



## INFORMATION USE PATTERN OF DOCTORAL THESES FROM BANGLADESH AGRICULTURAL UNIVERSITY, MYMENSINGH

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### **Abstract**

*A list of the most significant journals used in the various agricultural sciences disciplines at Bangladesh Agricultural University (BAU), Mymensingh (i.e., Veterinary Science, Agriculture, Animal Husbandry, Agricultural Economics & Rural Sociology, Agricultural Engineering & Technology, and Fisheries) has been prepared using the citation analysis method in an effort to identify the primary sources of citations. A list of the 123 primary journals that receive the most citations, ranked by merit, has also been compiled. The study has also taken into account the citations' temporal and geographic dispersion. Agricultural University Libraries of Bangladesh may find the facts deduced in the study useful in reaching a need-based decision on the acquisition and selection of journals within the constrained budgets.*

### **Introduction**

**D**ue to the accelerating increase in the quantity of agricultural science related literature being published, including books, journals, proceedings, bulletins, govt. publications and in addition, it might not be possible for any library to purchase all of the reading materials needed for its potential users. Therefore, the knowledge of comparative and up-to-date details of the literature is of great importance. Information use pattern relates to the series of ways or processes that together show how information are normally utilize in an information centre. The purpose of this study is to determine how information is used and whether the BAU library can meet the information needs of various researchers from different fields. "The academic and scientific institute in the country are using journals impact factor judging the

merit and scholarship of research papers, for deciding appointments to academic and research positions and nominations for research awards, and for benchmarking the performance of scientific staff and research laboratories for inter-comparisons". (1) Many professionals in the domains of veterinary science, (2) Agriculture (3) Animal husbandry (4) Agricultural Economic and Rural Sociology (5) Fisheries etc. have also employed this techniques; regardless, there haven't been many attempts to create a systematic research of this kind in the field of agricultural science, and we have tried to improve it. There are six faculties in Bangladesh Agricultural University. In this study, authors have analyzed Ph.D. thesis of a specific subject or various subjects in fields or as a specific journals etc. We have selected 661 PhD theses in the various fields of agriculture and allied disciplines.

### *Scope and Objectives*

The study's scope has to be expanded because there is a lot of current research happening quickly in the field of agricultural science. From 1974 and up to till date on 31<sup>st</sup> December, 2020, 800 scholars awarded PhD degree from this university in various disciplines.

An investigation has been made here to study the information use pattern in PhD theses submitted by the scholars of various disciplines of agriculture and allied science and to analyze them to obtain the required information with respect to the objectives given below:-

- i) to identify the department-wise distribution of theses;
- ii) to show the different forms of information;
- iii) to find out the country-wise distributing of used information;
- iv) to depicts the chronological scattering of information;
- v) to prepare a list of the top five most cited information (journals).

### *Methodology*

Bangladesh Agricultural University have been awarded 800 PhD degrees, but 661 theses were collected from the library.

We have chosen 441 theses proportionately for analysis out of 661 theses. The sample technique was the stratified random sampling with proportional allocation. A total of 72304 sources of information (citation) were gathered from these chosen theses for the current study's analysis. There were two primary categories for all the data listed in the bibliography. Once are non-periodical publications and

another are periodical publications. Non-periodical publications consists of text books, reference books, govt. publications and theses. Periodical comprise journals, bulletins, proceedings or similar works, which appear regularly and continuously in a numbered sequence.

However, the newspapers and annual reports were excluded from selected theses. With the help of tables, all the information from both periodicals and non-periodical sources was noted, categorized, tabulated, presented examined and understood. The study analyses a number of factors, including department wise distribution and citation formats. Ultimately, a list of top five significant journals was created based on the highly referenced journal articles. For its chronological examination, all of the citation were provided along with the names of the branch and researchers, which covered the period from 1912-2015, were divided into three classes: old period (1912-1971), recent period (1972-2000) and most recent period (2001-2015). The Ulrich's International Periodical directory, along with other sources available in the BAU library, were consulted in order to determine the journals origin country and publication year.

## *Results and Discussion*

### **1. Department-wise distribution of theses**

At present, Bangladesh has nine public agricultural universities. Among them, Bangladesh Agricultural University is the first and largest. It is known as the mother University of Bangladesh's agricultural sector. Bangladesh Agricultural University is to consist of 43 departments under the 6 faculties. Out of these departments, only 30 departments were differed 800 Ph.D. degrees during the periods of 1973 to 2020.

The number of theses that were submitted in different departments, as well as the number of theses that were awarded, are shown in Table 1.

Out of the eight departments, there were 43 departments that were granted Ph.D. degrees by the faculty of veterinary. We have selected 43 of 61 theses for analysis and discovered that research scholars use 8629 citations. Again, there are 14 departments out of which 16 departments were offered 400 Ph.D. degrees under the faculty of Agriculture. We have chosen 265 (66.25%) for the study out of 400 theses and found that 43,720 citations are used by the researchers.

Further, there are 5 departments under the Faculty of Animal Husbandry and all the departments offered Ph.D. degree. We have

analyzed 33 (66%) theses out of 50 theses and 3707 of citations are found from the analyzed theses. There are four departments under the faculty of Agricultural Economics and Rural Sociology, and four departments offer Ph.D. degrees.

The total number of Ph.D. degrees was 45 and we have taken 33 theses and found 4681 citations.

Faculty of Agricultural Engineering and Technology is consisted of 5 departments. Three departments were offered Ph.D. degree and the rest are not providing any Ph.D. degree. The total number of research volumes was 31 and we have taken 24 (77.42%) theses in order to study and found 3040 citations are used. The last one of the faculty is called faculty of fisheries, which belong to 5 departments.

Out of 74 submitted theses, 45 (60.81%) theses were analyzed and 8527 citations are used by the research scholars. It is noted that the departments under the faculty have not completed any Ph.D. works not listed in table 1 and the departments are arranged in descending order in relation to the theses submitted.

*Table 1*

<i>Sl</i>	<i>Name of the Department</i>	<i>No. of theses submitted</i>	<i>No. of theses analysis</i>	<i>No. of information contained in analysed theses</i>
01	Microbiologies and Hygiene	10	07	1251
02	Anatomy and Histology	03	02	200
03	Medicine	04	03	465
04	Parasitology	06	04	1072
05	Pathology	21	15	3196
06	Physiology	01	01	150
07	Surgery and Obstetrics	08	06	1341
08	Pharmacology	08	05	954
Total		61	43	8629
Percentage (%)		100%	70.49%	-
<i>Faculty of Agriculture</i>				
01	Agronomy	98	66	7596
02	Horticulture	75	55	6361
03	Agril. Ext. Education	40	23	5117
04	Plant Pathology	28	19	4500
05	Genetics and Plant Breeding	45	27	4672
06	Soil Science	28	17	3611
07	Crop Botany	20	12	2540

<i>Sl</i>	<i>Name of the Department</i>	<i>No. of theses submitted</i>	<i>No. of theses analysis</i>	<i>No. of information contained in analysed theses</i>
08	Entomology	28	20	3919
09	Biochemistry	01	01	195
10	Agri. Chemistry	08	05	1017
11	Biotechnology	16	10	2113
12	Environmental Science	11	08	1674
13	Agroforestry	01	01	210
14	Total Seed Pathology	01	01	195
Total		400	265	43720
Percentage (%)		100	66.25%	-
<i>Faculty of Animal Husbandry</i>				
01	Animal Breeding & Genetics	16	11	2567
02	Animal Nutrition	09	06	1941
03	Animal Science	05	03	472
04	Poultry Science	13	08	1431
05	Dairy Science	07	05	896
Total		50	33	3707
Percentage (%)		100%	66%	-
<i>Faculty Of Agricultural Economics &amp; Rural Sociology</i>				
01	Agricultural Economics	31	20	2396
02	Agricultural Finance	02	02	195
03	Agricultural Business	10	07	1578
04	Agricultural Statistics	02	02	512
Total		45	31	4681
Percentage (%)		100%	68.89%	-
<i>Faculty Of Agricultural Engineering And Technology</i>				
01	Farm Power and Machinery	14	12	1497
02	Irrigation and Water Management	14	10	1161
03	Food Technology	03	02	382
Total		31	24	3040
Percentage (%)		100%	77.42%	-
<i>Faculty of Fisheries</i>				
01	Aquaculture	22	15	3125
02	Fisheries Biology and Genetics	17	10	1996
03	Fisheries Management	29	17	2911
04	Fisheries Technology	06	03	495
Total		74	45	8527
Percentage (%)		100%	60.81%	-
Grand Total		661	441	72304
Percentage (%)		100%	66.72%	-

## 2. Different forms of information

Table 2 depicts the different forms of information's used by the researchers in the various fields, on the basis of the analysis made, it was found that the researchers made use journals, govt. publications, proceedings, books, bulletins and theses as the source of information. From the analysis it can say, most of the researchers used citations 35354 (48.90%) to the journal articles and 22805 (31.54%) citations are used from books. Thirdly they also chose 6576 (9.09%) citations from the theses, 3997 (5.53%) are from proceedings and the remaining sources were responsible for 4.94% citations only. From this study it is clear that the most of the researchers used journals articles. Journal articles can play vital roles for research purpose. So, it can be said that most of the Ph.D. scholars are heavily depended on journals articles and next books.

*Table 2*

<i>Name of the faculty</i>	<i>Sl. No.</i>	<i>Documents cited</i>	<i>No. of citations</i>	<i>Percentage (%)</i>	<i>Cumulative (%)</i>
Veterinary	01	Journals	6152	71.29	-
	02	Govt. Pub.	176	2.04	73.33
	03	Proceedings	217	2.54	75.84
	04	Books	1381	16.01	91.85
	05	Bulletins	254	2.91	94.76
	06	Theses	452	5.24	100%
	Total		8629	100%	-
Agriculture	01	Journals	19972	45.68	-
	02	Govt. Pub.	566	1.30	46.98
	03	Proceedings	2590	5.92	52.90
	04	Books	15761	36.05	88.95
	05	Bulletins	1053	2.41	91.36
	06	Theses	3778	8.64	100%
	Total		43720	100%	-
Animal Husbandry	01	Journals	1925	51.93	-
	02	Govt. Pub.	165	4.45	56.38
	03	Proceedings	219	5.91	62.29
	04	Books	624	16.83	79.12
	05	Bulletins	115	3.10	82.22
	06	Theses	659	17.78	100%
	Total		3707	100%	-

<i>Name of the faculty</i>	<i>Sl. No.</i>	<i>Documents cited</i>	<i>No. of citations</i>	<i>Percentage (%)</i>	<i>Cumulative (%)</i>
Agricultural Economics and Rural Sociology	01	Journals	2072	44.26	-
	02	Govt. Pub.	185	3.95	48.21
	03	Proceedings	192	4.10	52.31
	04	Books	1717	36.68	88.99
	05	Bulletins	47	1.01	90.00
	06	Theses	468	10.00	100%
	Total		4681	100%	-
Agricultural Engineering and Technology	01	Journals	1208	39.74	-
	02	Govt. Pub.	34	1.12	40.86
	03	Proceedings	182	5.99	46.85
	04	Books	1125	37.00	83.85
	05	Bulletins	34	1.12	84.97
	06	Theses	457	15.03	100%
	Total		3040	100%	-
Fisheries	01	Journals	4025	47.20	-
	02	Govt. Pub.	652	7.65	54.85
	03	Proceedings	597	7.00	61.85
	04	Books	2197	25.76	87.61
	05	Bulletins	294	3.45	91.06
	06	Theses	762	8.94	100%
	Total		8527	100%	-
<i>Grand Total Citations of 6 Faculties</i>					
Grand Total Citations of 6 Faculties	01	Journals	35354	48.90	-
	02	Govt. Pub.	1778	2.46	51.36
	03	Proceedings	3997	5.53	56.89
	04	Books	22805	31.54	88.43
	05	Bulletins	1794	2.48	90.91
	06	Theses	6576	9.09	100%
	Total		72304	100%	-

### 3. Country-wise distribution of information

Table 3 presents that USA, India, UK, Bangladesh, Japan, Canada, Netherland, German, Australia, Pakistan, Iran, Philippine, Ireland, Neweland, Switzerland produced 246 titles which account for 18.18% of the total number of journals covering 18.18% of the total number of citations. The remaining citations of other countries produced

81.82% title which account of 21300. Citations are only journals. These citations (information) are not counted because they used below 3 times. The citation of books are second position on research purpose. The other sources are such as theses, proceeding, bulletins, and govt. publications together account for 19.56% citations only.

With the help of citation analysis, the top five most important primary journal in each branch have been identified, which will serve as a guide-line to the researchers to pick out the journals most relevant in their area of research.

*Table 3*

<i>Sl. No.</i>	<i>Country of Origin</i>	<i>No. of journals</i>	<i>Percentage (%)</i>	<i>No. of citations</i>	<i>Percentage (%)</i>
1	Australia	6	0.44	205	0.58
2	Bangladesh	25	1.85	1325	3.75
3	Canada	7	0.52	421	1.19
4	German	6	0.44	318	0.90
5	India	55	4.06	3016	8.53
6	Iran	3	0.22	253	0.72
7	Ireland	2	0.15	43	0.12
8	Japan	10	0.74	798	2.26
9	Netherland	7	0.52	576	1.63
10	Newseland	2	0.15	19	0.05
11	Pakistan	4	0.30	25	0.35
12	Philippine	3	0.22	176	0.50
13	Switzerland	1	0.07	15	0.04
14	UK	48	3.55	2677	7.57
15	USA	67	4.95	4087	11.56
Total Journal (according to top five most)		246	18.18%	14054	39.75
Rest used journal		1107	81.82%	21300	60.25
Grand total		1353	100%	35354	100%

#### **4. Chronological distributions of information**

Table 4 presents the scattering of information use pattern of chronologically. Table 4 also shows that about 38.58% cited information's

Table 4

Period	Periodicals			Non-Periodicals				Grand Total	
	Journal No. of citation & %	Bulletin No. of citation & %	Proceeding No. of citation & %	Total No. of citation & %	Books	Govt. Pub.	Theses		Total
Old period (1912-1971)	6540 (9.05%)	421 (0.58%)	581 (0.80%)	7542 (10.43%)	4352 (6.02%)	454 (0.63%)	635 (0.88%)	5441 (7.53%)	12983 (17.96%)
Recent period (1972-2000)	14859 (20.55%)	775 (1.07%)	2519 (3.48%)	18153 (25.11%)	9687 (13.40%)	873 (1.21%)	2714 (3.75%)	13274 (18.35%)	31427 (43.46%)
Most recent period (2001-2020)	13955 (19.30%)	598 (0.86%)	897 (1.25%)	15450 (21.37%)	8766 (12.12%)	451 (0.62%)	3227 (4.46%)	12444 (17.21%)	27894 (38.58%)
Total	35354 (48.76%)	1794 (2.48%)	3997 (5.53%)	41145 (56.91%)	22805 (31.54%)	1778 (2.46%)	6576 (9.09%)	31159 (43.09%)	72304 (100%)

are literature, irrespective of documents were published during most recent period (2001-2020). Among them 43.46% information were used during recent period (1972-2000) and rest 17.96% were used old period (1912-1971). From this study it can say, most of the users used recent and recent period information. This study may be very useful and time saving and assuring to the librarians in the acquisition of back-log of journals.

### **5. Top five most important journals in each branch**

The number of journals covering all agricultural disciplines is not very extensive, a comprehensive study has selected only five journals as the most significant in terms of space economy, as indicated by the frequency of their citations from the various discipline in Table 5. Journals that have been used less than five times were included. Table 5 also shows the country of origin, the establishment date, and the number of citations used from each individual journal. Table 5 shows the total number of used citations as well as the percentage of the five most frequently used journals.

### ***Findings***

In the present study 72304 citations from 661 Ph.D theses in Bangladesh Agricultural University. On the basis of the above discussion the following findings are bellow:-

- i) from this study it is observed that most the contributors (Ph.D scholar) under the faculty of Agriculture, which are consist 400 (66.25%) by Bangladesh Agricultural University, Mymensingh during the period of 1974-2020.
- ii) It is also revealed that most of the citations are from Agricultural faculty. The highest number of citations 43720 (60.47%) among 72304 citations lowest number of citations are from faculty of Agricultural Engineering and Technology 3040(4.2%).
- iii) Findings also observed that most of the citation or contributors are from foreign countries (counted over 5 most journals).
- iv) About 19.30%, citations come from the most recent period from journals and next are from Books (12.12%).

From this observation it is seen that the study will be significant or as a guideline for the researchers to pick out the most relevant journals in their respective areas of research.

## *Conclusion*

Information use pattern that means citation analysis in any research activities has become one of the popular methods to study subject relationships, citation forms, impact, publication trends and to identify the most popular journals for a particular research community or subject field. The citations (forms of information) show that Ph.D. research scholars at BAU consulted a lot of literature when writing their dissertation.

It is expected that the study will help the researchers identify the primary source of information from which the information has been gathered. Such studies will help information scientists circulate content for users to use. This study will also serve as a guide for librarians to collect and acquire the most valuable journals within their capacity.

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## APPENDIX

Table 5: Top Five most important journals in each branch of Agricultural Science

Sl. no.	Branch Rank	Name of the Journals	Country of origin	Year of found	No. of citations	Percentage (%)
<i>Faculty of Vet. Sci.</i>						
01.	Anatomy & Histology	I. Indian J. of Animal Sciences	India	1931	52	28.11
		II. Acts Anatomy	Switzerland	1945	20	10.81
		III. J. of Agricultural Science	UK	1905	16	8.65
		IV. American J. Veterinary Research	USA	1940	16	8.65
		V. Indian Veterinary Journal	India	1924	12	6.49
		Total citation (J), 185				116
02	Medicine	I. J. Clinical Microbiology	USA	1975	44	17.60
		II. American J. Veterinary Research	USA	1940	40	16.00
		III. Veterinary Record	UK	1888	34	13.60
		IV. Infectious Immunology	USA	1970	32	12.80
		V. J. American Veterinary Medical Association	USA	1877	28	11.20
		Total citation (J), 250				178
03.	Microbiology Hygiene	I. Avian Diseases	USA	1957	400	50.00
		II. Avian Pathology	USA	1972	75	9.36
		III. American J. Veterinary Research	USA	1940	42	5.25
		IV. Vaccine	UK		43	5.36
		V. Arch. Virology	USA	1939	35	4.36
		Total citation (J), 800				595
04	Parasitology	I. Avian Diseases	USA	1957	32	12.80
		II. Infection Immunity	USA	1970	28	11.20
		III. Journal of Clinical Microbiology	USA	1975	26	10.40
		IV. J. American Veterinary Medical Association	USA	1877	24	9.60
		V. Journal of Protozoa	USA	1954	14	5.60
		Total citation (J), 250				124
05	Pathology	I. Indian Veterinary Journal	India	1924	84	33.20
		II. Hehninthology Abstract	UK	1932	40	15.81

<i>Sl. no.</i>	<i>Branch Rank</i>	<i>Name of the Journals</i>	<i>Country of origin</i>	<i>Year of found</i>	<i>No. of citations</i>	<i>Percentage (%)</i>
		III. Indian Journal of Animal Science	India	1931	26	10.28
		iv. Indian Journal of Animal Health	India	1960	23	9.09
		v. Indian J. Veterinary Science	India	1924	10	3.95
		Total citation (J), 506			366	72.33
06	Physiology	I. Journal of Animal Science	USA	1968	90	19.82
		II. Journal of Dairy Science	USA	1917	65	14.32
		III. Thenogenology	USA	1974	50	11.01
		IV. Veterinary Record	UK	1888	44	9.69
		V. Indian Veterinary Journal	India	1924	38	8.37
		Total citation (J), 908			287	63.22
07	Surgery & Obstetrics	I. Veterinary Record	UK	1888	115	37.34
		II. Journal of Dairy Science	USA	1917	63	20.45
		III. Preventive Veterinary Medicine	Netherlands	1982	30	9.74
		N. J. American Veterinary Medical Association	USA	1877	29	9.42
		V. Australian Veterinary Journal	Australia	1925	17	5.52
		Total citation (J), 616			254	82.47
08	Pharmacology	I. Environmental Health Perspective	UK	1991	80	9.70
		II. J. Ethnopharmacology	USA	1983	62	7.52
		III. Diabetes Care	USA	1978	51	6.18
		IV. Indian J. Pharmacology	India	1981	45	5.45
		V. Toxicology Science	Ireland	1973	35	4.24
		Total citation (J) 825			273	33.09
<i>Faculty of Agriculture</i>						
01	Agricultural Chemistry	I. Journal of Agricultural Science	UK	1905	60	25.53
		II. Journal of Soil Science	UK	1950	25	10.64
		III. Journal of Agronomy	UK	1907	15	6.38
		N. Journal of American Society	USA	1968	08	3.40
		V. Nature	UK	1869	08	3.40
		Total citation (J), 235			116	49.35

<i>Sl. no.</i>	<i>Branch Rank</i>	<i>Name of the Journals</i>	<i>Country of origin</i>	<i>Year of found</i>	<i>No. of citations</i>	<i>Percentage (%)</i>
02	Agricultural Extension Education	I. Indian J. Extension Education	India	1965	325	28.89
		II. Journal of Applied Psychology	USA	1951	85	7.56
		III. Bangladesh J. Extension Education	Bangladesh	1995	69	6.13
		N. Rural Sociology	USA	1936	32	2.84
		V. Indian J. Public Administration	India	1979	21	1.87
		Total citation (J), 1125				532
03	Agronomy	I. Indian Journal of Agronomy	India	1956	339	12.89
		II. Field Crop Abstract	UK	1948	152	5.78
		III. Indian. Journal of Agricultural Science	India	1931	147	5.59
		IV. Agronomy Journal	USA	1907	135	5.14
		V. Journal of Agricultural Science	Iran	1905	113	4.30
		Total citation (J), 2629				886
04	Biochemistry	I. Plant Physiology	USA	1926	210	16.56
		II. Soil Science	UK	1950	92	7.26
		III. Plant & Soil	Netherlands	1949	51	4.02
		IV. Biochemistry	USA	1964	47	3.71
		V. Soil Science Society of American Proc.	USA	1989	45	3.55
		Total citation (J), 1268				445
05	Crop Botany	I. Crop Science	USA	1961	48	7.62
		II. Annals of Botany	USA	1987	42	6.67
		III. Agronomy Journal	USA	1907	41	6.51
		IV. Australian J. Plant Physiology	Australia	1974	36	5.71
		V. Australian J. Agricultural Research	Australia		33	5.24
		Total citation (J), 630				200
06	Entomology	I. International Rice Research Newsletter	Philippine	1974	65	25.00
		II. Japanese J. of Applied Zoology	Japan	1957	43	16.54
		III. Journal of Economic Entomology	USA	1908	21	8.08

<i>Sl. no.</i>	<i>Branch Rank</i>	<i>Name of the Journals</i>	<i>Country of origin</i>	<i>Year of found</i>	<i>No. of citations</i>	<i>Percentage (%)</i>
		IV. Rice Comm. Newsletter	Philippine	1897	17	6.54
		V. Pakistan J. Agricultural Research	Pakistan	1949	09	3.46
		Total citation (J), 260			155	59.62
07	Genetics and Plant Breeding	I. Crop Science	USA	1961	205	16.21
		II. Indian J. Genetics	India	1941	149	11.78
		III. Heridity	Great Britain	1947	74	5.85
		IV. Genetics	USA	1916	69	5.45
		V. Indian Journal of Agricultural Science	India	1931	61	4.82
		Total citation (J), 1265			558	44.11
08	Horticulture	I. Indian Journal of Horticulture	India	1943	99	6.89
		II. Horticulture Science	USA	1966	87	6.05
		III. Journal of Agricultural Science	Iran	1905	76	5.29
		IV. Potato Journal	USA	1955	61	4.24
		V. Bangladesh Horticulture	Bangladesh	1973	54	3.76
		Total citation (J), 1437			377	26.24
09	Plant Pathology	I. Indian Phyto-pathology	India	1948	149	13.73
		II. Phyto-pathology	USA	1911	126	11.61
		III. Plant Diseases	USA	1917	74	6.82
		IV. Bangladesh J. Plant Pathology	Bangladesh	1974	60	5.53
		V. Canadian J. Plant Pathology	Canada	1979	30	2.76
		Total citation (J), 1085			439	40.46
10	Soil Science	I. J. of Soil Science	UK	1950	76	15.29
		II. Soil. Science Society of American Journal	USA	1936	72	14.49
		III. Plant and Soil	Netherland	1949	59	11.87
		IV. Soil Sc. Society of American Proceedings	USA	1989	33	6.64
		V. Canadian J. Soil Science	Canada	1956	24	4.83
		Total citation (J), 497			264	53.12
11	Biotechnology	I. Plant Cell Tissue Culture	Japan	1960	108	8.64
		II. Plant Cell Report	German	1981	96	7.68
		III. American Potato Journal	USA	1963	60	4.80

<i>Sl. no.</i>	<i>Branch Rank</i>	<i>Name of the Journals</i>	<i>Country of origin</i>	<i>Year of found</i>	<i>No. of citations</i>	<i>Percentage (%)</i>
		IV. Potato Research	USA	1955	47	3.76
		V. Indian J. Agronomy	India	1971	34	2.72
		Total citation (J), 1250			345	27.60
12	Environmental Science	I. Agricul. & Forest Meteorology	Netherland	1964	228	21.51
		II. Compost Science & Utilization	USA	1993	72	6.79
		III. Soil Sc. Soc. of American Journal	USA	1989	58	5.47
		IV. Bangladesh Rice Journal	Bangladesh	1995	51	4.81
		V. Global Change Biology	USA	1972	24	2.26
		Total citation (J)1060			433	40.85
<i>Faculty of Animal Husbandry</i>						
01.	Animal Breeding & Genetics	I. Genetics	USA	1916	45	17.65
		II. Indian J. Animal Science	India	1931	45	17.65
		III. Indian Veterinary Journal	India	1924	20	7.84
		IV. Animal Production	UK	1954	21	8.24
		V. Small Ruminant Research	Netherland	1988	18	7.06
		Total citation (J), 255			149	58.44
02.	Animal Nutrition	I. Poultry Science	USA	1908	950	45.24
		II. British Poultry Science	UK	1960	185	8.81
		III. Indian J. Poultry Science	India		70	3.33
		IV. Poultry Abstracts	UK	1975	30	1.43
		V. Bangladesh Journal of Animal Science	Bangladesh	1978	25	1.19
		Total citation (J), 2100			1260	60.00
03.	Animal Science	I. J. Ame. Leather Chemical Assoc.	USA	1952	85	19.54
		II. Leather Science	India	1954	37	8.51
		III. Indian Journal of Animal Science	India	1931	32	7.36
		IV. Leather Technology	Japan	1960	29	6.67
		V. Journal of Agricultural Science	UK	1905	23	5.29
		Total citation (J), 435			206	47.36

<i>Sl. no.</i>	<i>Branch Rank</i>	<i>Name of the Journals</i>	<i>Country of origin</i>	<i>Year of found</i>	<i>No. of citations</i>	<i>Percentage (%)</i>
Asian Journal of Multidisciplinary Studies, 3(1) January, 2015.						
Trends in Citation Pattern in Agricultural Doctoral Theses of Bangladesh Agricultural University						
04	Dairy Science	I. J. Animal Science	Bangladesh	1968	180	24.00
		II. J. Dairy Science	USA	1917	85	11.33
		III. Animal Production	UK	1954	62	8.27
		IV. Indian J. Dairy Science	India	1948	55	7.33
		V. Newzealand J. Agricultural Research	New Zealand		25	3.33
		Total citation, 304			407	54.26
05	Poultry Science	I. Poultry Science	USA	1908	92	19.37
		II. British Poultry Science	UK	1960	35	7.37
		III. Indian Journal of Animal Science	India	1931	30	6.32
		IV. Poultry Abstracts		1975	26	5.47
		V. World Poultry Science Journal	UK	1936	16	3.37
		Total citation (J), 475			199	41.89
	Agril. Econ. & Rural	I. Indian J. Agricultural Economics	India	1.940	205	39.88
01	Agricultural Economics	II. Bangladesh J. of Agril. Economics	Bangladesh	1980	38	7.39
		III. American J. Agricultural Economics	USA	1969	31	6.03
		IV. Journal of Econometrics	USA	1933	27	5.25
		V. Bangladesh Development Studies	Bangladesh	1973	23	4.47
		Total citation (J), 514			324	63.04
02	Agricultural Finance	I. Indian J. of Agricultural Economics	India	1940	180	40.00
		II. Bangladesh J. of Agricultural Economics	Bangladesh	1987	30	6.67
		III. Bangladesh Development Studies	Bangladesh	1973	21	6.67
		IV. J. of Farm Economics	USA	1897	15	3.33
		V. Economic & Political Weekly	India	1966	10	2.22
		Total citation (J), 450			256	58.89

<i>Sl. no.</i>	<i>Branch Rank</i>	<i>Name of the Journals</i>	<i>Country of origin</i>	<i>Year of found</i>	<i>No. of citations</i>	<i>Percentage (%)</i>
03	Agri Business	I. Indian J. of Agril. Economics	India	1940	45	11.19
		II. Bangladesh Dev. Studies	Bangladesh	1973	23	5.72
		III. American J. of Agril. Economics	USA	1969	15	3.73
		IV. Bangladesh J. of Agril. Economics	Bangladesh	1980	12	2.99
		V. Econometrics	USA	1933	08	1.99
		Total citations (J), 402				103
	Agri. Eng. & Tech.	I. J. of Agricultural Engi. Research		63	115	22.33
01	Farm Power & Machinery	II. J. of Food Engineering	USA	1928	65	12.62
		III. Drying Technology	USA	1983	52	10.10
		IV. J. Food Technology	India	1966	60	11.65
		V. Energy	USA	1956	39	7.57
		Total citation (J), 515				331
02	Irrigation & Water Management	I. Potato Abstracts	UK	1976	55	15.90
		II. J. of Indian Potato Assoc.	India	1974	42	12.14
		III. Agronomy Journal	USA	1907	35	10.12
		IV. Field Crop Abstracts	UK	1948	30	8.67
		V. American Potato Journal	USA	1973	21	6.07
		Total citation (J), 346			183	52.89
Trends in Citation Pattern in Agricultural Doctoral Theses of Bangladesh Agricultural University						
03.	Food Technology	I. Journal of Food Sc. & Technology	UK	1994	25	17.01
		II. Journal of Food Science	Canada	1956	13	8.84
		III. Journal of Food Engineering	USA	1928	12	8.16
		IV. Indian Food Packers	India	1986	08	5.44
		V. Chemical Engineering Science	UK	1951	06	4.08
		Total citations (J). 147				64

<i>Sl. no.</i>	<i>Branch Rank</i>	<i>Name of the Journals</i>	<i>Country of origin</i>	<i>Year of found</i>	<i>No. of citations</i>	<i>Percentage (%)</i>
	Faculty of Fisheries	I. Hydrobiology	Netherland	1985	88	6.46
01.	Aquaculture	II. American Fish Society	USA	1870	86	6.31
		III. Aquaculture	UK	1972	85	6.24
		IV. J. of Fish Research	Netherland	1982	68	4.99
		V. J. of Fish Biology	UK	1956	48	3.52
		Total citation (J) ,1363			375	27.51
02.	Fisheries Biology and Genetics	I. Aquaculture	UK	1972	72	10.54
		II. Indian J. Fisheries	India	1954	24	3.51
		III. Canadian J. of Zoology	Canada	1929	18	2.64
		IV. Bangladesh J. of Zoology	Bangladesh	1973	12	1.76
		V. Bangladesh J of Fisheries	Bangladesh	1986	08	1.17
		Total citation (J), 683			134	19.62
03.	Fisheries Management	I. Bangladesh J. of Zoology	Bangladesh	1973	180	18.89
		II. J. Inland Fisheries Society of India	India	1965	105	11.02
		III. Bangladesh J. of Fisheries	Bangladesh	1986	72	7.56
		IV. Bangladesh J. Agricultural Science	Bangladesh	1974	47	4.93
		V. Indian Journal of Fisheries	India	1954	19	1.99
		Total citation (J), 953			423	44.39
04.	Fisheries Technology	I. Aquaculture	UK	1972	54	23.89
		II. J. of Marine Biology	Germany	1967	21	9.29
		III. Aqua Engineering	UK	1982	18	7.96
		IV. J. Expert Biology.	UK	1923	15	6.64
		V. J. Indian Aquaculture Society	India	1986	15	6.64
		Total citation (J), 226			123	54.42

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