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Medicinal Plants Research In India 2009-2018 :

A Bibliometric Profile

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Abstract

Medicinal plants are very useful for human life. Medicinal plants is nature and very safe as there is no side effects. The use of medicinal treatments is independent of any age groups. . The researcher data's from web of science with the keyword of "Medicinal Plants" in the title field and in addressas India. The researcher limited the year from 2009 to 2018 and 3325 data collected from Web of Science. The downloaded data was analyses with Bibexcel software and Pajek tool. Most of the authors are interested to publish in the journal as article. This study was focus on publishing Authorship Pattern,Language, and Citation and Collaborate countries also. Frequently used in English language . Authorship paten Single author 77 , Joint author 600, Ten author published in 50 more than ten author published 69.Highly collaborate with India in Saudi Arabia was115 and USA was 113 joint paper publish .Top ten citation analysis in CR field use top of the Murashige T,1962,V15,P473, Physiol Plantarumin 306 publication . The Choice of the Unit os analysis and of the Initial set as a strong influence on the measures and result of any bibliometic study [5]. Bibliometric a systematic mapping study to identity categories and analyses existing literature related. The most commonly used the metric method for the analysis of past present and future scientific developments [6]. The Area of Research in terms of the top countries top organization to authors and finally using the parameter space. In this paper it is argued that multiple applications of indicators can show the contempoarystatus of nanotechnology development in india[7].In India the national Institutional Ranking Framwork (NIRF) approved by ministry of human resource and development ranking based teaching , learning and resources[7].

Keywords: *Medicinal plants, India, Authorship Pattern , Bibexcel, Year of Publication, Pajek.*

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Introduction:

Medicinal plants were evergreen traditional medicine in Ayurvedicplants. Medicinal plants cure many diseases and they are very rare too. Indian medicinal plants have been extensively used in the Indian traditional (Ayurveda) system. Medicine was some which disease and clear slowing the process of again and cure related disorders. Technological advances in renewable energies have extended their use of globally source of these energies are available worldwide in some countries [2]. All Result and figure are related articles with the citations per article during the period under purview and identifies the original investigated into[3]. Indian journal of Information library & Society are well known quarterly research journal field in the library and information science[4]. Medicinal plants various parts such as the leaves, roots, seed, bark, fruit, and flowers are very useful. Some medicinal plants are widely used as a home remedy. Some herbs are also having antibiotic properties. To take the medicine for common use such as pungent and emetic and diuretic, in dropsy, piles, boils, eruptions of the skin problems, diabetics, sugar, blood control level, hydrophobia, snake-bites, insect-bites, in ear-disease, in abscess, in asthma and cough in colic children to all. Medicinal plants used for species are known to be used for the extraction of oil, paste, tablets prepared traditional medicine. There are so many databases like Web of knowledge, Scopus, Pub med , INSPEC , Commendedand so on. Two authors screened the titles and abstracts of the hits and full papers were retrieved according to the inclusion study design [1.] The Collaboration Institute working in different divisions work together while a domestic collaboration. According KC Garg and Sandhya Dwivedi was collaboration. Internationals scientific collaboration is particularly advantage our for less advanced countries but also beneficial for highly industrial countries[8]. Web of Science is the world's most trusted publisher-independent global citation database. Guided by the legacy of Dr.Eugene Garfield, inventor of the world's first citation index. Web of Science is the very useful to researcher to publish article and journal.The Web of Science Core Collection was citation index. One of the platform of researcher to travel from over 1.7 billion cited references from over 159 million records.Web of sciencethe best guide the future of their institution and research.The Web of Science is International journal and open access in Art and Science Articles. The Journal was published in monthly once issued per year. All the journal was published online service via.The Researcher used the keyword "Medicinal Plants" in the topic filed 2009-2018 and the address field " India". The result was 3325 was downloaded in separate text files. The Data was analyzed with the Bibexcel field. Another step was Pajek tool in mapping purpose. Bibliometric analysis collaboration is accepted in the new interdisciplinary research. The Research is meaningful in the present exercise to focus on research contribution of higher educational Institution in India[9]. The Present study of evaluation development in india using Bibliometric innovation indicators was developed. The Process of performance evaluation and innovation to time which highlighted the strength and inspire to hold rank nationally and globally[10].

Need for the Study:

The medicinal plants are cure in traditional Ayurvedic plants in India. Medicinal plants are since along very ancient times.The latest metric terms of all three metric terms is Informeteics, Bibliometrics and Scienctometrics[1]. Medicinal herbal plants are very use full for medicinal purposes. It cures health

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problems. The Herbal have used flavor food, Aromatic herbs many plants produce special aroma and given leaves,root, flower, Stamp are helped them to the medicinal purpose. Aromatic herbs and some herbs are easy to prepare our home garden and treat minor illnesses. Some home herbal leaf control in Blood sugar level and Diabetic control effect also. In India we are using Turmeric, Aloe vera, Ginger, Tulsi, Basil, Mint, Piper petal in the day to day life. The Agriculture students organized and improved the medicinal plants prepared challenged at work. So the researcher was growth medicinal plants article contribution from author and Increase research article for medicinal plants.

Research Questions:

Data was in 2009 – 2018 for Indian research of Web of Science used the following questions.

- The Growth rate of Medicinal plants
- Authorship Patten and Contribution collaboration
- Distribution wise language and Publication Type
- Bradford' law of scattering
- Collaborative countries
- Citation Reference

Review of Literature for Medicinal Plants Research:

All Medicinal plants Longley used in traditional medicine. It acts the all traditional various treatment is used. The Rare medicinal plants are the cure in some unique dieses. Table -1 was explained the publication year wise growth of literature. Minimum Productivity occurred in the year 2011 with only 150 (4.5%) publications. The total publication count is 3325 and the productivity year of 2018 having 394 and 11.8% of the total output. The Publication increase year to year.

Table - 1

Publication Year of Medicinal Plants - India			
S.No	Publication Year	No of Publication	%
1	2011	150	4.5
2	2012	210	6.3
3	2009	309	9.3
4	2010	366	11.0
5	2016	372	11.2
6	2017	375	11.3
7	2014	382	11.5
8	2015	383	11.5
9	2013	384	11.5
10	2018	394	11.8

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	Total	3325	100.0

Medicinal Plants Research Production by Language:

The Distribution of Medicinal plants literature by language. The Author through only the English language represents the Language in India. The history of the English language was started with the arrival of three Germanic tribes who invaded Britain during the Fifth century AD. The main characteristics of the English language was used toknowledge improves our chances of job vacancy, communication, the internet and career increase purpose. Most of the scientist publishes their work in English. 3325 articles are published in the English language. Hundred percent of the published articles are referred by the researchers.

Publication Type of Medicinal Plants Research:

The Basic concepts of Medicinal plants research output is the publisher in Publication types. The Studies growth trends authorship and published 2912 records 87.6% total records of 3325. The Journal article was 333 and 10% the Publication meeting abstract, Editorial materials, Article preceding of paper, Letter, Review, and Book chapteritems have less number of records.

Table - 2

Publication Type Medicinal Plants - India			
S.NO	Publication Type	No of Publication	%
1	Article	2912	87.6
2	Review	333	10.0
3	Meeting Abstract	34	1.0
4	Editorial Material	14	0.4
5	Proceedings Paper	14	0.4
6	Letter	11	0.3
7	Book Chapter	7	0.1
	Total	3325	100.0

Authorship Pattern of Medicinal plant Research:

Research Impact of individual researchers is measured in Journal and Articles was analyzedthe Authorship patter purpose. The Medicinal Plants' research was analyzed in Table – 3. The details are

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given below. Among the 3325 articles, 77 papers, 2.3% are authored by single authors. Two authors contributed 600 articles, which is 18%. Three authors jointly published 679, which is 20.4%.659 papers are authored by four authors which is 19.8%. 353 articles are published by six authors which is10.6% .only 69 papers, 2.1 % of paper are published by Ten and above. The study distinctly exposes that the major contribution of the articles is done not by single authors but by the collaboration of many writers.

Table-3

Authorship Productivity Medicinal Plants - India			
S.NO	Authorship Pattern	No of Publication	%
1	Single	77	2.3
2	Joint	600	18.0
3	Three	679	20.4
4	Four	659	19.8
5	Five	469	14.1
6	Six	353	10.6
7	Seven	170	5.1
8	Eight	130	3.9
9	Nine	69	2.1
10	Ten	50	1.5
11	More than Ten	69	2.1
	Total	3325	100.0

Top Ten Journalsin Medicinal Plants -India:

The Researcher used Bibexcel tool forto find out which journals the authors wants to publish. With the SO tag, we can we can find out the results. The 3325 articles are published in 727 Journals. “Journal of Ethno pharmacology” with 150 records 4.5% in high second “Indian Journal of Traditional knowledge” as 126 and 3.8%, “Pharmaceutical Biology” as 65 and 2.0% reset ordered. Industrial crops and products, Journal of Medicinal plants research, Parasitological research, Magazine, Paper presentation, PLOS one, Indian Journal of Experimental Biology, BMC complementary and Alternative Medicine and other Journal 2654 are 79.8% also.

Table- 4

Top Ten Journals of Medicinal plants -India			
S.NO	Journal	Record	%
1	Journal of Ethnopharmacology	150	20.4

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2	Indian Journal of Traditional Knowledge	126	17.1
3	Pharmaceutical Biology	65	8.8
4	Industrial Crops and Products	59	8.0
5	Journal of Medicinal Plants Research	52	7.1
6	Parasitology Research	48	6.5
7	Pharmacognosy Magazine	47	6.4
8	PLOS One	44	6.0
9	Indian Journal of Experimental Biology	42	5.7
10	BMC Complementary and Alternative Medicine	38	5.2
11	Other Journals	66	9.0
	Total published Journal	737	100.0

Collaborate Countries of Medicinal plants Research:

Table- 5 explained the collaborated work with countries and the number of contributions. Indian Agriculture to the best of our knowledge it was contributed the first learned article on the Indian agriculture modern times[5]. The Bibexcel tools used to analyze. Select the C1 field and the whole field intact and then create the out file. Edit the out file select Decompress the out file ok then the result was .nnu file then result was .out file selected analysis Add Frequencies then sort descending whole string the result was India with Collaborative countries. Then the selected oux file the result was co-occurrence make pairs via the list box the result was coc file. The next step creates a .net file and then mapping create .vec file this file draws the mapping purpose. The next net file uses to Pajek and apply mapping to create the image. The Image is Informed Publication of the scientists India and Saudi Arabia collaborate countries 115, India and USA 113, India and South Korea 80, India and Malaysia 37, Canada and India 34, India and Iran 32 then India and Italy 31.

Table - 5

Collaborate Countries of Medicinal Plants - India Research			
S.NO	Country	Collaborate Countries	Record
1	India	Saudi Arabia	115
2	India	USA	113

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3	India	South Korea	80
4	India	Malaysia	37
5	India	Canada	34
6	India	Iran	32
7	India	Italy	31
8	India	China	29
9	India	South Africa	27
10	India	Germany	24
11	India	UK	23
12	India	Taiwan	22
13	India	Australia	21
14	India	Japan	18
15	India	Egypt	18
16	India	Brazil	17
17	India	Spain	16
18	India	Ethiopia	15
19	India	Turkey	14
20	India	Pakistan	14
21	India	Russia	14
22	India	Cameroon	11
23	India	Ireland	11
24	India	Nigeria	11
25	India	Poland	11

For Medicinal Plant research India done collaborated research with 77countries. The highest collaboration with India was Saudi Arabia (115) ,USA (113), South Korea (80), Malaysia (37), Canada (32), Iran (31), Italy (31), China (29), South Africa (27), Germany (24), UK (23) , Taiwan (22) , Australia (21), Japan (18) , Egypt (18), Brazil (17), Spain (16), Ethiopia(15), Turkey (14), Pakistan (14), Russia (14) , Cameroon , Ireland , Nigeria, Poland each (11) .Total collaborative top 25 countries selected for the study. For creating vector map we select the publications of five and above.

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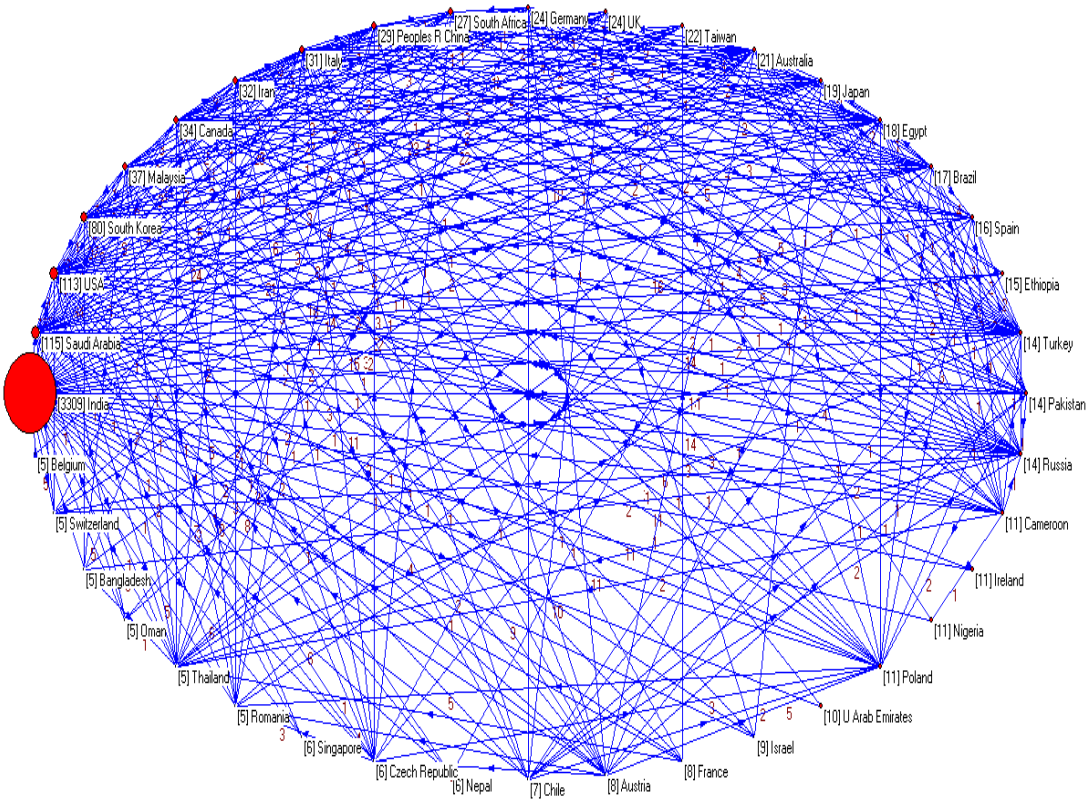
Image -1



Top Ten Citation in Medicinal Plants –India :

Table -6 explained the citation reference analysis. For that purpose CD field was selected This file explained top ten cited reference. Murashige, T, 1962, v15, p473, Physiol Plantarum 306, Lawry OH, 1951, V193, P265, J Biochem 149, Ohkawa H, 1979, v95, P351, Anal Biochem. 97 etc.

Table -6

Top Ten Citation of Medicinal Plants - India		
S.NO	Citation Reference	Publication
1	Murashige T, 1962, V15, P473, Physiol Plantarum	306

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2	Lowry OH, 1951, V193, P265, J Biol Chem	149
3	Ohkawa H, 1979, V95, P351, Anal Biochem	97
4	Cowan MM, 1999, V12, P564, Clin Microbiol Rev	73
5	Bradford MM, 1976, V72, P248, Anal Biochem	72
6	Mosmann T, 1983, V65, P55, J Immunol Methods	71
7	Oyaizu M, 1986, V44, P307, Japanese Journal Of Nutrition	64
8	Bauer AW, 1966, V45, P493, Am J Clin Pathol	57
9	Chopra R. N., 1956, Glossary Indian Med	56
10	Brand-Williams W, 1995, V28, P25, Food Sci Technol-Leb	55

Image – 2

Co-Citation Network of Medicinal plants- India:

To find out the collaborative citation, the researcher used pajek tool with .net and .vec file. The map was created with thirty and above collabartative citations. In this image we can view the authors name, year, volume, pages and the name of the journal. With in the arrow we can get how many time the same article is cited. The researcher selected the top ten cited articles.

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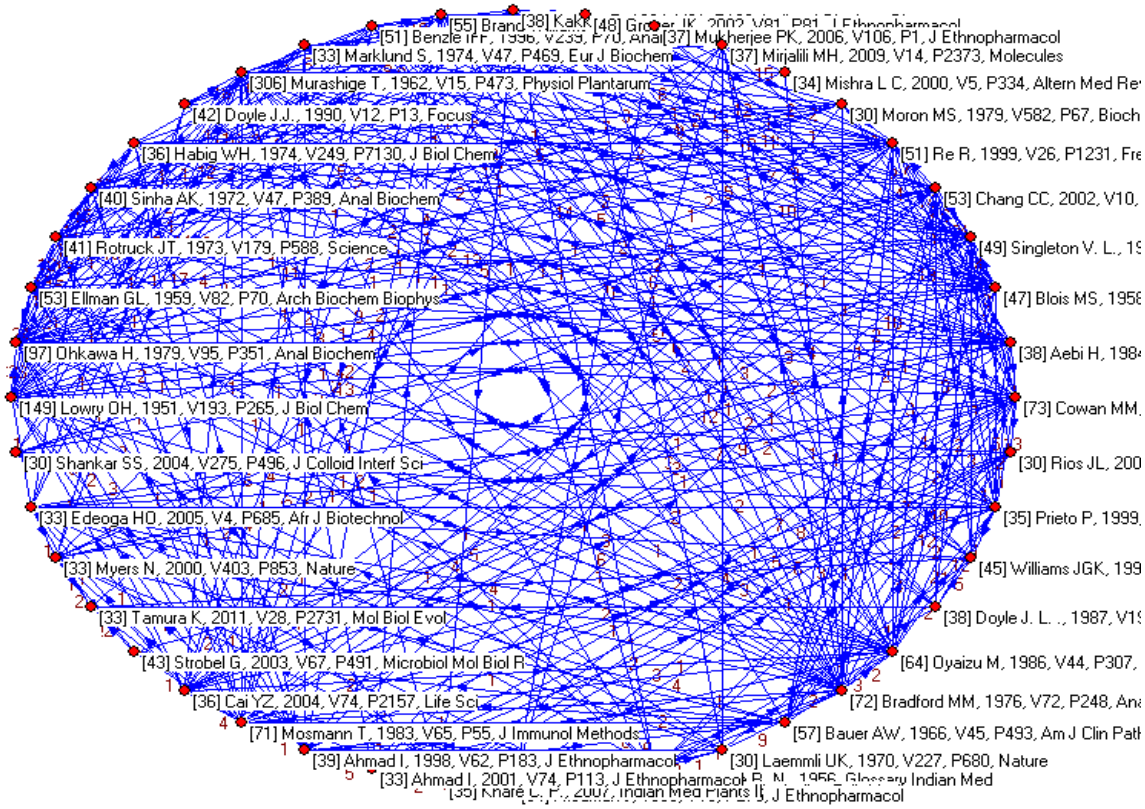

Conclusion:

Researcher expected to apply Bibliometric tools to analyzed Medicinal plants in India. Important role in programmed and survival of knowledge on medicinal plants author, Language publishes, publications produced between 2009 and 2018 to identify the most highly cited publications, author and institution collaboration networks, and topic trends. Analysis of the literature can highlight areas of emerging interest and knowledge gaps and direct future research. A systematic research was conducted using Clarified Bibliometric Analytics fromWeb of Science. Citation analysis was carried out using the Web of Science. The researcher single author almost 77 article publish three author collaboration most contribution 679 articles. Publication year was better-quality in 2018 was 394 publication. So research improved in medicinal plant research next twenty year value-added in this study of author contribution. Collaboration networks are explain simply made using map diagrams.Important plants reference details cure disease medicinal value recordsand growth Ayurvedic plants analysis researcher opportunities for future research. The present study aimed to investigate the presence of author encouragement purpose. The medicinal plant uses and different types of analysis may be the result of experimentation in future research.

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Reference:

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