

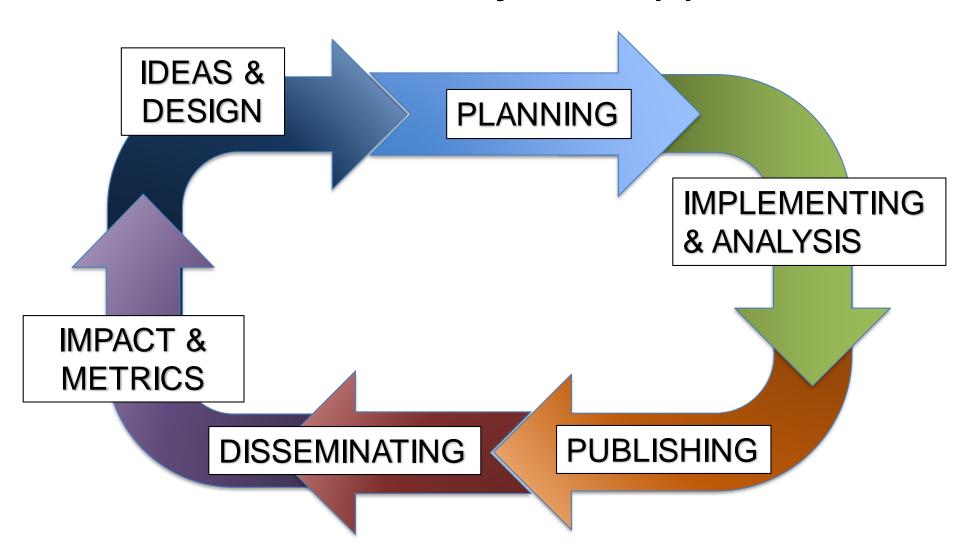
National Agricultural Library (NAL) Mission

NAL facilitates the creation of agricultural knowledge through the acquisition, curation, and dissemination of information needed to solve agricultural challenges.





Research Lifecycle Support



Objectives

- Introduce publicly available research tools and services of the National Agricultural Library
- Learn how to use these tools and services to conduct and support research throughout each stage of the research lifecycle

Overview

- I. Research Idea Development
- II. Research Planning
- III. Conducting Research
- IV. Writing and Publishing
- V. Dissemination and Preservation





AGRICOLA

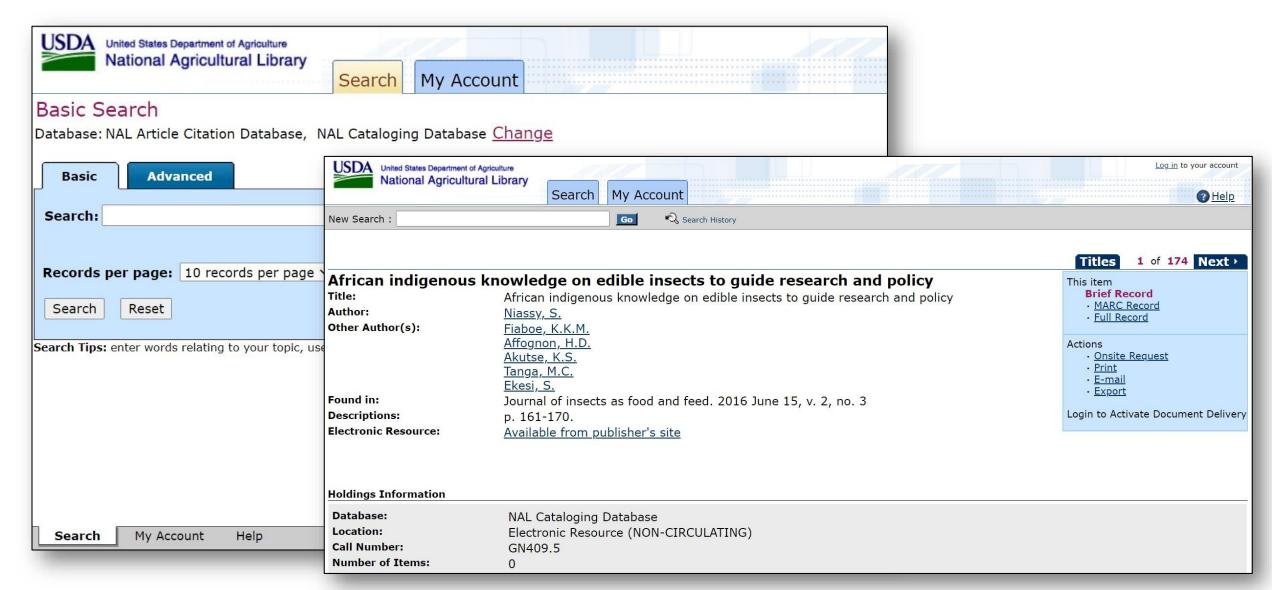
https://agricola.nal.usda.gov

AGRICOLA database comprehensively covers agricultural literature:

- 5,200,000+ records to as far back as the 15th century
- Print and Electronic Materials from the NAL Collection



AGRICOLA





NAL Thesaurus

https://agclass.nal.usda.gov

- Contains over 265,000 terms, including 153,000+ descriptors in English and Spanish
- NAL Thesaurus includes hierarchical, equivalents and associate relationships among concepts
- NAL Thesaurus is used to select controlled vocabulary terms for subject indexing of AGRICOLA, PubAg and other databases



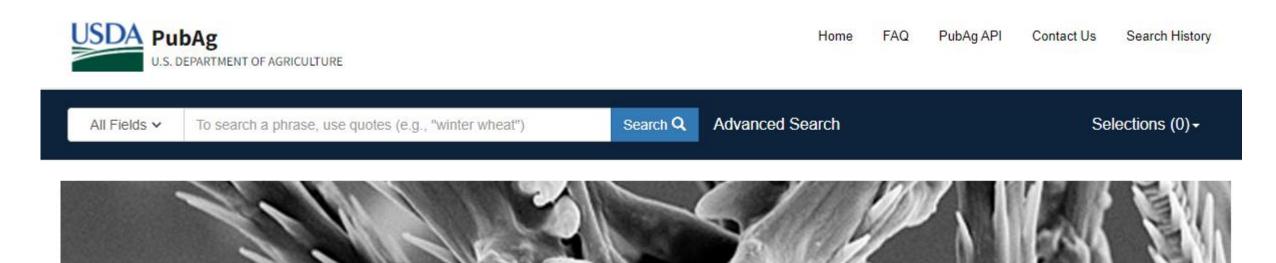
U.S. Department of Agriculture Pomological Watercolor Collection. Rare and Special Collections, National Agricultural Library, Beltsville, MD 20705

PubAg

https://pubag.nal.usda.gov

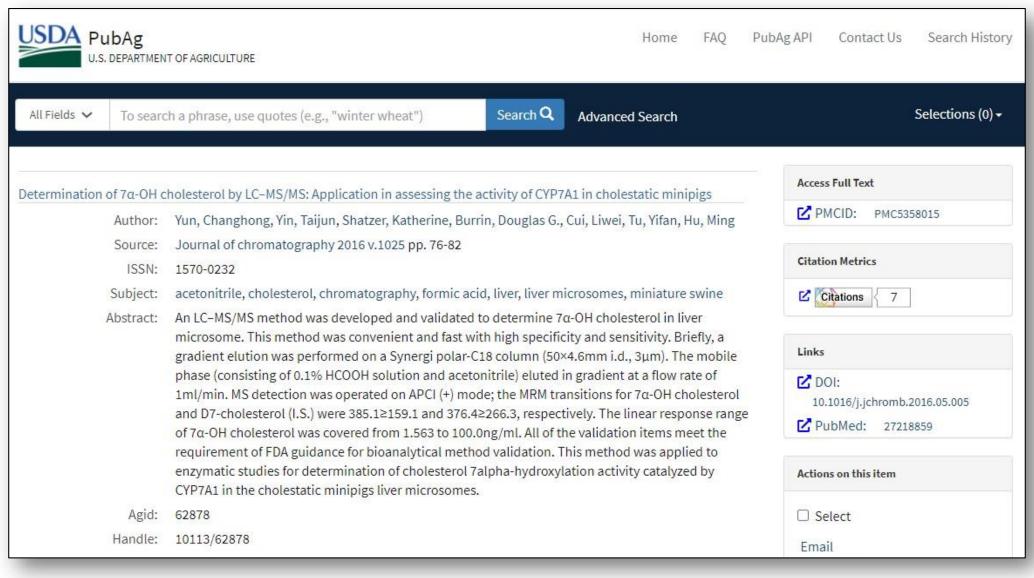
PubAg is a free, searchable database containing links to:

- 300,000+ full-text articles* relevant to the agricultural sciences
- indexed citations to peer-reviewed journal articles in the agricultural sciences





PubAg



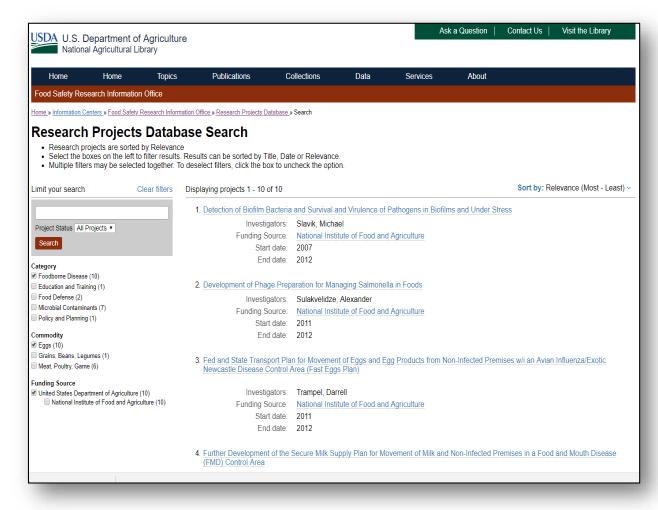
PubAg Links to USDA-funded Publications

- Free public access to the best available full-text version of USDA-funded scholarly publications
- Access to full text will occur after at least a 12-month administrative interval.
- Access will be provided earlier when the publisher makes a full-text version available for free

Food Safety Research Projects Database

- Browse food safety categories, commodities, and funding sources from the homepage.
- Dynamic filtering in advance search allows you to choose any combination of categories, food types, and funding agencies.
- Features that allows you to sort by relevance, date, or title.

Learn more at: https://www.nal.usda.gov/fsrio/research-projects



FSRIO Research Publications Feed



- Provides ready access to the latest food safety research publications, including ahead of print.
- Currently tracks 200+ journals
- Publications generated by these feeds are grouped by:
 - ✓ Journal
 - ✓ Subject

Learn more at:

https://www.nal.usda.gov/fsrio/research/publications



Animal Welfare Literature Review Training

Meeting the Information Requirements of the Animal Welfare Act

This in-person workshop is intended for the regulated community (any personnel working with animals in research, testing, or education) and is typically held at the National Agricultural Library (NAL) in Beltsville, Maryland. However, due to COVID-19, AWIC is offering this workshop through a virtual platform.

About the Workshop

The regulations of the <u>AWA</u> require that investigators provide Institutional Animal Care and Use Committees (IACUCs) with documentation demonstrating that alternatives to procedures that may cause more than momentary pain or distress to the animals have been considered and that activities do not unnecessarily duplicate previous experiments. A thorough literature search regarding alternatives meets this Federal mandate. An alternative is any procedure which results in the reduction in the numbers of animals used, refinement of techniques, or replacement of animals.

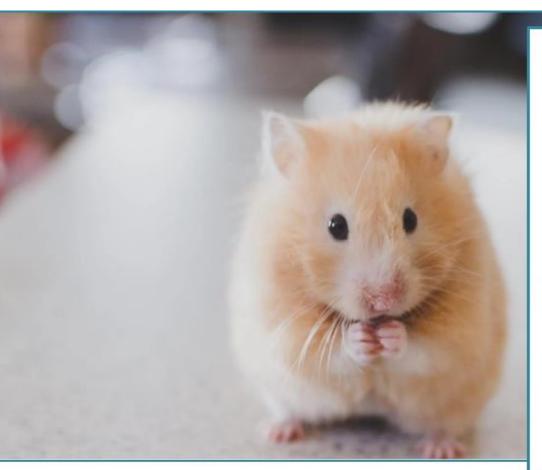


Real-Time Workshop

To Register: http://bit.ly/3dkQpzk

Self-Paced AWIC Workshop

To Register: http://bit.ly/2ZLkAtd



Online Animal Welfare Workshop

This online version of the workshop provides an interactive environment where participants can learn about conducting literature searches, the history of animal welfare law and the specific responsibilities of researchers and IACUCs.

Combining the expertise of the AWIC staff and the flexibility of self-paced learning, the online workshop meets the needs of researchers, librarians and IACUC members nationwide.

What You'll Cover

- · A historical overview of the Animal Welfare Act (AWA), and regulations
- · What is meant by the Information requirements of the Animal Welfare Act (AWA).
- 3Rs Alternatives of Reduction, Refinement, and Replacement
- · Databases and resources available to access scientific literature
- A systematic approach to accessing information and creating effective literature search strategies.



Customizable Trainings

Freely provided upon request

Information Requirements of the AWA

History of the Animal Welfare Act

3Rs Alternatives/Resources

Conducting a Literature Search

Animal Welfare Information Center (AWIC)



Data Management Challenges

People (Researchers)

- Not trained in data management
- Don't think about long-term preservation
- Career demands to produce papers outweigh managing data
- Great need for effective collaboration tools (with controls)
- Few researchers know about services offered by libraries

https://www.clir.org/pubs/reports/pub154/problem-of-data/

7 Greatest Causes of Data Loss

(+media degradation over time)

- Deleting files accidentally
- Viruses and damaging malware
- Hardware crashes
- Power failures
- Computer theft
- Spilling coffee/water other damaging fluids

https://www.databackuponlinestorage.com/7 Causes of Data Loss



What is a Data Management Plan?

- A guideline for the life cycle of your data
- A brief outline
 - Who
 - What
 - When
 - Where
 - How
- Easy to understand

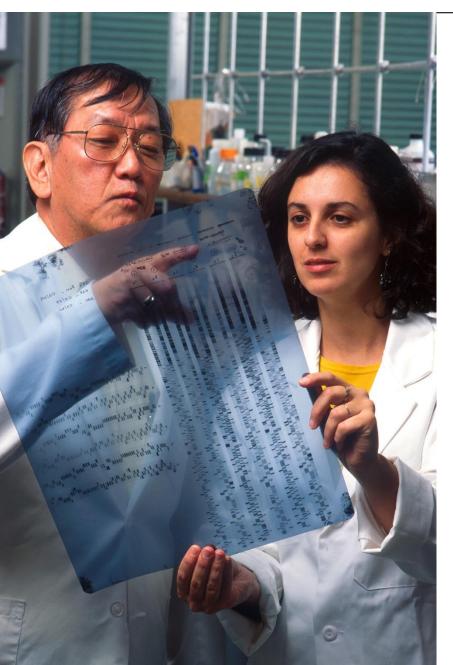
A Data Management Plan is NOT...

- An in-depth documentation of your protocol
- Workflows instructions, charts, diagrams, the names of every person or company who will interact with the project, or indepth review guidelines
- The end of the conversation about data management
- Concerned with paper or manuscript publication



Why Create a DMP?

- Proper management of data
 - The FAIR data principles
 - Findable
 - Accessible
 - Interoperable
 - Reusable
- Follow the US Federal public access and open data directives
- Funding agency requirements



Data Management Plan Overview

- 1. Expected data types
- 2. Data formats and standards
- 3. Data storage and preservation of access
- 4. Data sharing and public access
- 5. Roles and responsibilities
- 6. Monitoring and reporting



DMP Consultations

- NAL will review DMP drafts (subject to capacity and priorities)
 - Send DMP draft and Project Summary draft to <u>agref@usda.gov</u>
 - We will provide review and propose improvements for DMPs
 - Requirements: at least 5 business days
- Exceptional DMP example: <u>https://www.nal.usda.gov/main/data/data-management-plan-guidance</u>



Domain Specific Data Applications

https://www.nal.usda.gov/main/data

NAL provides an integrated portfolio of data products that support ARS and external agricultural research communities



Federal Life Cycle Assessment (LCA) Commons

An interagency data portal and community of practice for research methods



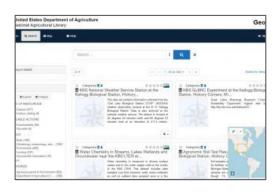
i5K Workspace

A workbench for arthropod genome communities to curate, visualize and share data.



FoodData Central

Nutrient profile data and links to related agricultural and experimental research.

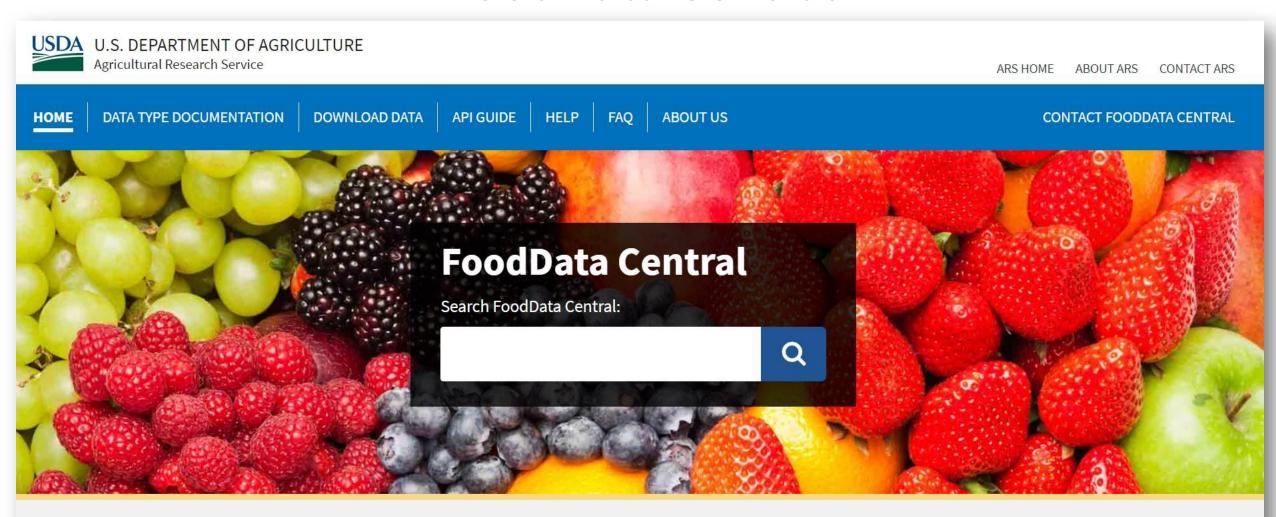


Geodata @ NAL

A catalog of locationbased agricultural research data, imagery, and more.



FoodData Central









NAL Collections

- Houses one of the world's largest collections devoted to agriculture and its related sciences, with both physical and digital collections
- One of five U.S. National Libraries
- Congressionally designated depository for U.S. Government documents
- Departmental library for USDA



Research from NAL Collections

Key Fact sheets Glossary Gallery

About the Farm, Field and Fireside Collection

Together with the introduction of rural mail delivery, the telephone, and the automobile, farm newspapers played a key role in the modernization historically significant U.S. farm weeklies titles document a time of transition in A Back.

Titles Currently Available:

- Banker Farmer 1 December 1913 1 Febru
- Berkshire World and Cornbelt Stockman 1
- Better Farming 1 May 1913 1 March 1925
- Chicago Livestock World 1 January 1902 -
- Chicago Packer 13 April 1907 17 June 19
- Daily National Live Stock Reporter 1 Decer
- Farm, Field, and Fireside 1 February 1884 -
- Farm, Field, and Stockman 1 January 1885
- Farm Home 1 August 1899 1 June 1920 (
- Farm Press 1 October 1906 1 April 1913 (
- Farmers Gazette 1 December 1883 1 December 1
- Farmers' Review 1 September 1879 25 M
- Farmers Voice 1 January 1898 15 May 19
- Farmers' Weekly Review 24 April 1929 31
- Farmer's Wife 1 January 1906 1 April 193
- Illinois Farmer 1 January 1856 1 October
- Lancaster Farming 4 November 1955 29
- Lee County Farm News 6 June 1922 19 D

About the tool

> Introduction

Home About the tool

- > Scope
- > About microlepidoptera
- > Specimen preparation
- > Using the key
- > Authors
- Acknowledgements
- > References
- > Copyright, citation, disclaimers

About microlepidoptera



"Microlepidoptera" informally re about half of the Lepidoptera. 7 "microleps" have larvae that fee within their host plant, rather th surface. This fact makes microl important for plant inspection because concealed larvae are ha eliminate.

In this tool, we focus on two spe genera of the tribe Gnorimosch Gelechiidae) and the Leucinode. (Pyraloidea: Crambidae). These largest radiations of microleps

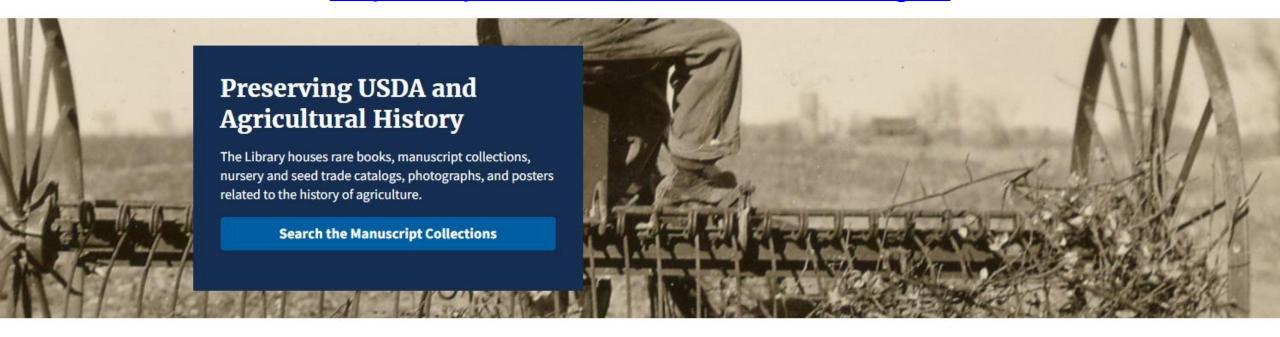
with a disproportionately great number of economically important species. The few other Solanaceae-specialist microleps in other families are not covered. These





Special Collections

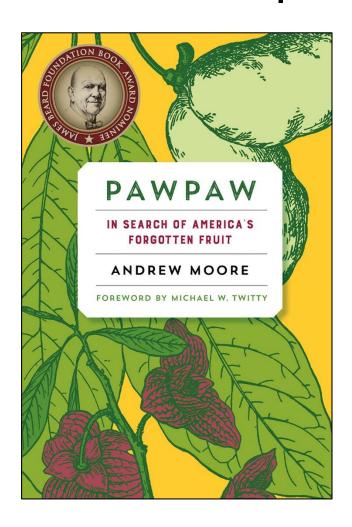
https://specialcollections.nal.usda.gov

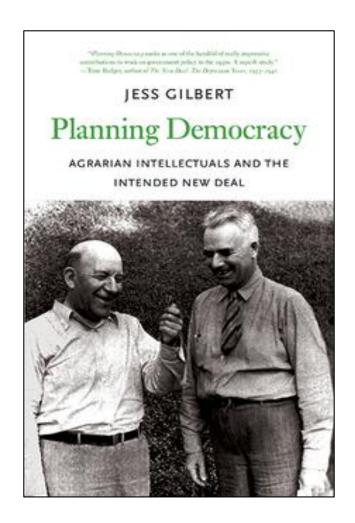


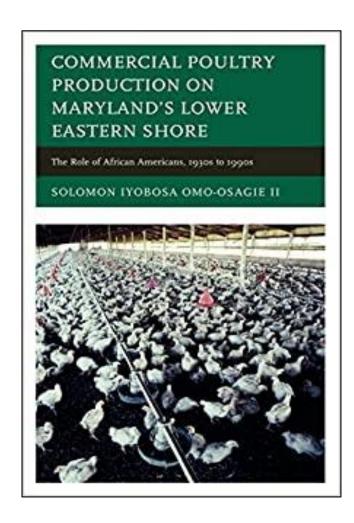
Collections include the:

- records and archives of organizations,
- personal papers of individuals,
- rare books, correspondence, objects, photographs, posters, films, and other unique materials

Special Collections Research



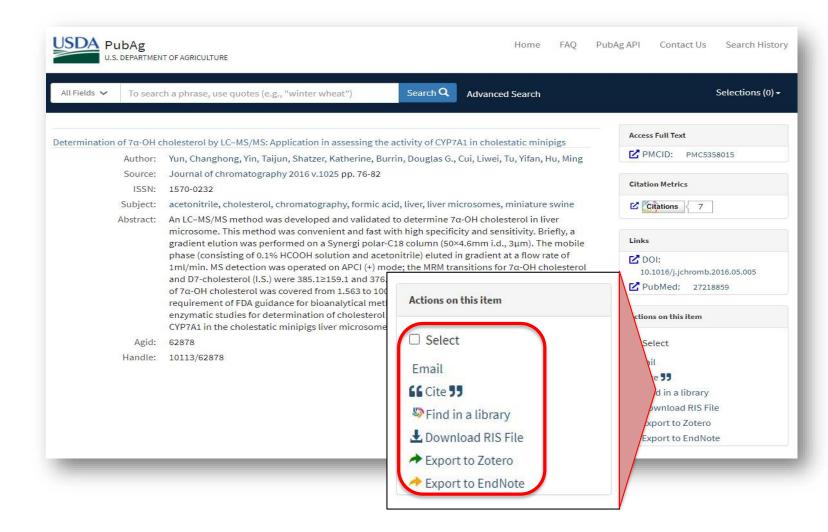






Record Exports and Citation

Several NAL
 Databases include record export in common formats





Copyright and Citation

https://specialcollections.nal.usda.gov/copyright-and-citation-guide

Information about image reuse and manuscript collection attribution

Citation Examples

Everything for the Garden. New York: Peter Henderson and Co., 1917. Henry G. Gilbert Nursery and Seed Trade Catalog Collection. Special Collections, National Agricultural Library.

Farm Security Administration Labor Camps in Arizona. Map, undated. Documentary Files 1914-1939, USDA History Collection. Special Collections, National Agricultural Library.

Heiges, Bertha. "Collins" Apple. Watercolor, 1898. USDA Pomological Watercolor Collection. Special Collections, National Agricultural Library.

Sapp, Roy. U.S. Department of Agriculture, 12th and 14th Streets, Independence Avenue and C Street as Taken from Top of Washington Monument. Photograph, circa 1950. USDA History Collection. Special Collections, National Agricultural Library.

Smith, E. D. "Anemone stellata." In *The British Flower Garden*, vol. II, by Robert Sweet, color plate 112. London: Simpkin and Marshall, 1825-1827. Rare Book Collection. Special Collections, National Agricultural Library.

Hint: Scientific names (genus, species, and subspecies) of plants and animals are usually set in italics. The genus name is capitalized and the species name is in lower case. Plant variety names are placed in quotation marks, e.g., "Red Delicious" apple.





Disseminating and Preserving Research

PubAg

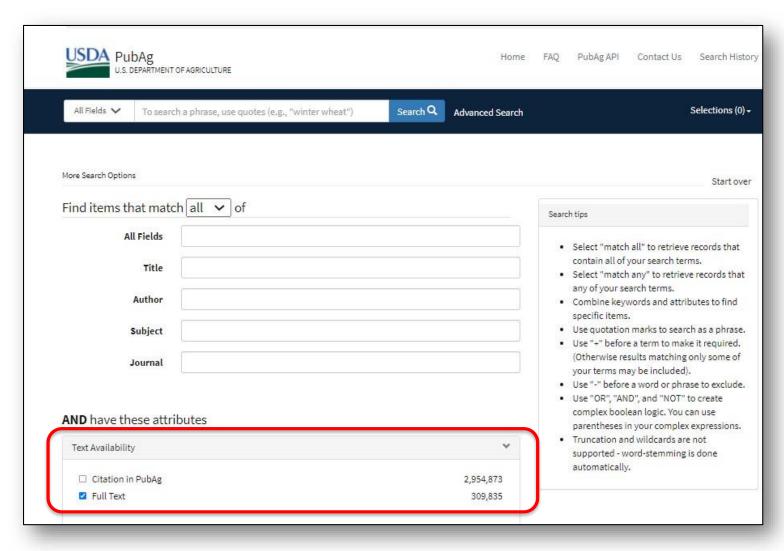
 Public access to USDA funded research publications

Ag Data Commons

Public access to research data

PubAg Submissions (USDA-funded but outside of USDA)

- Send an accepted manuscript to <u>NAL-PubAg-Curator</u> @usda.gov
- Include a DOI with submission



What is an Accepted Manuscript?

- The version of the article that has been accepted for publication and includes all modifications resulting from the peer-review process, which is also called the final peerreviewed accepted manuscript.
- It is the same content as the published version but does not include the publisher's copyediting, stylistic or formatting edits that will constitute the final "version of record" that appears in a scholarly journal.

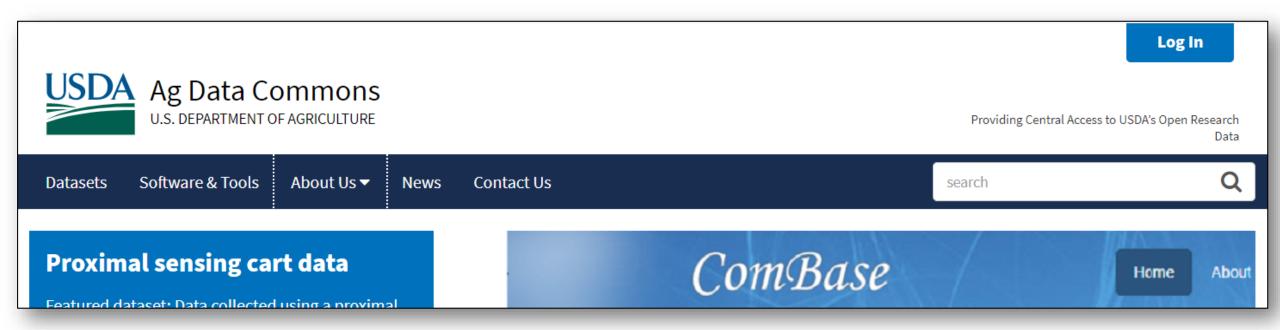
What is a Final Published Article?

- The final published article, including copyediting, stylistic edits, and formatting changes per a specific journal publisher. It is considered the "version of record" (VoR) because of potential post-publication updates such as errata, retractions, or other changes.
- When a publisher provides free access to the VoR, this is considered the "best available version," and PubAg will link to it.

Ag Data Commons

https://data.nal.usda.gov

- Catalog & data repository for USDA-funded data
- Services to create, curate, and enable access to machine-readable scientific metadata (FAIR data)





Ag Data Commons Submissions

Ag Data Commons Data Submission Manual

This submission manual provides practical information for contributors to the Ag Data Commons data repository and catalog. For further help with using the Ag Data Commons watch the Ag Data Commons User Instruction Series on the National Agricultural Library's YouTube channel. These video tutorials review much of the submission manual content. While videos may look different from the current site, the core function remains similar. We recommend searching the online submission form using a Control/F (PC) or Command/F (Mac) function to find fields listed in the submission manual.

Choose from the following sections to go straight to that information:

Quick start guide

Register for an Ag Data Commons account

Organize data

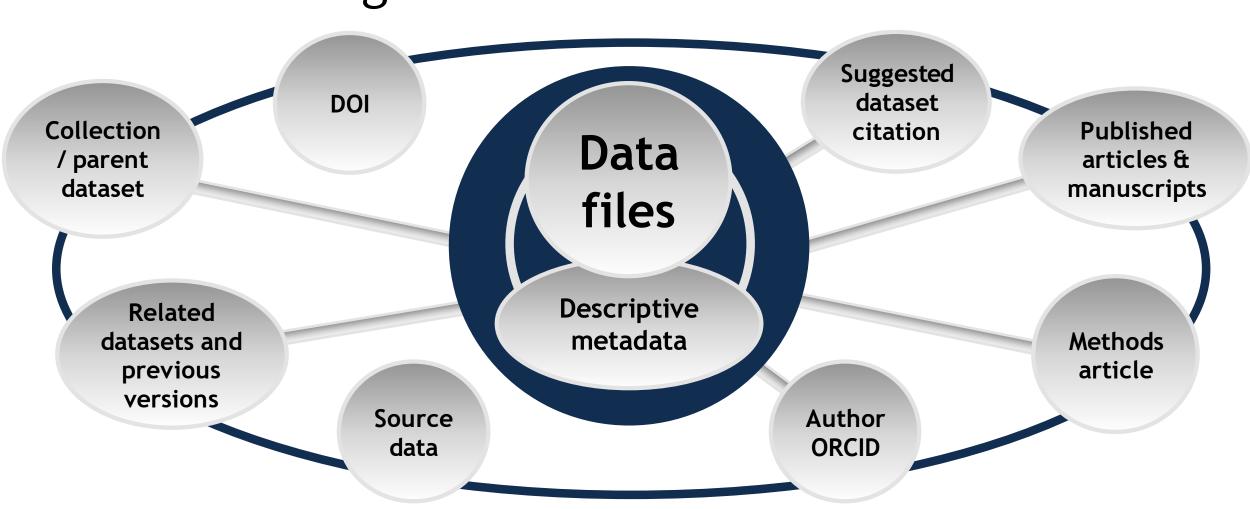
Create a dataset

Add the data

Embargo

Viewing unpublished datasets

Ag Data Commons Dataset



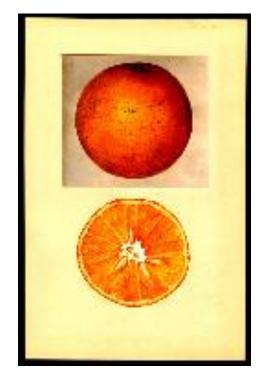


Contact NAL With Your Questions

Use our newly launched chat service for a quick response!

Chat with us or **email** at:

https://www.nal.usda.gov/ask-question



U.S. Department of Agriculture Pomological Watercolor Collection. Rare and Special Collections, National Agricultural Library, Beltsville, MD 20705