SCIENTOMETRIC ANALYSIS OF QUARTERLY JOURNAL OF INDIAN JOURNAL OF ANIMAL NUTRITION (IJAN)

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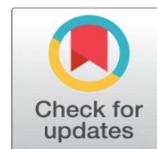
ABSTRACT

Using scientometric analysis, animal nutrition research from 2016 to 2020 was collected from the quarterly journal of the Indian Journals of Animal Nutrition. According to the research, 384 papers were written between 2016 and 2020, with 24 papers being highly published in 2016. As a result, animal nutrition is the most popular topic among scientists interested in veterinary research, with 1838 papers published out of 384. In particular, author Chander Data published 15 publications in the years (2016, 2017, 2018, and 2020), and some authors published (2,3,4,5,6,7,8,9,10,11,12) articles in the years (2016, 2017, 2018, and 2020).

Keywords: Scientometric, Indian Journals, Animal Nutrition, Relative Growth Rate, Doubling Time

1. INTRODUCTION

Original papers on research in the fields of animal nutrition, feed technology, feed evaluation and conservation, physiological and biochemical aspects including microbiology, biotechnology, feed and feeders, and other relevant areas related to livestock feeding in developing and tropical regions are published in the Indian Journal of Animal Nutrition (IJAN). Papers describing ruminant and non-ruminant research in specific areas are encouraged. The Journal is a place where peer-reviewed publications on basic and applied research can be shared. Priority is given to submissions that address the subject's new frontiers, such as growing fields of nutritional genomics, modeling, and interface themes such soil plant animal and ecosystem interrelationships. There are also reviews on specific themes. Since its beginning in 1983, the IJAN has been published quarterly under the auspices of the Animal Nutrition Society of India (ANSI), which has over a thousand life members around the world.

2. OBJECTIVES OF THE STUDY

The primary goal of this study is to examine the results of Indian Journal of Animal Nutrition research as expressed in the Indian Journals. Com publications from 2016 to 2020. The study focuses in great detail on the following goals:

1) For the period 2016-2020, Indian Journals. Com was used to assess the whole spectrum of publications produced on animal nutrition research analysis.
2) Year wise distribution of publications.
3) Identify the highest article published authors.
4) Issue wise distribution of publications

3. METHODOLOGY

The data for the three years (2016-2020) was retrieved from the Indian Journals Online database by searching for the keyword "Indian Journal of Animal Nutrition" in the title area. The Online database comprises 1985 to 2021 records in total.

4. RESULTS AND ANALYSIS

The data on animal nutrition research from the Indian journal database was analyzed and presented using a variety of statistical methods, including tables.

4.1. IN ANIMAL NUTRITION RESEARCH OUTPUT FROM INDIAN JOURNAL DATABASE, GROWTH RATE AND DOUBLING TIME

In the analysis of field research and development, a study of the growth rate of animal nutrition research production is critical. There are an identical number of publications on the relative growth rate of animal nutrition or study production over these years, as indicated in table -1 (1993 to 1996). Table 1 extracts and describes the quotes from the Relative Growth Rate [R9c) mean (0.19) and Doubling Time. The relative publishing growth rate fell and increased over the years specified, however the cumulative quantity of output [y] shows a progressive increase in Table 1. The doubling time [Dt(c)] increased from 2.57 to 173.3, with a three-year mean doubling time of 58.62.

Table 1 Relative Growth Rate [R(c)] and Doubling Time [Dt(C)] of Overall Research Output

Sl.No.	Year	No. of Publications[x]	Cumulative No. of Output [y]	$\log_e 1^{y-x}$	$\log_e 2^{y-x}$	[R(c)]	Mean [R(c)]	[Dt(C)]	Mean [Dt(C)]
1	1985	51	51	0	3.93	3.93		1.79	
2	1986	56	107	3.93	4.02	0.09		7.7	
3	1987	61	168	4.02	4.11	0.09		7.7	
4	1988	68	236	4.11	4.21	0.1		6.93	
5	1989	74	310	4.21	4.3	0.09		7.7	
6	1990	75	385	4.3	4.31	0.01		69.3	
7	1991	77	462	4.31	4.34	0.03		23.1	
8	1992	61	523	4.34	4.11	0.23		30.1	
9	1993	56	579	4.11	4.02	0.09		7.7	
10	1994	56	635	4.02	4.02	0		0	
11	1995	57	692	4.02	4.04	0.02		34.6	
12	1996	57	749	4.04	4.04	0		0	
13	1997	66	815	4.04	4.18	0.14		49.5	
14	1998	77	892	4.18	4.34	0.16		43.3	
15	1999	83	975	4.34	4.41	0.07		99	
16	2000	78	1053	4.41	4.35	0.06		115.5	
17	2001	78	1131	4.35	4.35	0		0	
18	2002	62	1193	4.35	4.12	0.23	0.19	30.1	58.62
19	2003	81	1274	4.12	4.39	0.27		25.7	
20	2004	72	1346	4.39	4.27	0.12		57.7	
21	2005	69	1415	4.27	4.23	0.04		173.3	
22	2006	64	1479	4.23	4.15	0.08		86.6	

23	2007	72	1551	4.15	4.27	0.12	57.7
24	2008	58	1609	4.27	4.06	0.21	33
25	2009	77	1686	4.06	4.34	0.28	24.7
25	2010	78	1764	4.34	4.35	0.01	69.3
26	2011	81	1845	4.35	4.39	0.04	173.3
27	2012	80	1925	4.39	4.38	0.01	69.3
28	2013	84	2009	4.38	4.43	0.05	138.6
29	2014	79	2088	4.43	4.36	0.07	99
30	2015	84	2172	4.36	4.43	0.07	99
31	2016	88	2260	4.43	4.47	0.04	173.3
32	2017	77	2337	4.47	4.34	0.13	53.3
33	2018	76	2413	4.34	4.33	0.01	69.3
34	2019	68	2481	4.33	4.21	0.12	57.7
35	2020	64	2545	4.21	4.15	0.06	115.5
Total		2545					

4.2. AUTHORS' HIGHEST ARTICLE

The papers are divided into single, double, triple, multi-authored, and other categories to analyze the authorship pattern. The number of publications in each category is counted, and the percentage is calculated to reflect research trends as solo or collaborative research in a specific topic. Table 4.2 shows that for the year, around 2545 papers were submitted by many authors (1985 to 2020). Out of 2545 publications, the most were published by more than two authors, accounting for 170 (6.67%), followed by three-authored articles accounting for 44 (1.72%). Four writers contributed 21 publications, accounting for 0.82 percent of the total. Six writers authored 9 publications, accounting for 0.35 percent of the total. Seven to a single author published 0.27 percent to 0.03 percent of publications. However, the author pattern in the publication indicates that there were more than fifteen authors on the team.

Table 2 Highest Articles of Authors												
Number of Authors	2	3	4	5	6	7	8	9	10	11	12	15
Number of Paper	170 (6.67%)	44 1.72%	21 ().82%)	17 (0.66%)	9 (0.35%)	7 (0.27%)	3 (0.11%)	1 (0.03%)	4 (0.15%)	1 (0.03%)	1 (0.03%)	1 (0.03%)

4.3. ISSUE-BASED PUBLICATION DISTRIBUTIONS

Contributions to five online quarterly Indian journals in the field of animal nutrition, published by various academics, were issued in four issues per volume, which were examined for the study from 2016 to 2020. The table illustrates the five-year durations that were taken into consideration.

Table 3 Issue-Based Distributions					
Year	Number of Issue				Total (%)
	1	2	3	4	
2016	24	21	23	20	88 (6.44)
2017	19	18	19	21	77 (3.02)
2018	20	19	19	18	76(2.98)
2019	15	17	17	19	68(2.67)
2020	16	17	16	15	64(2.51)

5. CONCLUSION

Contributions are made to online quarterly Indian journals in the subject of animal nutrition. The biggest number of articles were published in 2016, with 88 (3.45%), and the lowest number of articles were published in 1985, with 51 (2.00%). In the years 2019 and 2020, "Issue Number 1 and 4" published articles in the highest 24 (09.20 percent) articles and the least number of articles 15 (7.63%). The most papers were published by more than two authors, accounting for 170 in total (6.67%).

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