors, such as in the example of "389-389"; the correct page numbers were 381-389. Page number errors that were the most troublesome when attempting to locate an article were those given, for example, as "1185" instead of "1885" and which involved differences of hundreds of pages. Incorrect/incomplete or omitted book chapter page numbers (3.3%, $n = 17$ and 1.5%, $n = 8$, respectively) can cause similar problems; however, it often is easier to find pages to a book chapter in a table of contents than it is to look up article pages in a journal's yearly index.

Incorrect/incomplete names of book editors were the 4th most frequently occurring error. Of 520 errors, 4.0% ($n = 21$) were in this category (Table 4). Incorrect/incomplete names of book authors also appeared, although less often (1.2%, $n = 6$). As with errors in the names of article authors, these can hinder attempts to locate a publication in an online database or library catalog.

Incorrect/incomplete journal titles (3.7%, $n = 19$) or book titles (2.7%, $n = 14$) also can cause serious problems when attempting to locate the publication. The following title word reversal was problematic: *Journal of Medical and Veterinary Mycology* was cited as *Journal of Veterinary and Medical Mycology*. Occasionally, the journal *Nature* was cited instead of the correct *Science*, and vice-versa. That these 2 titles happened to be juxtaposed in the library I used, in addition to my library experience, prevented these errors from becoming time-consuming. Otherwise, this error would have required the use of an index for verification. One especially time-consuming title error, discovered only after a number of days by interlibrary loan borrowing staff, was an incorrect citation of the 1986 book *Proteinase Inhibitors as Protease Inhibitors*.

Omissions of the place of publication of books occurred (1.9%, $n = 10$), despite the availability of the information on the books' title pages in each case. Although this did not cause problems in locating the books, it could cause problems when ordering books, especially when ordering a particular edition. Another error (1.5%, $n = 8$) was the omission of volume numbers in citing chapters in multivolume monographic sets. In every case, finding the original chapters required looking in the index to the set.

Incorrect/incomplete or omitted volumes and years in journal article citations did not cause time-consuming problems in this study because these errors never occurred simultaneously in the same citations. These errors can cause problems for the reader of a bibliography who tends to memorize or write down one and not the other. They also can cause problems when a journal is published in multiple volumes each year.

Some types of errors occurred infrequently or not at all. These included journal title, volume, page, and year omissions; book pub-

lication year, article title omissions, chapter title omissions, book publisher errors or omissions, and incorrect book volumes. The reason for this seems to be the relative "obviousness" of these data. In one instance, an apparent omission of journal title, volume, page, and year all in one citation seems to have been typesetter error; the lines of type containing this information were omitted from their proper location and placed a few lines further down the page at the end of another line of type.

The types of errors found in this study are similar to those of previous studies. Although 8 previous studies found most errors in the names of authors, 4 found most errors in article titles (Table 1), as did the current study (Table 4). In the current study, mistakes in journal authors' names were the next most frequent error, followed by mistakes in journal page numbers.

Although fewer books were cited than journal articles, citations to books and book chapters generally contained higher percentages of errors than citations to journal articles (Table 5). Overall, the percentage of book chapter citations containing at least 1 error (47.1%) was greater than that for book citations (35.3%), whereas the percentage for journal article citations was lowest (28.0%). It is possible that book chapter citations generally contain a greater percentage of errors because they include more bibliographic information or "elements" than do journal articles or book citations. For example, if an author cites a chapter from a multivolume set of books, 9 minimum elements are needed in the citation: chapter author(s), chapter title, book editor(s), book title, place of publication, publisher, volume number, year, and page numbers. In contrast, when an author cites an entire book, no more than 6 elements are required, which is the same amount required for a journal article citation. It also is possible that books are cited less often than journals; consequently, authors get more practice with citing journal articles.

Of the 49 articles in the journal issues examined (Table 3), only 3 had completely error-free reference citation lists, one each in *Ecological Entomology*, *Insect Biochemistry and Molecular Biology*, and *Journal of Insect Physiology*. I spoke with an editor of the *Journal of Insect Physiology*, who said that although reference lists are examined for content, each citation is not examined for accuracy. Judging from the similarity of numbers of errors and error patterns among these journals, it is likely that none of the editors of these journals examines citations for accuracy during the editorial process. Authors of previous studies have suggested that authors primarily should be responsible for the accuracy of their bibliographies, yet it also has been noted that editors, reviewers, or publishers should attempt to verify at least a small portion of the citations in papers accepted for publication. Some journals, such as *Archives of Physical Medicine and Rehabilitation* and *Library Trends*, have review staff who check the accuracy of citations in articles submitted for publication. Doms' (1989, p. 444) suggestion that editors or editorial staff "make a policy of checking 10% of the citations for each article as part of the acceptance process" still seems to be an idea worth implementing.

Accurate citations demonstrate the kind of attention to detail that should be a part of every scholar's research. As Place advised: "Take no reference for granted. Verify the reference that your best friend gives you. Verify the reference that your revered chief gives you. Verify, most of all, the reference that you yourself found and jotted down. To err is human, to verify is necessary" (Place 1916, p. 699).

Acknowledgments

I thank Tschera Harkness Connell (Kent State University School of Library and Information Science) for her advice and encouragement, and Judy Thompson Willis (Prior Health Sciences Library, The Ohio State University)

for processing the large number of interlibrary requests so quickly. This article is based on a research paper submitted to the Kent State University School of Library and Information Science in partial fulfillment of the requirements for the M.L.S. degree.

References Cited

- Benning, S. P., and S. C. Speer. 1993. Incorrect citations: a comparison of library literature with medical literature. *Bull. Med. Libr. Assoc.* 81: 56-58.
- Boyce, B. R., and C. S. Banning. 1979. Data accuracy in citation studies. *RQ* 18: 349-350.
- Broadus, R. N. 1983. An investigation of the validity of bibliographic citations. *J. Am. Soc. Info. Sci.* 34: 132-135.
- de Lacey, G., C. Record, and J. Wade. 1985. How accurate are quotations and references in medical journals? *Br. Med. J.* 291: 884-886.
- Dobell, C. 1938. Dr. O. Uplavici (1887-1938). *Parasitology* 30: 239-241.
- Doms, C. A. 1989. A survey of reference accuracy in five national dental journals. *J. Dent. Res.* 68: 442-444.
- Eichorn, P., and A. Yankauer. 1987. Do authors check their references? A survey of accuracy of references in three public health journals. *Am. J. Public Health* 77: 1011-1012.
- Evans, J. T., H. I. Nadjari, and S. A. Burchell. 1990. Quotational and reference accuracy in surgical journals. *JAMA (J. Am. Med. Assoc.)* 263: 1353-1354.
- Foreman, M. D., and K. T. Kirchoff. 1987. Accuracy of references in nursing journals. *Res. Nurs. Health* 10: 177-183.
- Garfield, E. 1993. SCI journal citation reports: a bibliometric analysis of science journals in the ISI database. Institute for Scientific Information, Philadelphia.
- George, P. M., and K. Robbins. 1994. Reference accuracy in the dermatologic literature. *J. Am. Acad. Dermatol.* 31: 61-64.
- Goldberg, R., E. Newton, J. Cameron, L. Chan, W. R. Bukata, and A. Rakab. 1993. Reference accuracy in the emergency medicine literature. *Ann. Emerg. Med.* 22: 1450-1454.
- Goodrich, J. E., and C. G. Roland. 1977. Accuracy of published medical reference citations. *J. Tech. Writing Comm.* 7: 15-19.
- Hinchcliff, K. W., N. J. Bruce, J. D. Powers, and M. L. Kipp. 1993. Accuracy of references and quotations in veterinary journals. *J. Am. Vet. Med. Assoc.* 202: 397-400.
- Key, J. D., and C. G. Roland. 1977. Reference accuracy in articles accepted for publication in the Archives of Physical Medicine and Rehabilitation. *Arch. Phys. Med. Rehabil.* 58: 136-137.
- McLellan, M. F., L. D. Case, and M. C. Barnett. 1992. Trust, but verify: the accuracy of references in four anesthesia journals. *Anesthesiology* 77: 185-188.
- Nuckles, D. B., N. N. Pope, and J. D. Adams. 1993. A survey of the accuracy of references in 10 dental journals. *Operative Dent.* 18: 28-32.
- Pandit, I. 1993. Citation errors in library literature: a study of five library science journals. *Libr. Inf. Sci. Res.* 15: 185-198.
- Place, E., Jr. 1916. Verify your references. A word to medical writers. *N.Y. Med. J.* 104: 697-699.
- Pope, N. N. 1992. Accuracy of references in ten library science journals. *RQ* 32: 240-243.
- Poyer, R. K. 1979. Inaccurate references in significant journals of science. *Bull. Med. Libr. Assoc.* 67: 396-398.
- Putterman, C., and I. S. Lossos. 1991. Author, verify your references! or, The accuracy of references in Israeli medical journals. *Isr. J. Med. Sci.* 27: 109-112.
- Stull, G. A., R. W. Christina, and S. A. Quinn. 1991. Accuracy of references in Research Quarterly for Exercise and Sport. *Res. Q. Exercise Sport* 62: 245-248.

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