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FULL TEXT BOOK

EDITORS

Assoc.Prof.Dr. Erdihan TUNÇ

Assoc.Prof.Dr. Vural Emir KAFADAR

Lecturer Erkan ÖZDEMİR

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1st INTERNATIONAL CONGRESS ON SUSTAINABLE AGRICULTURE AND TECHNOLOGY

01-03 APRIL | GAZİANTEP, TURKEY

INCSAT-I

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&

BOOK OF ABSTRACTS

EDITORS

Assoc.Prof.Dr. ERDİHAN TUNÇ

Assoc.Prof.Dr. VURAL EMİR KAFADAR

Lecturer ERKAN ÖZDEMİR

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Dear Colleagues,

It is my great pleasure to welcome you to the First International Conference on Sustainable Agriculture and Technology (INCSAT-1) in the gastronomic city of Gaziantep.

Our goal is to provide a platform for researchers, engineers, academicians, institutions, communities, agencies and industrial professionals to present their research results and development activities in Sustainable Agriculture and Technology. At the same time, it is a great opportunity for all the delegates to exchange new ideas and application experiences, establish business and research connections and find global partners for future cooperation. We are honoured to welcome our valuable scientists working in these fields.

Research and innovation will play a vital role in improving the future prospects of the agricultural sector and rural areas. We need to keep producing enough healthy food for everyone. Farmers must be empowered to embrace research and innovation, working in collaboration with scientists and investors to generate knowledge at an early stage. We need to reduce agricultural emissions, while maintaining strong economies and productive and resilient sectors capable of meeting the food demand of an exponentially growing world population.

With the Congress of INCSAT-1, young researchers will gain insight into new study topics by taking advantage of the knowledge and experience of internationally renowned scientists specializing in their fields. In addition, new working groups from different universities are emerging and lead new studies in related fields. We strongly believe that the INCSAT-1congress will be successful and productive with your valuable supports.

I would like to thank you, experienced and young researchers, for attending and bringing their expertise and innovative ideas to our conference. I want to thank the International Scientific Board Members and all reviewers for their significant contribution to the high level of the conference. At the end I would like to thank to Gaziantep University Scientific Research Projects and all our supporter companies.

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Agricultural waste management
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Animal Protein and fibre products
Animal Science
Aquaculture and Biosystems Research
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Renewable Energy
Soil and Gastronomy
Soil Science and Plant Nutrition
Traceability of animal source foods
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Journals Published in Agricultural Field in The Last Five Years Bibliometric Analysis

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Abstract

Today, scientific publications published in every field offer important contributions to both scientific activities and technological developments. As a matter of fact, access to information is fast and easy, and scientific activities can be observed and analyzed. The bibliometry, which performs the quantitative analysis of scientific publications, enables the analysis of publications published in a particular discipline or in all disciplines, as well as a general structure of the discipline in question. In this study, the development of agricultural and related published articles in WOS and Scopus database within five years is explained by bibliometric analysis. In this context, the results of the surveys on the subject of agriculture in WOS and Scopus were limited to five years. The obtained data were transferred to Excel and their graphics were prepared. In addition, data were analyzed in Bibexcel program for analyzing the number of authors of multi-author articles of this data. The findings were evaluated and evaluations were made about publications published in the literature related to agriculture within five years.

Introduction

Scientific activities such as online sharing of information resources and participation in international projects and conferences have accelerated cooperation between researchers. Prepared for sharing information, papers, etc. such as scientific studies, informs the reader with information and references (Polat, 2015). Thanks to the cooperation between the authors and the institutions, there has been an increase in the production of publications of countries and institutions, as well as the development of international scientific activities. The increasing number of authors and the number of interdisciplinary studies directly affect the number of authors of scientific publications and the number of scientific studies with multiple authors. In this study, it is aimed to give information about the development of

articles related to agriculture in the last five years with the application of bibliometry which provides statistical analysis of scientific publications.

Bibliometrics

The term bibliometry, which is a quantitative analysis application of information sources in general, is based on the term Statistical Bibliometry (Bayram ve Zan, 2014; Frosman, 2008; Pritchard, 1969). The Statistical Bibliography term was used by E. Wyndham Hulme in 1922 at the University of Cambridge Sandars Reader in Bibliography, and courses were published as a book (Hulme, 1923; Pritchard, 1969). Hulme (1923) stated that he considered Statistical Bibliography as a practical application for compiling bibliographies and library studies. The term statistical bibliography was last used by Raising (Pritchard, 1969). According to Raising (1962: 450) statistical bibliography, collection of books and periodicals related to the collection and interpretation of statistics. Raising stated that this concept could also be used to show historical movements, to determine the national or universal research of books and magazines and to determine the general use of books and magazines in local situations. Pritchard defined bibliometry as the application of statistical and mathematical methods to books and communication media, stating that it would be better to use the term bibliometry instead of the term statistical bibliography (Pritchard, 1969; Bayram ve Zan, 2014: 225). Although books, theses, reports and patents are counted as elements of bibliometric analysis, the main component is scientific articles. On the basis of bibliometric measurement there are references to publications and authors. Bibliometric indicators are produced according to the number of publications, citations and authors (Karasözen, 2009: 3). Bibliometry deals with the statistical analysis of scientific studies such as the author, subject, cited author and cited sources, and enables the general structure of a particular discipline to be demonstrated in accordance with the statistical results obtained (Bayram and Zan, 2014: 225).

Method

In this study, the results obtained by scanning from the Web of Science (WOS) and Scopus database indexed articles on Agricultural area were analyzed. In order to determine the articles related to the subject, the topic Agricultural was searched from the advanced search option. The data were obtained from 173.413 from WOS database and 962.364 from the Scopus database. The results were transferred to Excel and their graphics were prepared. The graphs were interpreted and evaluated. Since the survey on the subject is made on different

days between 01.03.2019 and 30.03.2019, the results obtained from the database can be seen according to the days.

Limitations

In this study, articles published in the last five years in the field of agriculture are examined. Since 2019 was not completed, it was not included in the study. As the year 2019 was not completed, the whole year was not included in the study. In this study, the contribution to world literature in the last five years with the world's literature in Turkey were also examined.

Research Problem

Recent developments in information and information technologies have made it possible to share information in every field in the world of science. Thanks to these developments, factors such as time and distance have been eliminated. In addition, interdisciplinary, interdisciplinary and inter-institutional scientific communication has enabled the world of science. Bibliometric methods are a way of monitoring and / or explaining these developments in the scientific world. In this study, articles related to the agriculture issue indexed in WOS and Scopus databases in the last five years have been examined. The study tried to find answers to the following questions.

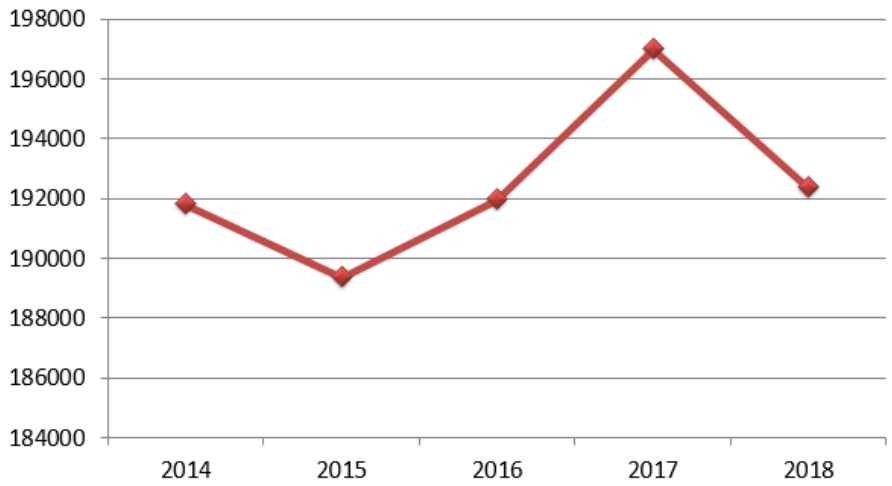
- How many articles have been indexed in agriculture in the last five years?
- Which country contributed the most to the literature?
- Which universities contribute the most to the literature?
- What is the distribution of the increase of article publishing of countries in the last five years?
- How is that Turkey gained momentum over the years?
- Which university in Turkey most contributed to the world literature?
- How is the multi-authored article distribution of Turkey?

Results

Distribution by Years

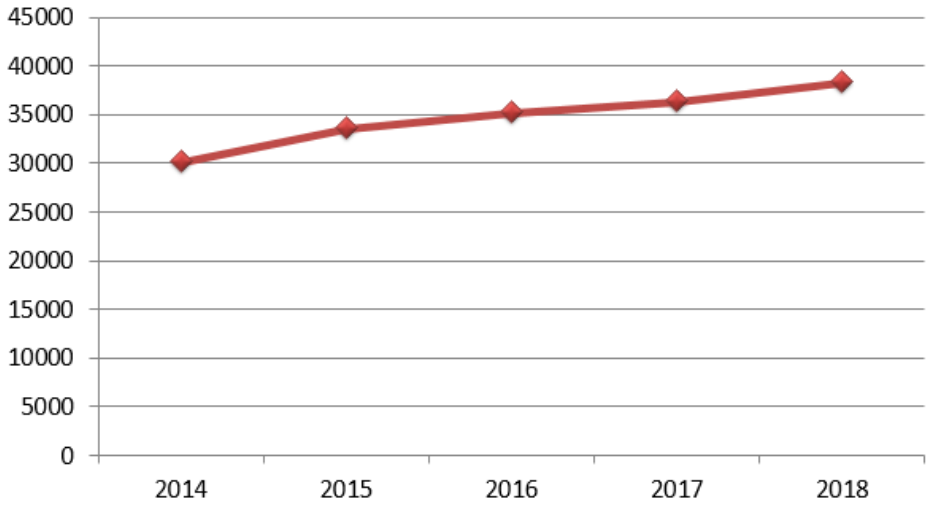
When Graph 1 is analyzed, it is indexed 962,364 articles in Scopus between 2014-2018 on Agricultural and Biological Science. When the five-year period is examined, it is seen that

the least number of articles are published in 2015 and most of the articles are published in 2017. The average number of articles in the five-year period is 192.473.



Graph 1: Number of Publication by Years in WOS

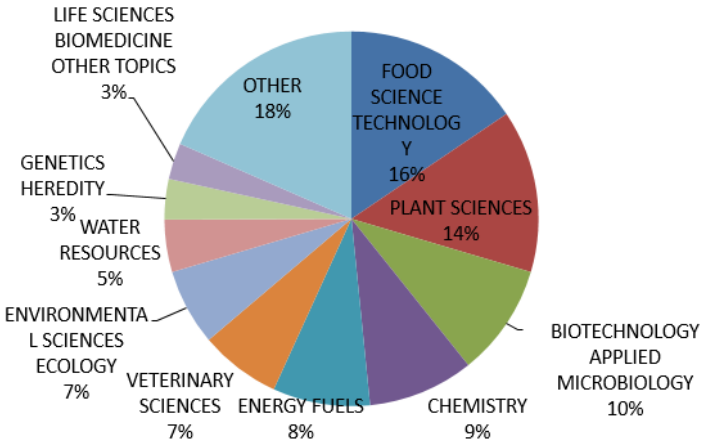
Graph 2 shows the distribution of 173,413 indexed articles for the years 2014-2018 related to WOS agriculture. In the five-year period, the minimum article belongs to 2014 with 30,118 imprint. There is a steady increase in the number of articles by years. With an increase of 26.9% compared to 2014, 38,230 articles were indexed in 2018.



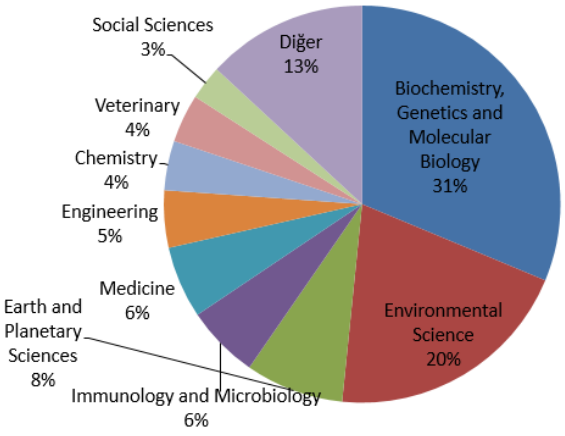
Graph 2: Number of Publication by Years in Scopus

Distribution by Subject

Graph 3 shows the distribution of agriculture related indexed articles in WOS according to sub-topics of agriculture. The subject with the most indexed subject is Food Science with a ratio of 16%.



Graph 3: Distribution by Topic in WOS

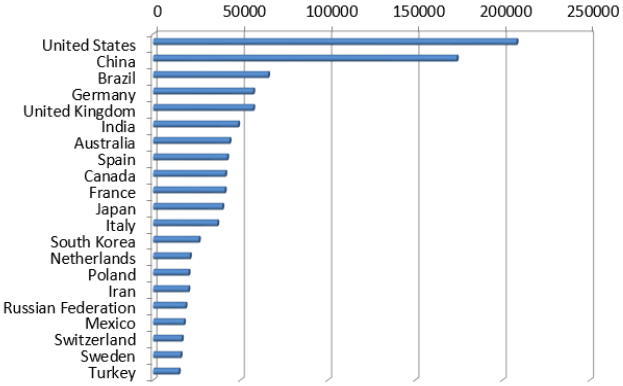


Graph 4: Distribution by Topic in Scopus

Graph 4 shows the distribution of articles related to agriculture indexed in Scopus. Scopus database shows that 962,364 articles on agriculture are at the rate of 31% with the highest rate of biochemistry, genetic and molecular biology. Environmental science ranks second with 20%.

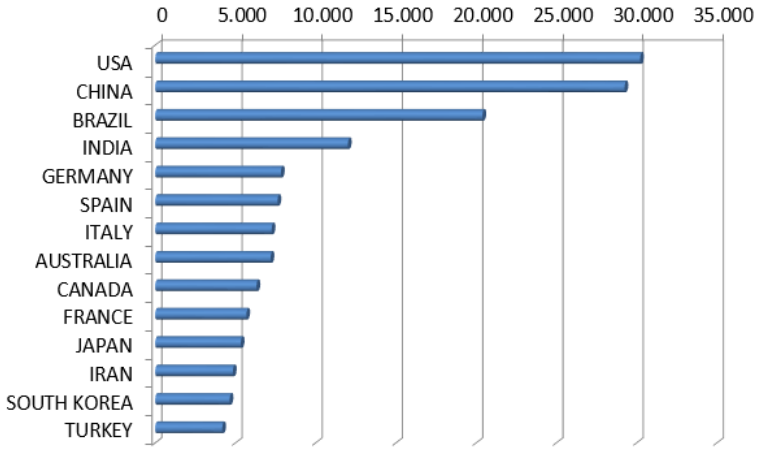
Distribution by country

When the distribution by countries in Graph 5 is examined, it is seen that the country which contributed the most with 208,035 articles to the literature is the United States. China follows the USA with 173,830 articles. From the data obtained, it is estimated that the world average is 6015 articles. Turkey 11th among European countries with 14 640 articles, 7th among Asian countries, ranks 21 in the world rankings.



Graph 5: Distribution by Country in Scopus

From the data obtained in WOS, the distribution of 173,413 articles is given by countries (Graph 6). With 30,229 articles, it is seen that the country that gave the most articles to the literature was the United States. China follows the US with 29,253 articles. The average number of articles was calculated as 854. Turkey among the European countries with the article 5. 4181, ranking the 6th in the world and ranks 14th among Asian countries.



Graph 6: Distribution by Country in WOS

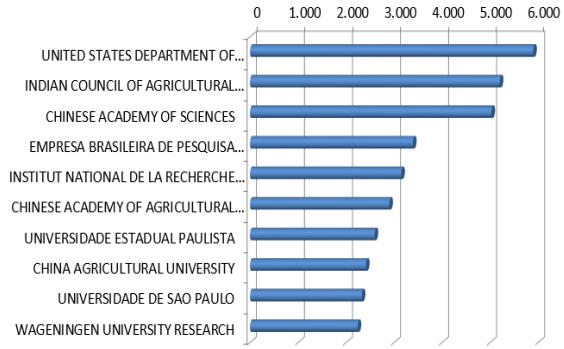
Distribution by Institutions

When Graph 7 is examined, it is seen that the most important countries that have the highest contribution to the literature is the People's Republic of China. As a matter of fact, when the first 20 institutions are examined, it is seen that there are 7 institutions with Chinese address. Among the most broadcasting institutions, there are higher education institutions at the Academy level. The second is the Chinese Ministry of Education. The University of São Paulo, located in Brazil, ranks first in university level. According to the data obtained it can not be seen any institution among the top 100 institutions from Turkey.



Graph 7: Distribution by Institutions in Scopus

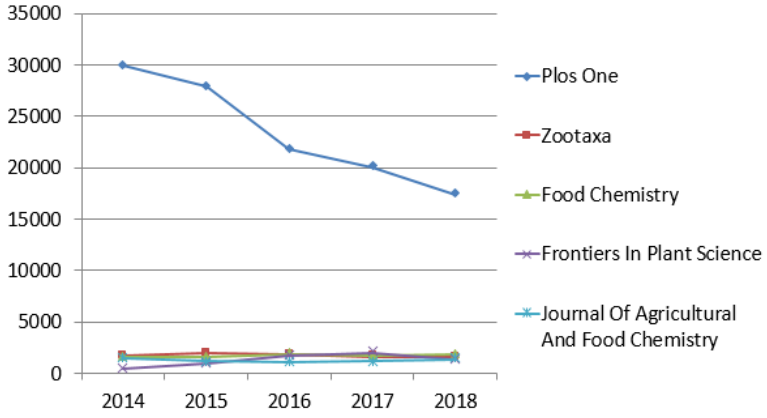
When the results of WOS searching are examined, it is seen that the organization contributing the most to the literature is the US Department of Agriculture with 5.896 articles. China's Ministry of Education ranks 2nd with 5,199 articles. At the Academy level the Chinese Academy of Sciences ranks first. At University level, Estadual Paulista University ranks first in Brazil. According to the data it is not included among the top 100 companies of Turkey.



Graph 8*:* Distribution by Institutions in WOS

Distribution by Publication Organizations

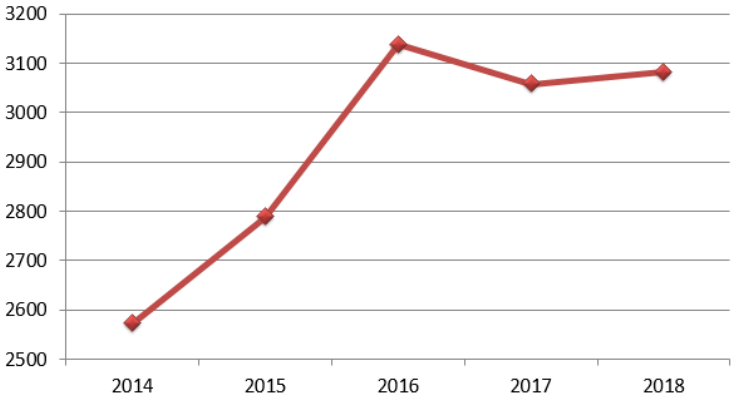
In the Scopus database, 357,715 of the 962,901 articles related to the science of agriculture and biology are open access articles**.** The most indexed publisher in the database is the open access Plos One with 116.992 article. Plos One publisher's article number is 12.14% of the number of articles in the last five year.



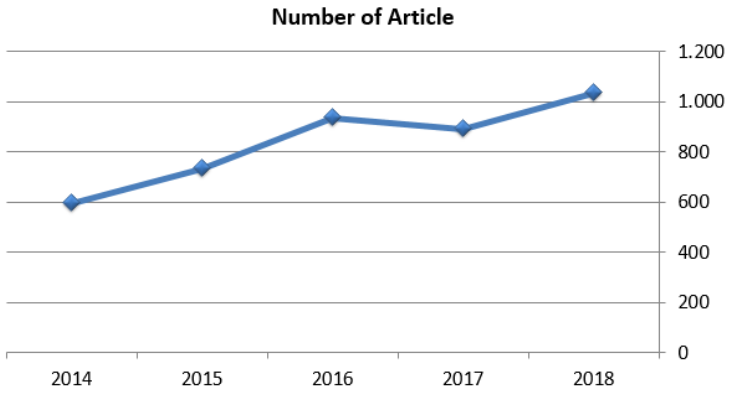
Graph 9: Distribution by Publication Organizations in Scopus

Distribution by Turkey of the Year

Scopus database in the last five years shows that Turkey produces 14 644 articles. In 2014-2018, the best increase was in 2016 with a rate of 12.5% compared to the previous year. The number of articles in 2018 increased by 19.9% compared to 2014 (Graph 10). WOS database in Turkey in the last five years shows that 4181 article produced. There is a 74.5% increase in the number of articles in 2018 compared to 2014 (Graph 11).



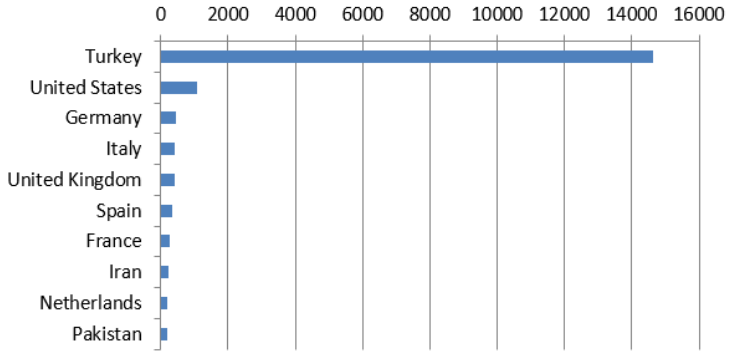
Graph 10: Distribution by Years of The Turkey in Scopus



Graph 11: Distribution by Years of The Turkey in WOS

Turkey's International Cooperation

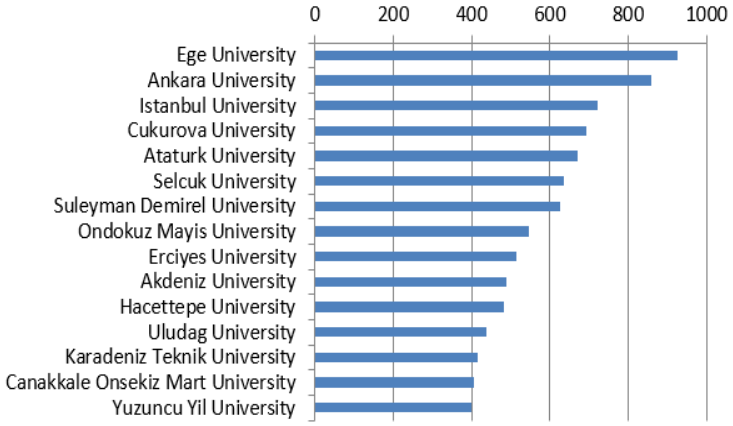
Looking at the last five years, Turkey's cooperation with other countries, it is seen that the most common articles United States. China is the second most publicized country at the level of countries. On the contrary, China is not among the top 10 countries in cooperation with our country.



Graph 12: International Cooperation of Turkey in Scopus

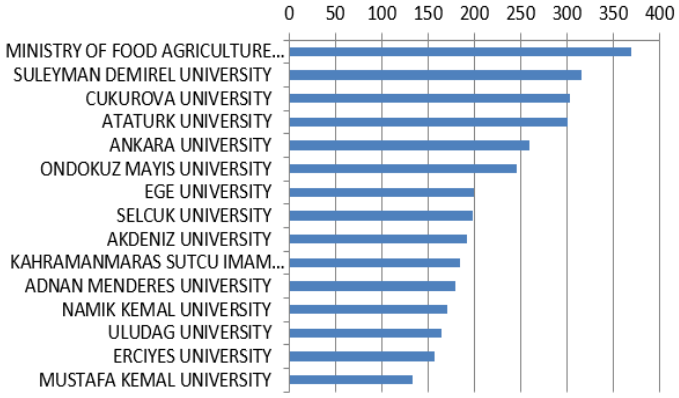
Distribution by Universities in Turkey

It is seen that the most indexed articles in the literature related to the science of agriculture and biology in Scopus database belong to Ege University. Academies and public institutions are among the institutions that produce the most publications worldwide. On the contrary, only universities are in the top 15 in our country.



Graph 13: In Scopus, Distribution by Universities in Turkey

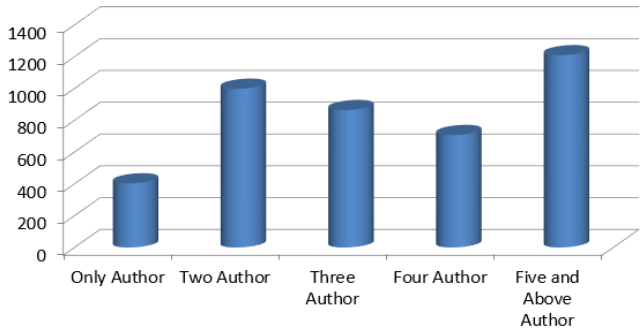
When the WOS database indexed in Turkey in agriculture issues related article analyzed 4181 shows that take place in the first Ministry of Food, Agriculture and Livestock. At the university level, Süleyman Demirel University is the first place.



Graph 14: In WOS, Distribution by Universities in Turkey

Distribution by Author Number

The literature review results showed that there was a large number of articles in both WOS and Scopus database. When Turkey's co-authored the article are examined, wos' in the article indexed in the last five years, one author of 9,6%, 23,9 % the two authors, shows that 66.5% three or more authors, consisting article.



Graph 15: In WOS, Distribution by Number of Authors in Turkey

Conclusion and Evaluation

By using bibliometric applications which allow statistical analysis of the publications, the country, institution, document type, authorship cooperation etc. also evaluations are made. In today's global world, the rapid dissemination of information, its availability, international scientific activities and cooperation among researchers are thought to accelerate scientific publication. When the Scopus WOS databases are examined, the following results are achieved.

- In the last five years, there has been a steady increase in the scientific publications produced and / or published in the field of agriculture.
- The increase in the number of publications has a large share of the international joint publication of researchers.
- It is found out that the country that contributed the most to the literature in the world about agriculture is the USA. The fact that the country with the most cooperation in the emergence of this situation has a great effect.
- Republic of China ranks second in the world ranking. İn addition to the People's Republic of China takes the first place in the world.
- Turkey is seen as the corporate database is not between the two countries in the top 100. in addition to, it is among the top 15 countries in WOS and 25 in Scopus.
- In international co-authored the article in Turkey is seen that the maximum cooperation of the countries the United States. Although the People's Republic of China is ranked 2nd in the world and 1st in the country, the number of co-authored works with China is very low.

- It is seen that academic institutions and ministries are among the institutions that publish the most articles in the world. The most broadcasting institutions in Turkey is seen that the universities.

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