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A Bibliometrics Study of Ph.D. Thesis Bibliographic Form Wise Distribution of Citations in Agronomy Dr. P. Krishi Vidyapeth Akola

Ravindra B. Nimat
Research scholar,
SGBAU University, Amravati
Corresponding Author – Ravindra B. Nimat
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Abstract:

This paper discusses the use of quantitative techniques to evaluate scientific and technical activities; sometimes it gives insights into trends in research and citation. Thus, this study, focusing on Agronomy PhD theses submitted to Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, analyses the bibliographic form-wise citations to access information usage of the theses. Data set: 75 theses with 8,348 citations are categorized under journals, books, conference, proceedings, and other sources.

Findings reveal that journals dominate at 60% of the total citations, emphasizing their Importance as major research resources, followed by books, conference proceedings, and Abstracts. Subject-wise analysis shows a significant contribution of Agronomy and Agriculture, Receiving the highest number of citations, while other disciplines such as Horticulture Science, Biology, and Soil Science also contribute.

Citation trends across Agronomy and its allied subjects appear to be quite uniform in the selected study, with journals and books as obvious resources. The results reflect the fragmentation of Agronomy literature in a broad range of subjects and emphasize the importance of focused collection development and resource acquisition within academic libraries to ensure effective support of Agronomy research.

Keywords: Bibliometrics, Agronomy, Citation Analysis, Journals, Academic Libraries.

Introduction:

Bibliometrics is a set of techniques devoted to the quantitative analysis of scientific and technical activities. These techniques implement statistical and mathematical tools to measure the data that measure researcher's contributions to science and technical development.

Allan Pritchard was the first man who coined the term Bibliometrics in 1968 but it became more popular during 1980s. According to D.T. Hawkins "quantitative analysis of the bibliographical features of body of literature". 3

The word 'Bibliometrics' is coined by two words 'biblio' and 'metrics'. The word 'biblio' is derived from combination of a Latin and Greek word 3 'biblion', which means book, paper. On the other hand, the word 'metrics' indicates the science of meter i.e. measurement. The terms bibliometrics and scientometrics were almost simultaneously introduced by Pritchard and by Nalimov and Mulchenko in 1969. While Pritchard explained the term bibliometrics as "the application of mathematical and statistical methods to books and other media of communication"

The great Indian Library Scientist, S.R .Ranganathan, coined the term "Librametry", which historically appeared first and perhaps seemed proper to streamline the services of Librarianship. The term 'Bibliometrics' is just analogous to Ranganathan's 'Libra metrics', the Russian concept of Scientometrics', 'Informatics'

and to some other well established. Now a day, the term 'Scientometrics' is used for the application of quantitative methods to the history of sciences and obviously overlaps with Bibliometrics to a considerable extent.

Statement of Problem:

Interest in the analysis of scientific research in Agronomy has been growing in recent years. User citations are a source for determining information use by a library's potential public and can be viewed as a simulation of user demands. The most direct alternative for studying information use by a university's researchers is the Bibliometrics mining of their publications (Martin and Sanz, 2001).

In such cases several questions are considered: what type of publications should be included, and how should they be identified? Depending on the answers to these questions, the source publications may vary widely in nature. Any analysis of library users entails deciding whether to take account of all types of source documents (theses, journal articles, congress papers and so on) and in that case whether their use is to be stratified, or whether on the contrary priority is to be given only to the documents that best reflect research tasks.

Hypothesis:

It is hypothesized that, **"**Analytical Study of PhD Thesis submitted in Dr. Panjabro Deshmukha Krishi Vidyapeth Akola in the Subject of Agronomy".

Objectives of the Study:

The objective of the present study are:

1. Bibliographic Form Wise Distribution of Citations in Agronomy Ph.D. thesis.
2. Bibliographic form wise distribution of citation in the different subjects Agronomy**.**

The Source of Data:

The of information source will be the 75 Ph.D. theses on Agronomy submitted to the Agricultural University of, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola which is available in the University Libraries.

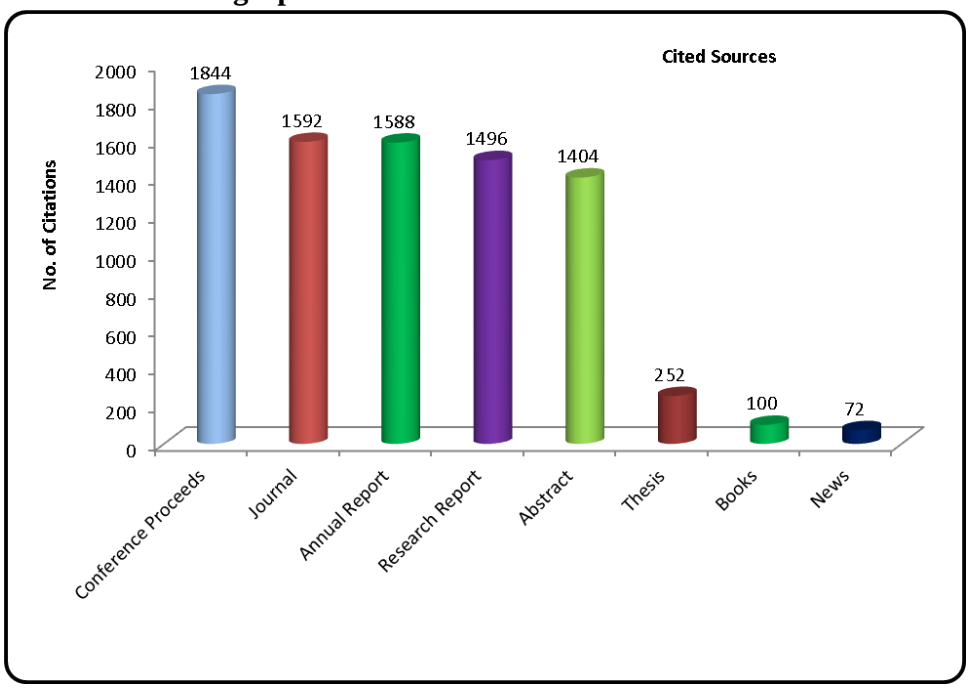
Methodology:

The main premises adopted in this study will be Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, in general the number of Ph. D awarded in a discipline constitutes a measure of research development in that field; the inventory of references affords an indication of the bibliographic materials being used by researchers to reinforce their intellectual effort and may indirectly represent the use of the literature in a specific area.

Bibliographic Form Wise Distribution of Citations

Sr. No.	Cited Sources	No. of Citation	C.F	Percentage	Cumulative %
1	Conference Proceeds	1844	1844	22.09	22.09
2	Journal	1592	3436	19.07	41.16
3	Annual Report	1588	5024	19.02	60.18
4	Research Report	1496	6520	17.92	78.10
5	Abstract	1404	7924	16.82	94.92
6	Thesis	252	8176	3.02	97.94
7	Books	100	8276	1.20	99.14
8	News	72	8348	0.86	100.00
	Total	**8348**		**100.00**	

Bibliographic Form Wise Distribution of Citations



From the Table, it is clearly indicated that in the citation almost (22.09%) share is a conference Proceeds followed by Journals (19.7%).Apart forms these sources has least citation as follows: Annual Report (19.02%), Research Report (17.92%), Abstract (16.82%), Thesis (3.02%), Books (1.20%), and Newspaper (0.86%).This may be because the conference Proceeding is easily accessible and contain the benefited research work. Due to the ease in accessing the source, becoming increasingly popular.

Table-2: Bibliographic form wise distribution of citation in the different subjects Agronomy.

Subjects	Abstract	Annual Report	Books	Conference Proceedings	Journal	News	Research Report	Thesis	Total
Agricultural Engineering	0	15	0	0	0	0	5	4	24
Agriculture	928	837	13	1268	290	0	622	60	4018
Agronomy	208	517	83	459	1191	63	715	144	3380
Biology Science	4	37	0	8	16	0	4	0	69
central soil and water Conservation Res.	0	4	0	0	0	0	0	0	4
Chemistry	0	4	0	1	2	1	5	0	13
Crop Science	4	4	0	4	0	0	16	0	28
Ecology	0	0	0	0	8	0	0	0	8
Fertilization	4	0	0	8	0	8	4	0	24
Field Crop	4	0	0	4	0	0	0	0	8

Farming	0	4	0	0	0	0	0	0	4
Horticulture Science	224	86	4	56	48	0	77	32	527
Management	0	4	0	0	1	0	8	0	13
Oil seed	4	32	0	24	8	0	12	0	80
Peanut Science	4	4	0	0	0	0	4	0	12
plant physiology	8	8	0	0	4	0	8	0	28
Research	12	12	0	4	4	0	8	4	44
Soil Science	0	12	0	8	16	0	0	4	40
Statistics	0	4	0	0	4	0	8	0	16
Water management	0	4	0	0	0	0	0	4	8
Total	**1404**	**1588**	**100**	**1844**	**1592**	**72**	**1496**	**252**	**8348**

It is important to note that the same pattern in bibliographic from wise distribution of Citation was observed in the different subject of Agronomy. The contribution of journals as a source is dominant followed by book. From the Table No.4.2' it is also seen that in the subjects Agronomy and Agriculture and services the source, books is more important as compared to in other subject.

Discussion of hypothesis:

The findings and conclusion incurred from the study under investigations are depicted in various headings in the following paragraphs.

In the present research, with 60% present of total citations, journals occupied the first place in Agronomy and its sub disciplines indicating the importance of journals as primary source of information for researchers in this field and followed by books, conference proceedings, abstract, reports other sources, reference books and thesis.

As per the Bibliographic form wise distribution of citation in the different Subjects of Agronomy, it is important to note that the same pattern in bibliographic form wise distribution of Citation was observed in the different Subject of Agronomy .The contribution of journals as a source was found dominant followed by Books. It was also seen that in the subject Agronomy and Agriculture, sources and services, the sources, Books was found more important as compared to other subjects.

The examination of subject wise analysis of citations in the discipline Agronomy has indicated wide scatter of literature. The analysis reveals that literature in Agronomy is distributed among 20 Subjects. Information Sources & Services and Agronomy received maximum number of citation and stood in the first and second place respectively. Agriculture 4018 and Agronomy 3380 citations to its credit stood in the third place. Horticulture Science and fourth and fifth places respectively.

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