



Food and Agriculture
Organization of the
United Nations

AGRIS, the International System for Agricultural Science and Technology

GL 2020. 22nd International Conference on Grey
Literature "Applications of Grey Literature for
Science and Society"

November 19, 2020 - Online Conference





Scholarly communication evolves

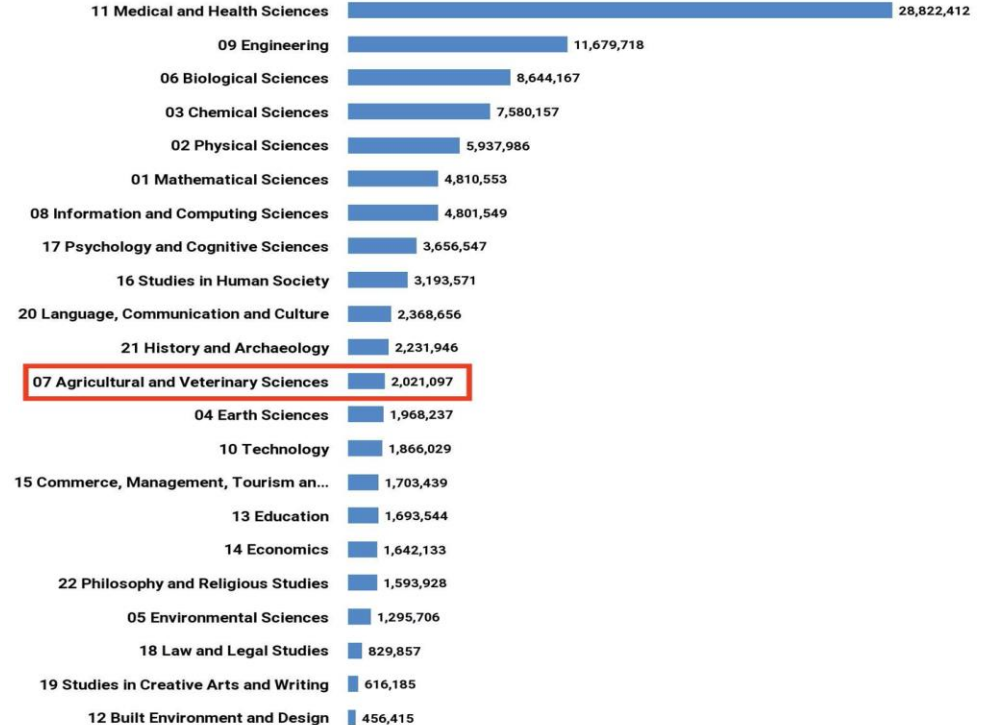
- Publicly funded research must be freely available to public
- Open access and open science
- Pre-print and open repositories
- Data sharing frameworks and funder requirements



Agriculture in the scientific literature

- Applied science
- A majority of the research output is not in the peer review literature
- A lot of the research is done by private companies and public organizations

number of publications in each research category. (Criteria: see below)



Source: https://login.research4life.org/tacsgr1app_dimensions_ai
Exported: July 01, 2020
Criteria: none.



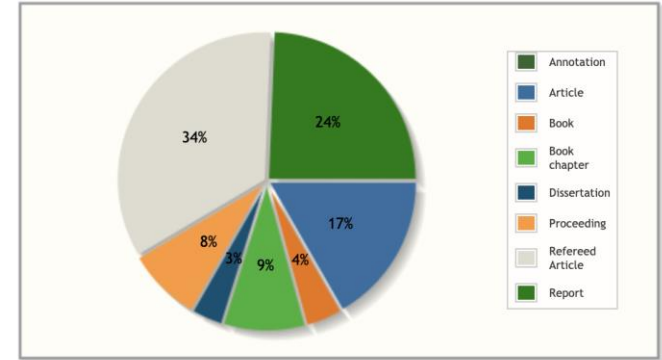
Diverse type of research output

Wageningen University & Research's (WUR) core areas of activity are food, food production, living environment, health, lifestyle and livelihood.

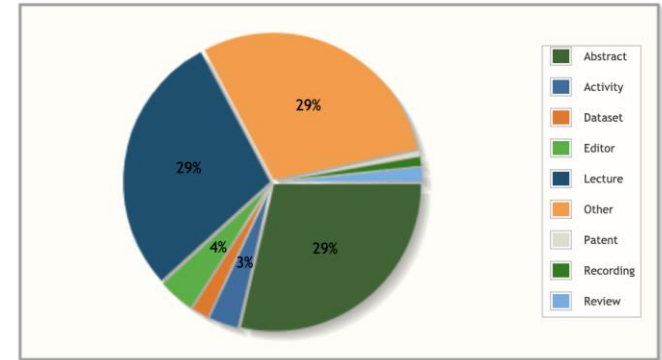
See the diversity in their research output, not only articles and note that PhD thesis are required to be published as article.

Output by type

230505 publications



74196 other output





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The role of FAO

Providing visibility to food and agricultural reseach



What is AGRIS?

AGRIS consists of three elements:

- **A network.** The AGRIS network refers to the contributing community of up to 450 institutions and 150 countries.
- **A database.** AGRIS is also a database with millions of structured bibliographical records on agricultural science and technology.
- **A web portal.** AGRIS is a web portal that links AGRIS knowledge to related web resources.

Maintained by FAO, AGRIS has been serving users worldwide since 1974.



AGRIS
COORDINATING CENTRE
A 107 4611



AGRIS

AGRICULTURAL SCIENCE AND TECHNOLOGY INFORMATION

Find resources...



-- Select a language --

-- Select resource type --

SEARCH

The AGRIS database contains 11,861,859 records (including 1,528 datasets) from 464 data providers

AGRIS DATA PROVIDERS

China

International Academy of Ecology and Environ

VIEW PROFILE

RESET

Show data provider list



What else?

The purpose of AGRIS is to provide comprehensive scholarly research information in the agricultural domain, accepting content related to all FAO's areas of interest from data providers.

Types of content

- books
- conference papers
- data sets
- journal articles
- scientific and technical projects
- technical reports
- theses

Some topics covered by AGRIS

- agriculture
- animal husbandry
- biotechnology
- environment
- fishing and aquaculture
- food
- food technology
- food toxicology
- forestry
- plant protection
- veterinary medicine

AGRIS is used by anyone interested in such literature, including students, scientists, librarians, researchers, publishers and policy-makers, among others.



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The AGRIS Network



Available in up to

90

Languages



12 million

**bibliographic
records**



From about

150

Countries



Records by

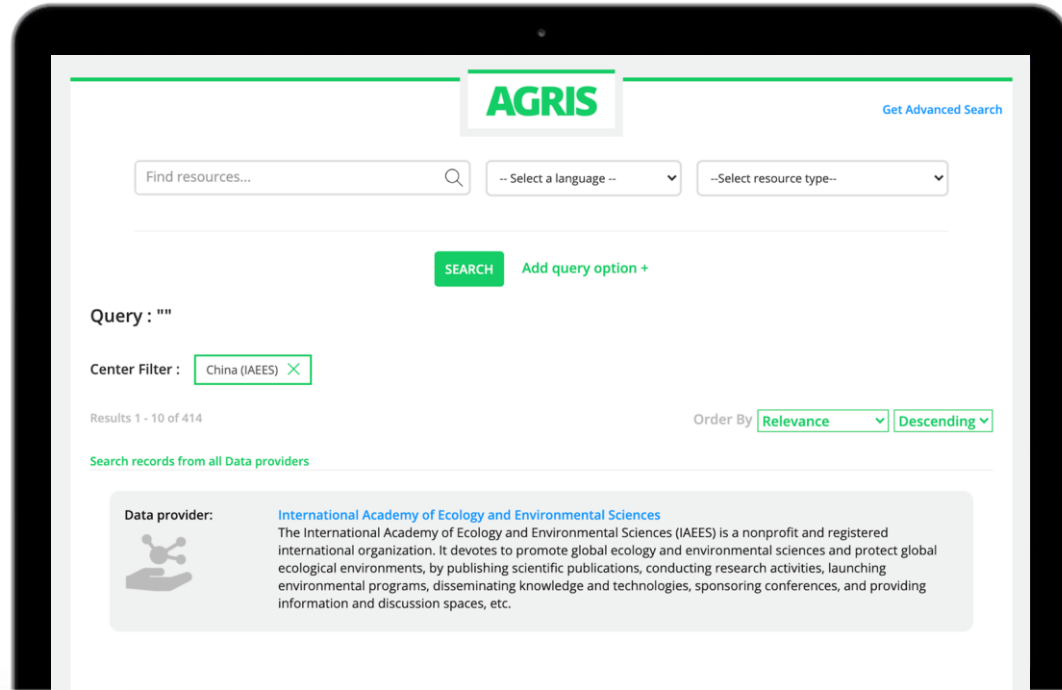
430 +

Data providers



Who Submits Data to AGRIS

- research centers
- academic institutions
- publishers
- governmental bodies
- development programmes
- international organizations
- national organizations





Representation per Country

Countries with 5 or more data providers

Russian Federation	52	Mexico	11	Slovakia	6
Brazil	40	Spain	10	Argentina	5
United States of America	31	Colombia	9	Costa Rica	5
Iran (Islamic Republic of)	19	United Kingdom	9	France	5
Ukraine	19	Italy	8	Indonesia	5
India	17	Philippines	8	South Africa	5
Australia	14	Kenya	6	Syrian Arab Republic	5
Cuba	12	Nigeria	6		
Turkey	12	Peru	6		

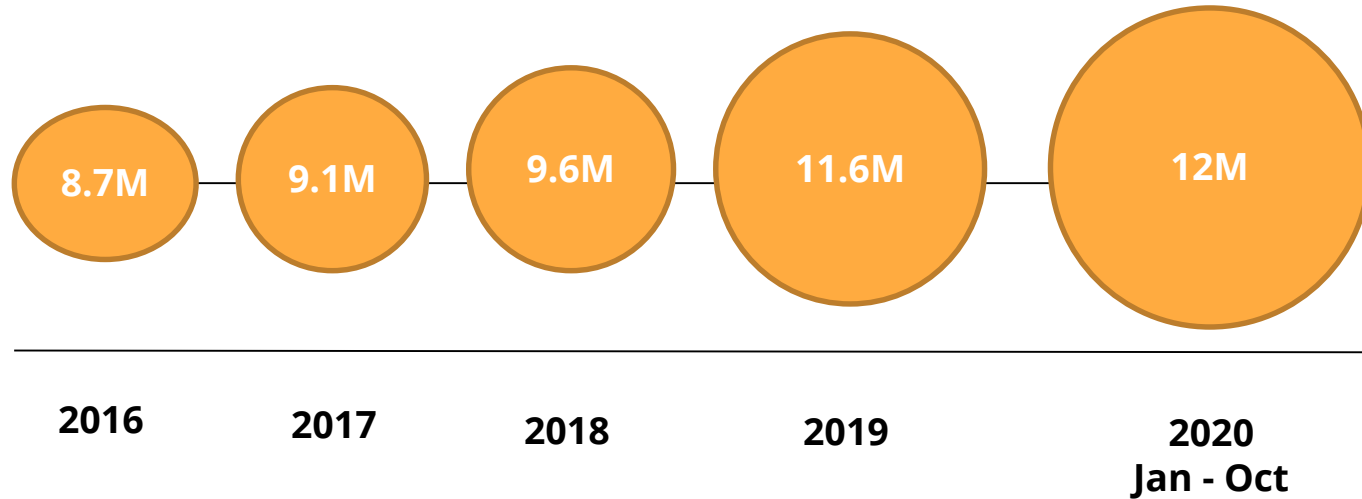


October 2020 Release. Data Sources

Brazil	<u>Empresa de pesquisa agropecuária e extensão rural de Santa Catarina</u>
Bulgaria	<u>International Scientific Publications</u>
Colombia	<u>UNAL Colombia - Sede Medellin</u>
France	<u>CIRAD</u>
India	<u>Extension Education Society</u>
India	<u>Acharya N.G. Ranga Agricultural University</u>
India	<u>Indian Council of Agricultural Research</u>
India	<u>Skyfox Publishing Group</u>
Indonesia	<u>Universitas Prof Dr Hazairin SH</u>
Latvia	<u>Fundamental Library of Latvia University of Life Sciences and Technologies</u>
Russian Federation	<u>Alexander Galushkin Publishing House</u>
Russian Federation	<u>Saint Petersburg Forestry Research Institute</u>
Russian Federation	<u>Marina Sokolova Publishings</u>
Turkey	<u>Turkish National AGRIS Center</u>
United Kingdom	<u>Hindawi</u>



AGRIS Content Evolution 2016-2020

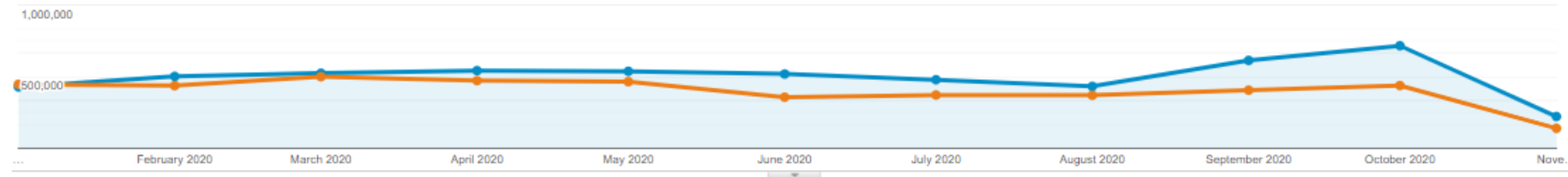




AGRIS usage statistics 2019/2020

01-Jan-2020 - 10-Nov-2020: ● Users

01-Jan-2019 - 10-Nov-2019: ● Users



Users

26.66%

5,027,296 vs 3,969,058



New Users

26.84%

4,882,482 vs 3,849,315



Sessions

28.79%

6,783,293 vs 5,266,761



Number of Sessions per User

1.68%

1.35 vs 1.33



Page Views

28.73%

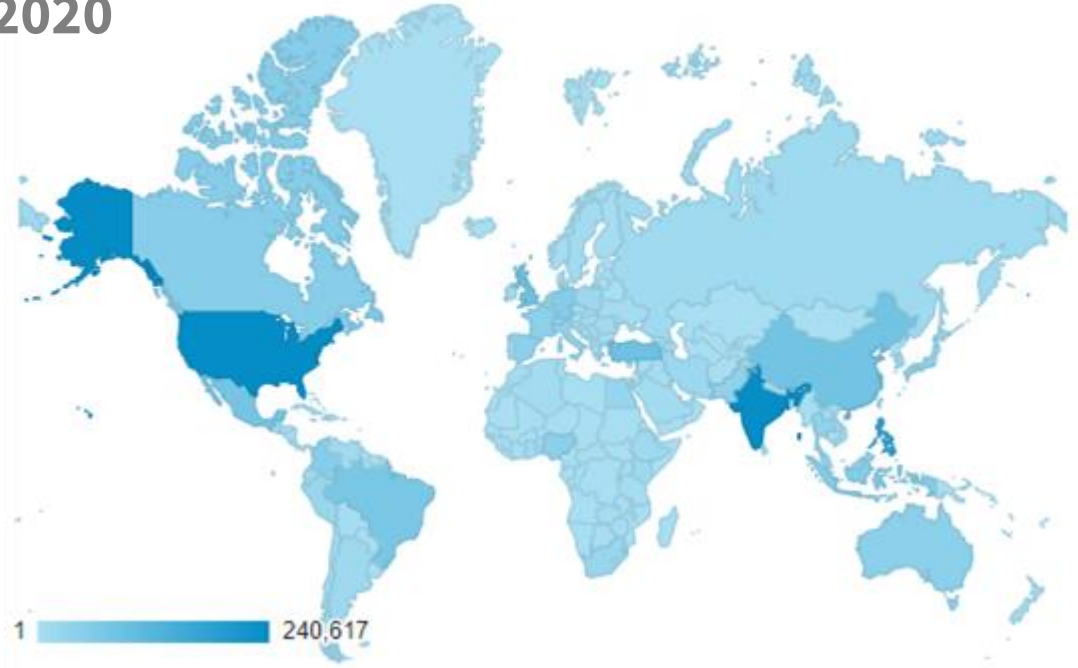
8,321,672 vs 6,464,266





Top 20 visiting countries in 2020

- | | |
|-------------------------|---------------------|
| 1 United States | 11 Colombia |
| 2 India | 12 Canada |
| 3 Philippines | 13 Australia |
| 4 Turkey | 14 Nigeria |
| 5 United Kingdom | 15 France |
| 6 China | 16 Spain |
| 7 Mexico | 17 Malaysia |
| 8 Brazil | 18 Pakistan |
| 9 Indonesia | 19 Italy |
| 10 Germany | 20 Japan |





How to contribute to AGRIS

Data collected from institutional repositories, journal publishers and harvested from aggregators via OAI-PMH or via APIs. **AGRIS does not accept individual author contributions.**

Before requesting to become an AGRIS data provider, check eligibility specifically in terms of content. The most important keywords that describe a journal or data collection must be related to the FAO Themes.

In addition, check at <https://agris.fao.org/> if data is not already indexed in AGRIS from other aggregators.

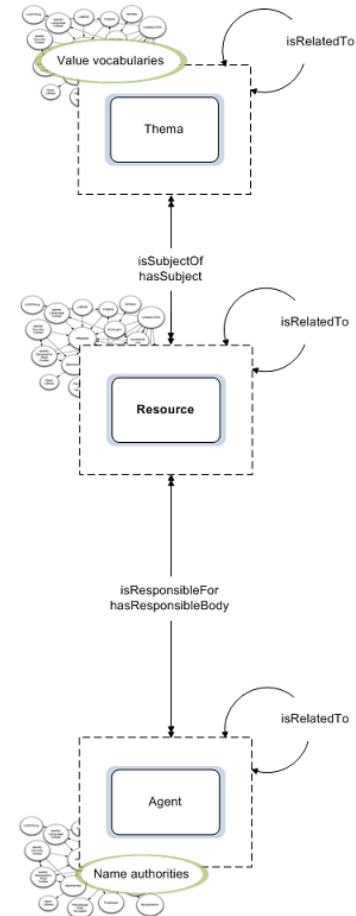
Should you have doubts on this preliminary step, please write to
agris@fao.org

Requirements for AGRIS Metadata

AGRIS provides a list of mandatory and recommended properties to be included in the metadata of records.
Note that the more descriptive the metadata, the easier will be the discovery of the resource in the Internet.

When cataloging the reference, it is recommended to add, along with titles, authors, abstracts, and AGROVOC keywords, the URLs links to the full text of the PDF of the article or publication, where this is available.

Furthermore, to make the resource more discoverable, it is strongly recommended to add English titles, abstracts and keywords.

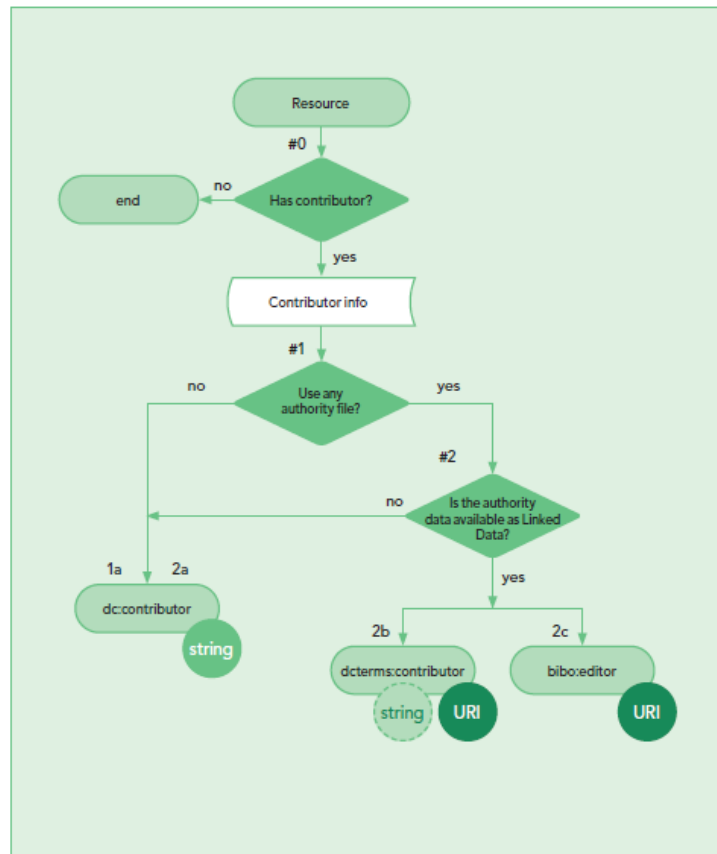


AGRIS Metadata Formats

AGRIS accepts the most common XML metadata formats such as MODS, Crossref, DOAJ, EndNote, MARC21, METS, PubMed and the AGRIS AP.

The data is curated and converted prior to the AGRIS indexing. When joining AGRIS as a data provider, it is important to specify the metadata standard used.

The AGRIS team highly recommends to consider [**LODE-BD Recommendations 3.0**](#) in order to learn about different metadata terms that can be used to describe properties included in the record.





Data provider needs to fill a form with information required by AGRIS.

After registration, it is sent a confirmation and an AGRIS ID (Identity number). *(important to use the ID whenever the data provider contact agris@fao.org to facilitate the processing of any request).*

Interested to become an AGRIS Data Provider

If you are interested in indexing your data in AGRIS and become an AGRIS Data Provider, please fill the details of this form. Your feedback will help us understand your requirements

Start Complete

Your institution *

Your name *

Your country *

e-mail *

Skype

Title of journal or repository *

System used to create metadata *



AGRIS Acceptable Use Policy



AGRIS content is licensed under CC-BY IGO 3.0. license. It is important to read the terms of this licence before confirming submission of any record to AGRIS.

AGRIS collects and index metadata (including links to the URL to the full-text) but does not store the PDF files of the article or publication.

Note also that:

- Data Providers are responsible for the correctness of the data that is submitted to AGRIS
- Use and access of the AGRIS service is subjected to the AGRIS acceptable use policy (to be read together with FAO Copyright Policies)
- By submitting data to AGRIS, data providers accept that bibliographical data describing its information resources will be visible worldwide through the FAO AGRIS platform.



How many data providers?

468 data providers in total
(from 1974 to 2020)

2017: **41** active data providers

2018: **77** active data providers

2019: **101** active data providers
from 42 countries (+31%)

Food and Agriculture Organization
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English Español Français العربية 中文 Русский

AGRIS

AGRICULTURAL SCIENCE AND TECHNOLOGY
INFORMATION

Find resources...

-- Select a language --

--Select resource type--

SEARCH

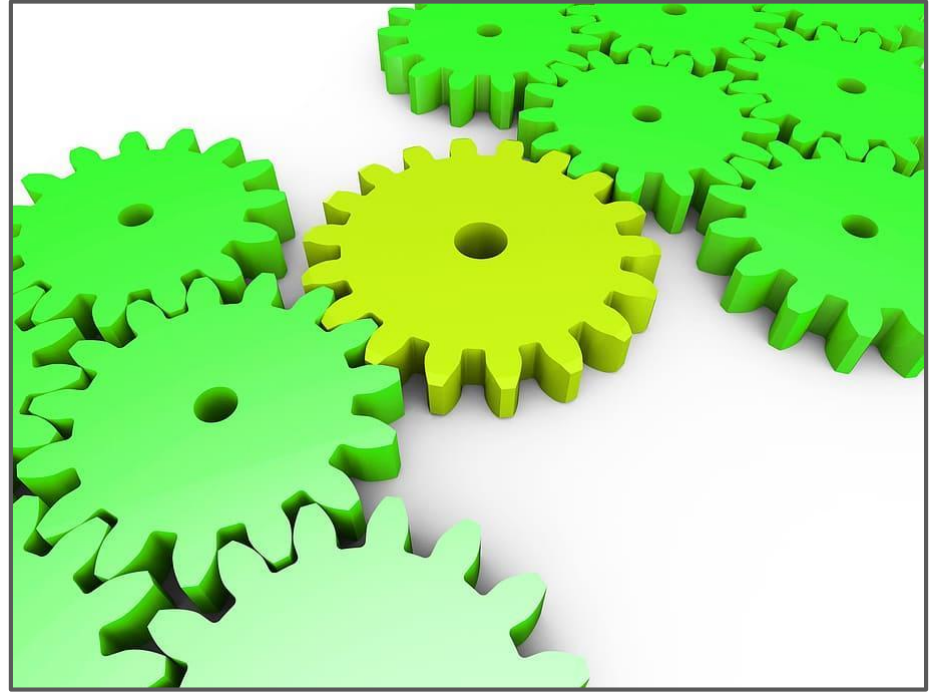
The AGRIS database contains 11,861,859 records (including 1,528 datasets) from 468 data providers



It's a mutual relationship

AGRIS gives visibility to data providers: it's indexed directly by Google and Google Scholar

Data Providers contribute to the growth and importance of AGRIS, providing their metadata





Services for data providers

- **Vision:** data providers should see AGRIS as a unique place where to store their metadata
- They must be able to browse their own metadata
- They must be able to access statistics on the usage of their metadata
 - they can see the results of their work, creating reports and disseminating statistics about their records
 - and the impact of storing their metadata in AGRIS



Data providers search pages

The screenshot displays the AGRIS search interface. On the left, a dropdown menu for 'Country' is open, listing various nations. The 'Russian Federation' is highlighted. Three green arrows with numbers 1, 2, and 3 point to specific elements: arrow 1 points to the 'Country' dropdown, arrow 2 points to the 'Data Provider' input field, and arrow 3 points to the 'VIEW PROFILE' button. The main header features the 'AGRIS' logo in green. Below it, the text 'SCIENCE AND TECHNOLOGY INFORMATION' is displayed. A search bar with a magnifying glass icon is present. Below the search bar, there are two dropdown menus: one for 'e --' and another for '--Select resource type--'. A green 'SEARCH' button is to the right of these dropdowns. Below the search bar, the text 'ains 11,861,859 records (including 1,528 data sets) from 468 data providers' is shown. Below this, the text 'AGRIS DATA PROVIDERS' is displayed. Below the text, there is a dashed box containing the text 'Data Provider'. To the right of this box are two green buttons: 'VIEW PROFILE' and 'RESET'. At the bottom, there is a green link 'Show data provider list' with a downward arrow.

Country

North Macedonia

Norway

Oman

Pakistan

Panama

Papua New Guinea

Paraguay

Peru

Philippines

Poland

Portugal

Republic of Korea

Republic of Moldova

Romania

Russian Federation

Rwanda

Saint Kitts and Nevis

Saint Vincent and the Grenadines

Samoa

Senegal

Switzerland

Country

AGRIS

SCIENCE AND TECHNOLOGY INFORMATION

Search

e --

--Select resource type--

SEARCH

ains 11,861,859 records (including 1,528 data sets) from 468 data providers

AGRIS DATA PROVIDERS

Data Provider

VIEW PROFILE

RESET

Show data provider list



Data providers search pages

-- Select a language --

Publications & Datasets

SEARCH Add query option +

Query : rice

Center Filter : Russian Federation (CSAL) X

Results 1 - 10 of 174

Order By Relevance Descending

Search records from all Data providers

Data provider: [Central Scientific Agricultural Library, Russian Academy of Agricultural Sciences](#)

journal article

[Influence of predecessors on water-physical properties of light-chestnut soil and rice efficiency in drip irrigation](#)

Kruzhilin, I.P. et al. [2017]

The article contains the results of research conducted at All-Russia Research and Development Institute of Irrigation Agriculture in 2014-2016. According to the predecessors of rice during drip irrigation. It was determined that, on average, during the years of research, the minimum density values 1.22 t/ cubic m in the soil layer 0.6 m, were formed on the soybean precursor, and the maximum co

From: [Central Scientific Agricultural Library, Russian Academy of](#)



AGRIS

Login

Email

fabrizio.celli@fao.org

Password

••••••••

Please enter the following text in the box below:

k_PG³⁰

[Generate new text](#)

kpg3o

Login

[Forgot password?](#)





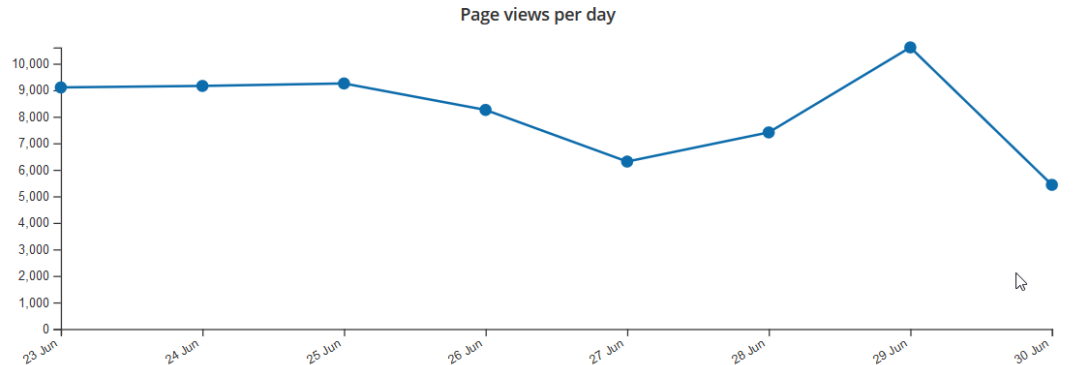
AGRIS

United States of America (NAL/USDA)

Information Systems Division, National Agricultural Library

The National Agricultural Library is one of four national libraries of the United States, with locations in Beltsville, Maryland and Washington, D.C. It houses one of the world's largest and most accessible agricultural information collections and serves as the nexus for a national network of state land-grant and U.S. Department of Agriculture field libraries. In fiscal year 2011 (Oct 2010 through Sept 2011) NAL delivered more than 100 million direct customer service transactions.

Total page views: 65534

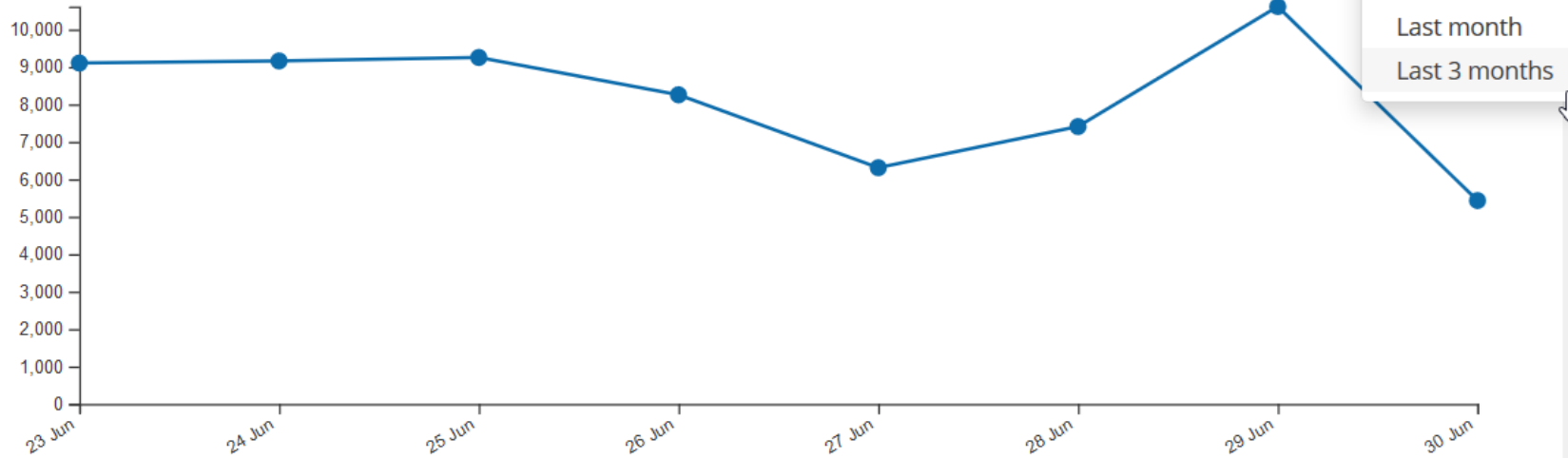




Change the time interval

Total page views: 65534

Page views per day





Top 15 most visited records

Most visited

	Name	Page views
1	Chemical composition of poultry meat: A comparison between broilers, soup hens, turkeys, ducks and geese	210
2	Antimicrobial activity of limonene	142
3	Evaluation of antiviral activity of fractionated extracts of sage <i>Salvia officinalis</i> L. (Lamiaceae)	132
4	Economic importance, biological properties, cultivars and production practices of sunflower	119
5	The role and importance of some secondary metabolites (terpenes, alkanes and flavonoids) in trees	118
6	The role of Internet in human resource management	118
7	Characteristics of cross-cultural communication	102
8	Business plan in animal husbandry	81
9	Determination of total phosphorus in the meat products	75
10	Determination of anethole in essential oil and extract from fennel fruit (<i>Foeniculi fructus</i>)	71
11	PESTEL analysis of project management in water sector in Bulgaria	60
12	Onion production guide	59
13	Advantages and limitations in bioherbicides use	59
14	Dog poisoning with furadan 35-ST (carbamate insecticide)	56
15	Geographic information systems for rural development planning and management	49



New AGRIS Open DataSet (ODS)



AGRIS is currently building up an **open data set** which can be shared with third parties and ensure an even wider dissemination of information about metadata records.

As a Data Provider, you can choose to participate in the AGRIS open data set or not.

It is recommended to make your metadata open for the AGRIS open data set to enhance visibility of your information resources.

Please let us know if you would like to join the AGRIS open data set with your open metadata.!



Testimonials

"There are many benefits of participating in AGRIS. First of all, it is an international collaboration and partnership. The participation of the University library in AGRIS helps to increase visibility and accessibility of agricultural contents issued in the Republic of Moldova in the information global space. It also helps to facilitate the information and data exchange in the field of agricultural sciences and provides reliable AGRIS user services."

*Viorica Lupu, State Agrarian University of Moldova
(Republic of Moldova)*

"AGRIS creates a great benefit for the younger Georgian generation, who are interested in the agricultural domain and it opens the door to the rich collection of research documents, which represents the great possibility to find the potential for collaboration, examples for analyzing problems and others' methods of resolutions of problems."

Marina Razmadze, Techinformi (Georgia)



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AGRIS enables discoverability



AGRIS brings discoverability

- Shared infrastructure for research literature and data
- Findable, interoperable and discoverable content
- AGROVOC multilingual thesaurus
- Trusted organisational support
- Enabling scholarly communication for all



Hybrid structure: data & service provider

- AGRIS metadata guidelines: descriptive, compliant with standards
- Semantic technology for interoperability
- Use policy and adoption of Creative Commons BY IGO 3.0
- AGRIS Open DataSet (ODS) to enhance visibility
- Google Scholar collaboration
- Dashboard for usage statistics



Takeaways

- Beware of inequalities in scholarly communication landscape
- Ask for bibliodiversity and respond to relevant calls
- Improve the ways in which the outputs of scholarly research are made available by
 - using repositories and aggregators compliant with standards
 - adopting open and interoperable standards
 - making your research available in shared, trusted infrastructure services like AGRIS



The AGRIS team



IMMA SUBIRATS

Information management officer,
AGRIS programme manager



FABRIZIO CELLI

Software engineer,
AGRIS technical lead



STEFANO ANIBALDI

Information management
specialist, AGRIS data curator



DANIELE OLIVOTTI

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support



TIZIANO DI CONDINA

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GIAMPAOLO RUGO

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Contact us! AGRIS@fao.org Follow along on Twitter @FAOAIMS