

Ethnobotany Journal : A Ten Year Bibliometric Study

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Ethnobotany journal brought out by Society of Ethnobotanists, C/O NBRI, Lucknow and published by Deep Publication, New Delhi, since 1989 has played a key role in the dissemination of ethnobotanical information throughout the world. Probably, it is the only journal, which is devoted completely to this field. The paper deals with the bibliometric study of this journal published during 1989-1998. It examines yearwise, institutionwise and countrywise, authorship pattern, range of references cited and length of the articles.

1. Introduction

The word *Bibliometrics* has been derived from Greek words, *Biblio* means Book and *Metrikos* meaning measurement, referring to the science of measurement relating to books. Allan Prichard (1) was the first man who coined the term *bibliometrics* in 1969 but it became more popular during 1980s. According to him, definition and purpose of bibliometrics is to shed light on the process of written communication and of the nature and course of a discipline (in so far as this is displayed through written communication) by means of counting and analyzing the various facets of written communication'. According to British Standards Institution, it is the study of the use of documents and pattern of publication in which mathematical and statistical methods have been applied (2). More recently Sengupta had defined this term as the

'organization, classification and quantitative evaluation of publication patterns of all macro and micro communications along their authorships by mathematical and statistical calculus' (3).

This paper attempts to analyze the results of bibliometric study of Ethnobotany journal-a multidisciplinary journal in the field of ethnobotany. Some of the earliest bibliometric study of this type were carried out by Vij and Bedi (4) on Defence Science Journal in 1999; Halkar et al., in 1998 (5) on Journal of Family Welfare; Kalyane and Sen (6) in 1995 on Journal of Oil Seeds Research and by Balog (7) in 1980 on multiple authorship and author collaboration in agricultural research publications during 1958-78 on Agricultural Journals. However, it is very clear that not even a single bibliometric study of Ethnobotany journal has been carried out so far, and hence this study is the first sincere effort in this regard.

2. Objectives of the Study

The current study on Ethnobotany journal is aimed to determine :

1. Yearwise distribution of papers.
2. Distribution of contribution among types of organizations.
3. Countrywise distribution of papers.
4. The nature of authorship pattern.
5. The frequency and mean of number of references cited by researchers and
6. Average length of papers.

3. Source Journal

For the purpose, Ethnobotany journal has been selected as the source journal. Although, it is a half-yearly publication but appears as a single volume annually. This publication is brought out by the Society of Ethnobotanists, C/O National Botanical Research Institute, Lucknow and published by Deep Publication A - 3/27 A, DDA Flats, Paschim Vihar, New Delhi - 63. It is a multidisciplinary journal in nature and carries articles on ethnobotany of various tribes including ethno-medicine, ethno-chemistry, ethno-pharmacology, ethno-taxonomy and ethno-pharmacognosy. It publishes original research papers, review articles and short communications on such fields. Since its emergence in 1989, 10 volumes (1998) till now have been published so far. Its editorial board and Executive committee comprise of eminent scientists/professors from different parts of India and abroad.

In terms of visibility, Ethnobotany journal is indexed in secondary journals like Medicinal & Aromatic Plants Abstracts and Indian Science Abstracts etc.

4. Scope

The present study is based on research, review articles and short communications published during 1989-1998. Address and affiliation contained in articles were studied and analyzed besides, references appended at the end of each article. The determination of the author's departmental affiliation is based on the addresses and affiliations given by them in articles.

5. Methodology

All the 10 volumes published so far now, i.e., volume-1-10 (1989-1998) was taken into consideration for this study. In the study, each individual article was scanned, checked, examined and tabulated for necessary data into separate sheets in terms of authorship pattern, author's addresses and affiliations. At the same time, the references appended by the respective authors at the end of each article were also scanned, counted and tabulated. Finally, all the collected data were recorded, compiled, tabulated and analyzed for making observations.

6. Data Analysis

The total number of contributions in the 10 volumes is 175, which consists of research and review articles and short communications.

6.1 Yearwise Distribution of Papers

In the table No. 1, details regarding the distribution of 175 articles published from 1989-1998 are given. This table shows that maximum number of articles published in 1997 were the highest i.e. 29 which is 16.6% of total published articles. This is followed by 26 articles (14.8%) in 1998 and 8 (4.6%) is lowest number of articles published in 1992.

Table No. 1 : Yearwise Distribution of Papers

Year	Total	Percentage
1989	12	6.8
1990	16	9.1
1991	17	9.7
1992	8	4.6
1993	15	8.6
1994	13	7.4
1995	17	9.7
1996	22	12.6
1997	29	16.6
1998	26	14.8
Total	175	100

6.2 Institution-wise Contribution

Table No. 2 indicates that highest contribution is from Research Institutions/Colleges i.e., 96 (47.5%). This is substantially more than that of University contribution i.e., 61 (30.2%). However, there was almost no contribution from professional organizations.

Table No. 2 : Institutionwise Distribution of Papers

Institutes	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Total	Percent
University	4	4	3	3	7	3	5	11	13	8	61	30.2
Instt./Colleges	7	4	10	4	7	9	8	14	13	20	96	47.5
Profess. Organisations	—	—	—	—	1	1	—	—	—	1	3	1.5
Others	1	9	5	1	2	2	5	1	11	5	42	20.8
Total	12	17	18	8	17	15	18	26	37	34	202	100

6.3 Countrywise Distribution of Papers

Table No. 3 gives an alphabetical list of 12 countries from where the contributions were received to publish in the journal during 1989-1998. The table depicts that India has contributed the highest number of papers i.e., 148 (81.7%) followed by 5 each from China, Nepal, Nigeria, UK and USA (2.8%). The minimum contributions were from Canada, Kenya, Newzealand, Spain and Tanzania i.e., 1 only (0.5%).

Table No. 3 : Countrywise Distribution of Papers

Country	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Total	Percent
Canada	—	—	1	—	—	—	—	—	—	—	1	0.5
China	—	—	—	—	2	1	1	—	—	1	5	2.8
India	9	13	14	7	9	10	13	20	27	26	148	81.7
Japan	—	—	—	—	1	1	1	—	—	—	3	1.6
Kenya	—	—	1	—	—	—	—	—	—	—	1	0.5
Nepal	1	1	1	—	—	—	1	—	1	—	5	2.8
Newzealand	—	1	—	—	—	—	—	—	—	—	1	0.5
Nigeria	—	—	1	—	1	1	—	—	1	1	5	2.8
Spain	—	—	—	—	—	—	1	—	—	—	1	0.5
Tanzania	—	—	1	—	—	—	—	—	—	—	1	0.5
UK	—	1	—	—	3	1	—	—	—	—	5	2.8
USA	2	—	—	1	—	—	—	2	—	—	5	2.8
Total	12	16	19	8	16	14	17	22	29	28	181	100

6.4 Authorship Pattern

In Table No. 4, the details of authorship pattern are shown. 69 papers (39.6%) out of 174 papers are of the single authorship, 61 (35.0%) are written by two authors, and 31 (17.8%) by three authors. Multiple authorship papers are 13, which is 7.5% of the total contributions.

Table No. 4 : Authorship Pattern

No. of Authors	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Total	Percent
One	6	6	4	4	5	5	9	11	11	8	69	39.6
Two	4	9	8	4	6	5	4	6	7	8	61	35.0
Three	2	1	4	--	2	1	2	3	8	9	31	17.8
Multiple	--	--	1	--	2	2	2	2	3	1	13	7.5
Total	12	16	17	8	16	13	17	22	29	26	174	100

6.5 Citation Study

Table No. 5 reveals the details of number of citations appeared at the end of articles during 1989-1998. Out of 175 papers published, 20 papers have no reference. The maximum number of references per paper is between 1-10 i.e., is 73 (41.7%) and minimum is between 191-200 i.e. (0.6%) appeared in 1993 issue and is shown in table under category (>101).

Table No. 5 : Study of References

No. of References	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Total	Percent
Nil	3	2	1	1	1	2	3	3	1	3	20	11.4
1-10	3	5	7	3	9	3	3	15	17	8	73	41.7
11-20	2	5	6	2	1	5	7	3	6	7	44	25.1
21-30	1	3	--	--	3	2	1	1	3	4	18	10.3
31-40	--	--	2	1	--	--	--	--	--	1	4	2.3
41-50	--	1	--	1	--	--	2	--	1	1	6	3.4
51-60	1	--	--	--	--	1	--	--	--	1	3	1.7
61-70	--	--	--	--	--	--	--	--	--	--	--	--
71-80	1	--	--	--	--	--	1	--	--	--	2	1.1
81-90	1	--	--	--	--	--	--	--	1	--	2	1.1
91-100	--	--	1	--	--	--	--	--	--	1	2	1.1
>101 (i.e., 191-200)	--	--	--	--	1	--	--	--	--	--	1	0.6
Total	12	16	17	8	15	13	17	22	29	26	175	100

6 Length of Articles

Table No. 6 contains that 100 (57.5%) papers cover 1-5 pages followed by 52 (29.9%) papers covering 6-10 pages. However, there is only one paper finishing between 56-60 pages i.e., (0.5%).

Table No. 6 : Length of Articles

Nos. of Pages of	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Total	Percent
1-5	4	7	12	4	9	5	7	16	21	15	100	57.5
6-10	5	7	4	1	4	6	5	3	7	10	52	29.9
11-15	3	2	1	2	1	2	5	3	1	1	21	12.1
16-20	—	—	—	1	—	—	—	—	—	—	1	0.5
21-25	—	—	—	—	—	—	—	—	—	—	—	—
26-30	—	—	—	—	—	—	—	—	—	—	—	—
31-40	—	—	—	—	—	—	—	—	—	—	—	—
41-45	—	—	—	—	—	—	—	—	—	—	—	—
46-50	—	—	—	—	—	—	—	—	—	—	—	—
51-55	—	—	—	—	—	—	—	—	—	—	—	—
56-60	—	—	—	—	1	—	—	—	—	—	1	0.5
Total	12	16	17	8	15	13	17	22	29	26	175	100

Conclusion

The following conclusions are drawn from the study.

Distribution of articles from 1989-1998 in Ethnobotany journals is not consistent as the difference between maximum and minimum is 21.

The maximum number of articles was published in 1997 (29) and minimum in 1992 (8).

Maximum articles (96) contributed from Research Institutions/Colleges come to 47.5% while minimum (only 3) was received from professional organizations.

Authorship pattern show that however, people like to write solely that comes to 39.6% but there a trend is developing for joint

authorship (35.0%) which means now-a-days the researches/projects are carried out on collaborative basis that is also a symbol of multidisciplinary approach of researches in scientific field.

- India contributed the maximum number of articles i.e., 148 (81.7%) and total number of countries comes of 12 that means this journals needs the popularity in other countries also.
- On average, around 16 (15.7) references appeared per paper in this journals. This is a healthy trend.
- The average length per paper comes to 6 pages, which shows the ideal length of a research article.

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