

CONTINENT WISE ANALYSIS OF ZOOLOGICAL SCIENCE PERIODICALS: A SCIENTOMETRIC STUDY

Mr.Chopkar Hemraj D.
Librarian

NKSPT'S Arts, Science & Commerce College,
Badnapur. (MS) India

Mr. Phatak Anil Shahaji
Research Scholar

Dr. Babasaheb Ambedkar Marathwada
University, Aurangabad. (MS) India

ABSTRACT:

Scientometrics empirically describe the constantly changing relationship between science, technology and the research productivity. There are seven continents, but here the researcher has taken only six continents because the last continent of Antarctica does not have any contribution to the publications of this area. So for this part of analysis, researcher has selected continents of Europe, North America, Asia, Australia, South America and Africa. This analysis covers the Periodicals of Zoological Science at continent level. The European continent stood in the first place with the highest publication i.e. 490 (50%) in Zoological Science. Germany published highest 97 (19.80%), periodicals in European countries, in Asian continent, Japan has first rank and India goes to second rank, in North American continent, only United States has published 201 (88.16%) periodicals.

KEYWORDS: Periodicals, Scientometrics, Zoological Science,

INTRODUCTION

Scientometrics is a newly emerging field that investigates quantitative aspects of science; it is often used with the same meaning as the bibliometrics to mean the application of quantitative methods to the history of science, but is now generally used as a generic term for a variety of research approaches within the study of science. That quantifiable aspect of science can be utilized to access the characteristics of science. In 1960, Vassily V. Nalimov had coined the term scientometrics. Modern scientometrics is primarily based on the work of Derek J. de Solla Price and Eugene Garfield. The principle aim of scintometric is to determine to state and prospect of a subject and its further development several

scientometrics indicators are used for this purpose and one of the most significant indicators is the number of publications its changer over time is usually considered as a measure of research topically in a given field. There indicator are on the way to becomes a standard tools of evaluation and analysis in research management of science has been paid in recent years to ways to measure scientific information which may be used for the control of science development in two ways :practical and strategic. The practical way includes search of information is concerned it implies the monitory of scientific development and the analysis changing structure of science. Since the beginning of the 1970, this of research activity aimed at getting structured (or qualitative) picture of the stats of science is gaining popularity (**Kumar, 2002**).

Periodical are considered to be the most important medium in which the progress of science is regarded. Though information is available in a variety of forms, Periodicals are the main carriers of nascent information and play an important role in the dissemination of information. Scientists are interested in exhibiting their thought and ideas through articles in periodicals which act as the primary media of communication (**Gopikuttan & Hima, 2010**).

The present study is to provide continent wise Zoological periodicals published in Ulrich's Periodical Directory.

DEFINITIONAL ANALYSIS

The conceptual definitions are detailed below,

Periodicals

The term periodical refers to publication such as magazines, involves, newspapers. Periodicals are usually published relatively frequently and in an ongoing manner year after year. Periodicals are not limited to the print format some periodicals are published as online, digitized information residing in a remote database or in CD-ROM or other optical disc format.

Scientometric

Scientometric studies broadly constitute quantitative analyses of scientific literature to reveal the latest developments in various fields and the patterns of geographical distribution of science and scientific productivity of individual nations.

“Scientometrics is the investigation of science as development of information process”, (Nalimov and Mulchenk 1969).

Zoological Science

Zoology is the branch of biology that relates to the animal kingdom, including the structure, embryology, evolution, classification, habits, and distribution of all animals, both living and extinct.

OBJECTIVES

To identify the continental with country wise distribution of publications.

SCOPE AND LIMITATION OF THE STUDY

The present study is to provide a continental of Zoological Science Periodicals Published all over the world represented in Ulrich's Periodical Directory. A total number of 978 Periodicals were identified in the directory from the discipline of Zoological Science

METHODOLOGY

The lists of periodicals published in the fields of Zoology were collected from the latest (48th) edition of Ulrich international periodical directory 2010. These have been classified grouped and analyzed to find the various dimensions of the study.

DATA ANALYSIS AND INTERPRETATIONS

This analysis covers the Periodicals of Zoological Science at continent level. There are seven continents, but here the researcher has taken only six continents because the last continent of Antarctica does

not have any contribution to the publications of this area. So for this part of analysis, researcher has selected continents of Europe, North America, Asia, Australia, South America and Africa.

The data will be analyzed using the descriptive statistics

CONTINENT WISE ZOOLOGICAL PERIODICALS

Table No. 1 reveals the continents wise analysis of Periodicals of different continents

Sr.No	Continents	Contributing Countries	No. of Periodicals	Percentages
1	European	31	490	50.10
2	North American	4	228	23.31
3	Asian	17	140	14.31
4	South American	8	58	5.93
5	Australian	3	32	3.27
6	African	5	30	3.07
	Total	68	978	100.00

Table No.1: Continent Wise Zoological Periodicals

Table No. 1 reveals the Continents wise analysis of Periodicals of different continents. At the comprehensive level, the European continent stood in the first place with the highest publication i.e 490 (50%) and another 50% Periodicals published in other five continents i.e. Asia, Australia, Africa, North America & South America. African continent stands last position

EUROPEAN CONTINENTS WISE PERIODICALS

Table No. 2 shows the different countries wise Periodicals in European continents

Sr. No	European Countries	Periodicals	Percentages
1	Germany	97	19.80
2	United Kingdom	87	17.76
3	Netherlands	72	14.69
4	Italy	29	5.92
5	France	24	4.90
6	Poland	24	4.90
7	Spain	20	4.08
8	Russian Federation	19	3.88
9	Belgium	12	2.45
10	Switzerland	12	2.45
11	Austria	9	1.84
12	Czech Republic	9	1.84
13	Hungary	9	1.84
14	Norway	9	1.84
15	Portugal	9	1.84
16	Denmark	7	1.43
17	Finland	7	1.43
18	Romania	7	1.43
19	Slovakia	5	1.02
20	Sweden	5	1.02

Sr. No	European Countries	Periodicals	Percentages
21	Bulgaria	4	0.82
22	Greece	2	0.41
23	Lithuania	2	0.41
24	Serbia	2	0.41
25	Slovenia	2	0.41
26	Azerbaijan	1	0.20
27	Croatia	1	0.20
28	Ireland	1	0.20
29	New Caledonia	1	0.20
30	Puerto Rico	1	0.20
31	Ukraine	1	0.20
	Total	490	100%

Table No. 2: European Continents wise Periodicals

It is observed that table no. 2 out of 490 European periodicals, Germany has published highest periodicals i.e.97 (19.80 %), United Kingdom published 87 (17.76%) periodicals, Netherlands published 72(14.69%) periodicals and one each periodicals published by Azerbaijan, Croatia, Ireland, New Caledonia, Puerto Rico, Ukraine.

ASIAN CONTINENTS WISE PERIODICALS

Table No. 3 shows the different countries wise Periodicals in Asian continents

Sr.No	Asian Countries	Periodicals	Percentages
1	Japan	71	50.71
2	India	22	15.71
3	China	12	8.57
4	Pakistan	6	4.29
5	Singapore	5	3.57
6	Taiwan	4	2.86
7	Turkey	4	2.86
8	Korea	3	2.14
9	Indonesia	2	1.43
10	Iraq	2	1.43
11	Israel	2	1.43
12	Malaysia	2	1.43
13	Bangladesh	1	0.71
14	Jordan	1	0.71
15	Philippnes	1	0.71
16	Saudi Arabia	1	0.71
17	Thailand	1	0.71
	Total	140	100.00

Table No. 3: Asian Continents wise Periodicals

It is observed that table no. 3 out of 140 Asian periodicals, Japan has first rank i.e.71 (50.71 %) periodicals, India goes to second rank i.e. 22(15.71%) periodicals and each one periodicals published by Bangladesh, Jordan, Philippines, Saudi Arabia, and Thailand.

SOUTH AMERICAN CONTINENTS WISE PERIODICALS

Table No. 4 shows the different countries wise Periodicals in South American continents

Sr. No	South America	Periodicals	Percentages
1	Brazil	29	50.00
2	Argentina	15	25.86
3	Chile	4	6.89
4	Colombia	3	5.17
5	Uruguay	3	5.17
6	Venezuela	2	3.44
7	Bolivia	1	1.72
8	Peru	1	1.72
	Total	58	100

Table No. 4: South American Continents wise Periodicals

It is observed that table no. 4 out of 58 South American periodicals, Brazil has published highest periodicals i.e. 29 (50 %), Argentina published 15 (25.86%) periodicals, Chile published 4 (6.89%) periodicals and one each periodicals published by Bolivia and Peru.

TABLE 5 . AFRICAN CONTINENTS WISE PERIODICALS

Table No. 5 shows the different countries wise Periodicals in African continents

Sr.No	African	Periodicals	Percentages
1	South Africa	14	46.67
2	Egypt	11	36.67
3	Nigeria	3	10.00
4	Malawi	1	3.33
5	Morocco	1	3.33
	Total	30	100.00

Table No. 4: South American Continents wise Periodicals

Observed that above table no. 4 South Africa has published highest periodicals i.e. 14 (46.67 %), Egypt published 11 (36.67%) periodicals, Nigeria published 3 (10 %) periodicals and one each periodicals published by Malawi and Morocco

AUSTRALIAN CONTINENTS WISE PERIODICALS

Table No. 6 shows the different countries wise Periodicals in Australian continents

Sr.No	Australian	Periodicals	Percentages
1	Australia	25	78.13
2	New Zealand	6	18.75
3	Fiji	1	3.13
	Total	32	100.00

Table No. 6 Australian continents wise Periodicals

It is Observed that table no. 6, Australia has published highest periodicals i.e. 25 (78.13 %), New Zealand published 6 (18.75%) periodicals, and Fiji published 1(3.13 %) periodicals

NORTH AMERICAN COUNTRIES WISE PERIODICALS

Table No.7 shows the different countries wise Periodicals in North American continents

Sr.No	North American	Periodicals	Percentages
1	United States	201	88.16
2	Canada	15	6.58
3	Mexico	7	3.07
4	Cuba	5	2.19
	Total	228	100.00

Table No. 7: North American Countries wise Periodicals

It is observed that table no. 7 out of 228 North American continent periodicals, only United States has published 201 (88.16 %) periodicals, Canada published 15 (6.58 %) periodicals, Mexico published 7 (3.07 %) periodicals and 5 periodicals published by Cuba

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