AGRICOLA (Agriculture Online Access Database)

Subject Coverage

- Agriculture
- Animal Science
- Biotechnology
- Chemistry
- Energy
- Entomology
- Food Science
- Forestry
- Genetics
- Home Economics
- Life Sciences
- Natural Resources
- Nutrition
- Pesticides
- Plant Diseases
- Rural Society
- Soil Science
- Veterinary Medicine

File Type

Bibliographic

Features

Thesaurus	Controlled Term (/CT) Geographic Term (/GT)		
Alerts (SDIs)	Monthly		
CAS Registry Number® Identifiers	☐	Page Images	☐
Keep & Share	☑	SLART	☑

Record Content

- Worldwide coverage of agriculture and related fields
- Records contain bibliographic information, geographic terms, controlled terms, and supplementary terms that include GenBank Numbers
- Abstracts are available for more than 60% of records

File Size

More than 7.1 million records (08/2025)

Coverage

1970-present

Updates

Monthly

Language

English

Database Producer

National Agricultural Library (NAL)
U.S. Department of Agriculture (USDA)
10301 Baltimore Avenue
Beltsville, MD 20705
U.S.A.

Sources

- Bibliographies
- Serial Articles
- Book Chapters
- Monographs
- Computer Files
- Serials
- Maps
- Audiovisuals
- Reports
- Catalogs and chemical libraries from suppliers worldwide

User Aids

- Online Helps (HELP DIRECTORY lists all help messages available)
- STNGUIDE

Cluster

- AGRICULTURE
- AUTHORS
- ALLBIB
- BIOSCIENCE
- CHEMISTRY
- COMPANIES
- CORPSOURCE
- ENVIRONMENT
- FOOD
- MEETINGS
- NPS
- TOXICOLOGY

STN Database Cluster information

Search and Display Field Codes

Fields that allow left truncation are indicated by an asterisk (*).

Search Field Name	Search Code	Search Example	Display Codes
Basic Index* (contains single words from the title (TI), CABA and Library of Congress controlled term (CT), supplementary term (ST), abstract (AB), named person (NA), corporate name (CO), note (NTE), geographic term, CABA and other (GT) fields)	None (or /BI)	S FORAGING S NATURAL PEST CONTROL? S STATE (L) COUNCIL# S GENBANK U35001	AB, CO, CT, GT, NA, NTE, ST, TI
Abstract*	/AB	S ORGANIC COMPOUND?/AB	AB
Accession Number	/AN	S 2025000009/AN	AN
Author	/AU	S LEMASTERS J?/AU	AU
Author Identifier (ORCID)	/AUID	S 000-0002-0619-5123/AUID	AUID
Availability (contains codes for filing and holding locations, NAL and Library of Congress call numbers designations)	/AV	S L1 AND DNAL/AV	AV
Classification Code **(1)**	/CC	S DAIRY/CC S CONSUMER ECONOMICS/CC	CC
Corporate Name **(1)**	/CO	S RESEARCH CENTER/CO	CO
Controlled Term, CABA and Library of Congress **(2)**	/CT	S CINCHONA/CT S ACID RAIN+ALL/CT	CT
Controlled Word (contains single words from CABA controlled terms and Library of Congress controlled terms)	/CW	S (AGRICULTUR? (S) WORK#)/CW	CT
Corporate Source **(1)**	/CS	S DEPARTMENT OF AGRICULTURE/CS	CS
Country of Publication (ISO code and text)	/CY	S L1 AND GB/CY	CY
Digital Object Identifier	/FTDOI	S HTTPS://DOI.ORG/10.1001/ARCHDERM.1981.01650080061031/FTDOI	FTDOI, SO
Document Number	/DN	S IND20496956/DN	DN
Document Type (code and text)	/DT (or /TC)	S C/DT	DT
Entry Date **(3)**	/ED	S ED>=JAN 2025	ED
Field Availability	/FA	S AB/FA	FA
Geographic Term, CABA and other **(2)**	/GT	S EAST ASIA/GT S SHANGHAI+BT/GT	GT
International Standard (Document) Number (contains CODEN, ISSN, and ISBN)	/ISN	S 1000-1298/ISN	ISN, SO
Journal Title (contains full and abbreviated title)	/JT	S JOURNAL OF AGRIBUSINESS/JT S J APPL PHYCOL/JT	JT, JTA, JTF, SO
Language (ISO code and text)	/LA	S FR/LA	LA
Named Person	/NA	S OBAMA MICHELLE/NA	NA
Note	/NTE	S NOTEBOOK#/NTE	NTE

Search and Display Field Codes (cont'd)

Search Field Name	Search Code	Search Example	Display Codes
Publication Year **(3)**	/PY	S 1996/PY	PY, SO
Publisher	/PB	S SPRINGER NEW YORK/PB	PB, SO
Source (contains publication title, collation information (volume, issue, pagination), meeting information, ISBN, ISSN, CODEN, FTDOI, publication date, publication frequency, Library of Congress control number, publication status, publisher, editors, government source, etc.)	/SO	S (CHROMATOGRAPHY AND ELSEVIER)/SO S VOLUME/SO	SO
Summary Language (code and text)	/SL	S EN/SL	SL
Supplementary Term (includes GenBank Numbers)	/ST	S NEST ABANDONMENT/ST S GENBANK U51451/ST	ST
Title*	/TI	S (RUN OFF OR RUNOFF)/TI	TI
Update Date **(3)**	/UP	S L4 AND UP>NOV 2012	ED
Word Count, Title **(3)**	/WC.T	S WC.T<3	WC.T

(1) Search with implied (S) proximity is available in this field.
(2) There is an online thesaurus associated with this field.
(3) Numeric search field that may be searched using numeric operators or ranges.

Property Fields (1)

In AGRICOLA a numeric search for a specific set of physical properties (/PHP) is available within the abstract and title fields. The numeric values are not displayed as single fields, but highlighted within the hit displays. Use EXPAND/PHP to search for all available physical properties. A search with the respective field codes will be carried out in the abstract and title fields. The /PHP index contains a complete list of codes and related text for all physical properties available for numeric search.

Field Code	Property	Unit	Symbol	Search Examples
/AOS	Amount of substance	Mol	mol	S 10 /AOS
/BIR	Bit Rate	Bit/Second	bit/s	S 8000-10000/BIR
/BIT	Stored Information	Bit	Bit	S BIT > 3 MEGABIT
/CAP	Capacitance	Farad	F	S 1-10 MF/CAP
/CATA	Catalytic Activity	Katal	kat	S 1-10/CATA
/CDN	Current Density	Ampere/Square Meter	A/m^2	S CDN>10 A/M**2
/CMOL	Molarity, Molar Concentration	Mol/Liter	mol/L	S UREA/BI (S) 8/CMOL
/CON	Electrical Conductance	Siemens	S	S 1S-3/CON
/DB	Decibel	Decibel	dB	S DB>50
/DEG	Degree	Degree	°	S CYLINDER/BI (S) 45/DEG
/DEN (/C)	Density (Mass Concentration	Kilogram/Cubic Meter	kg/m^3	S 5E-3-10E-3/DEN
/DEQ	Dose Equivalent, Absorbed Dose	Sievert	Sv	S 100/DEQ
/DOA	Dosage	Milligram/Kilogram/Day	mg/kg/day	S 100-300/DOA
/DOS (/LD50)	Dose	Milligram/Kilogram	mg/kg	S DOS>0.8
/DV	Viscosity, dynamic	Pascal * Second	Pa * s	S DV>5000
/ECH (/CHA)	Electric Charge, Capacity	Coulomb	C	S 0.0001-0.001/ECH

/ECO (/ECND)	Electrical Conductivity	Siemens/Meter	S/m	S ECO>800 S/M (15A) AQUEOUS
/ELC (/ECC)	Electric Current	Ampere	A	S 1-10/ELC
/ELF (/ECF)	Electric Field	Volt/Meter	V/m	S 200/ELF
/ENE	Energy	Joule	J	S DROPLETS (10A) 40 JOULE - 70 JOULE /ENE
/ERE (/ERES)	Electrical Resistivity	Ohm * Meter	Ohm * m	S ERE>0.1
/FOR	Force	Newton	N	S 50 N /FOR
/FRE (/F)	Frequency	Hertz	Hz	S OSCILLAT?/BI (S) 1- 3/FRE
/IU	International Unit	none	IU	S IU>1000 (P) VITAMIN A
/KV	Viscosity, kinematic	Square Meter/Second	m^2/s	S METHYLPOLYSILOXANES/BI (10A) 200-300 CST /KV
/LEN (/SIZ)	Length, Size	Meter	m	S 1-4/LEN
/LUME	Luminous Emittance, Illuminance	Lux	lx	S 10-50/LUME
/LUMF	Luminous Flux	Lumen	Lm	S LUMF>1000
/LUMI	Luminous Intensity	Candela	cd	S LUMI<4
/M	Mass	Kilogram	kg	S ALLOY/BI (30A) 1E-10-1E-5/M
/MCH	Mass to Charge Ratio	none	m/z	S MCH=1
/MFD (/MFS)	Magnetic Flux Density	Tesla	T	S MFD>102
/MFR (/MFL)	Mass Flow Rate	Kilogram/Second	kg/s	S MFR<0.1
/MFST	Magnetic Field Strength	Ampere/Meter	A/m	S MFST/PHP
/MM (/MW, /MOM)	Molar Mass, Molecular Weight	Gram/Mol	g/mol	S 2000-3000 G/MOL/MM

1) Exponential format is recommended for the search of particularly high or low values, e.g., 1.8E+7 or 1.8E7 (for 18000000) or 9.2E-8 (for 0.000000092).

Thesaurus Fields

Thesauri are present for the Controlled Term (/CT) and Geographic Term (/GT) search fields in the AGRICOLA File. The following Relationship Codes may be used with both the SEARCH and EXPAND commands in these fields.

Controlled Term (/CT)

Relationship Code	Content	Example
ALL	All associated terms (SELF, BT, USE, UF, NT, RT)	E BACTERIAL INSECTICIDES+ALL/CT
AUTO **(1)**	Narrower Terms (SELF, NT)	E ORGANOCHLORINE INSECTICIDES+AUTO/CT
BT	Broader Terms (SELF, BT)	E WEED CONTROL+BT/CT
HIE	Hierarchy terms (all broader and Narrower Terms) (SELF, BT, NT)	E VIRAL INSECTICIDES+HIE/CT
KT	Keyword Terms (SELF, KT)	E CONTROL+KT/CT
NT	Narrower Terms (SELF, NT)	E ECOLOGY+NT/CT
PFT	All Preferred and Forbidden Terms (SELF, USE)	E NATURAL BALANCE+PFT/CT
RT	Related (see also) terms (SELF, RT)	E RAINY SEASON+RT/CT
STD	All Broader, Narrower, and Related Terms (SELF, BT, NT, RT)	E DISEASE CONTROL+STD/CT
UF	Used For terms (Forbidden Terms) (SELF, UF)	E DROUGHT RESISTANCE+UF/CT
USE	Use terms (Preferred Terms) (SELF, USE)	E DROUGHT TOLERANCE+USE/CT

(1) Automatic Relationship Code is SET OFF. If you SET RELATION ON, the result of EXPAND without any relationship code is the same as described for AUTO.

Geographic Term (/GT)

Relationship Code	Content	Example
ALL	All associated terms (SELF, BT, NOTE, USE, UF, NT, RT)	E UK+ALL/GT
AUTO **(1)**	Narrower Terms (SELF, NT)	S SCOTLAND+AUTO/GT
BT	Broader Terms (SELF, BT)	E CONNECTICUT+BT/GT
HIE	Hierarchy Terms (all Broader and Narrower Terms) (SELF, BT, NT)	E USA+HIE/GT
KT	Keyword Terms (SELF, KT)	E AMERICA+KT/GT
NT	Narrower Terms (SELF, NT)	S ECUADOR+NT/GT
PFT	All Preferred and Forbidden Terms (SELF, USE, UF)	E UNITED STATES OF AMERICA+PFT/GT
RT	Related (see also) Terms (SELF, RT)	E PUERTO RICO+RT/GT
STD	All Broader, Narrower, and Related Terms (SELF, BT, NT, RT)	E CARIBBEAN+STD/GT
UF	Used For terms (Forbidden Terms) (SELF, UF)	E USA+UF/GT
USE	Use terms (Preferred Terms) (SELF, USE)	E BRITAIN+USE/CT

(1) Automatic Relationship Code is SET OFF. If you SET RELATION ON, the result of EXPAND without any relationship code is the same as described for AUTO.

Thesaurus Field Descriptors

Code	Description
SELF (-->)	Thesaurus Term
BT	Broader Term
KT	Keyword Term (Permuted Index)
NOTE	Note
NT	Narrower Term
RT	Related Term
UF	Forbidden Term
USE	Preferred Term

DISPLAY and PRINT Formats

Any combination of formats listed below may be used to display or print answers. Multiple codes must be separated by spaces or commas, e.g., D L1 1-5 TI SO, D L1 1-5 TI,SO. The fields are displayed in the order requested.

Hit-term highlighting is available in all fields except AU and CS. Highlighting must be on during SEARCH in order to use the HIT, KWIC, and OCC formats.

Format	Content	Examples
AB	Abstract	D TI AB
AN	Accession Number	D AN
AU	Author	D AU CS 1-5
AUID	Author Identifier (ORCID)	D AUID
AV	Availability	D AV
CC	Classification Code	D 2 4 6 CC
CO	Corporate Name	D CO
CS	Corporate Source	D CS
CT	Controlled Term, CABA and Library of Congress	D CT
CY	Country of Publication	D CY
DN	Document Number	D DN
DT (TC)	Document Type	D DT
FTDOI **(1)**	Digital Object Identifier	D FTDOI
GT	Geographic Term, CABA and other	D GT
ISN	International Standard (Document) Number (CODEN, ISBN, ISSN)	D ISN
JT **(1)**	Journal Title (JTF and JTA)	D JT
JTA **(1)**	Journal Title, Abbreviated	D JTA
JTF **(1)**	Journal Title, Full	D JTF
LA	Language	D LA SL
NA	Named Person	D NA
NTE	Note	D NTE
PB **(1)**	Publisher	D PB
PY **(1)**	Publication Year	D JT PY
SL	Summary Language	D LA SL
SO	Source	D SO
ST	Supplementary Term	D CT ST
TI	Title	D TI
WC.T **(1)**	Word Count, Title	D WC.T

DISPLAY and PRINT Formats (cont'd)

Format	Content	Examples
ABS	AN, AB	D ABS
IABS	ABS, with a text label	D IABS
ALL	AN, DN, TI, AU, CS, SO, NTE, CY, DT, LA, SL, AV, ED, AB, CC, GT, CT, ST, NA, CO	D L3 2 ALL
DALL	ALL, delimited for post-processing	D DALL
IALL	ALL, indented with text labels	D L7 6 IALL
BIB	AN, DN, TI, AU, CS, SO, NTE, CY, DT, LA, SL, AV, ED (BIB is the default)	D 1-
IBIB	BIB, indented with text labels	D IBIB
IND	AN, CC, GT, CT, ST, NA, CO	D IND
MAX	ALL, including AUID	D MAX
SCAN **(2)**	TI, CC, GT, CT, ST, NA, CO (random display without answer numbers)	D SCAN
TRIAL (TRI, SAM, SAMPLE, FREE)	TI, CC, GT, CT, ST, NA, CO	D SAM 2-4, 10
HIT	Fields containing hit terms	D HIT
KWIC	Hit terms plus 50 words on either side (Key-Word-In-Context)	D KWIC
OCC	Number of occurrences of hit terms and fields in which they occur	D OCC

(1) Custom display only.
(2) SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.

SELECT, ANALYZE, and SORT Fields

The SELECT command is used to create E-numbers or an L-number containing terms taken from the specified field in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphabetic or numeric order of the specified field(s).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract	AB	Y	N
Accession Number	AN	Y	N
Author	AU	Y **(2)**	Y
Author Identifier (ORCID)	AUID	Y	Y
Availability	AV	Y	Y
Citation	CIT	Y **(2,3)**	N
Classification Code	CC	Y	Y
Controlled Term, CABA and Library of Congress	CT	Y	N
Corporate Name	CO	Y	Y
Corporate Source	CS	Y **(2)**	Y
Country of Publication	CY	Y	Y
Digital Object Identifier	FTDOI	Y	Y
Document Number	DN	Y	Y
Document Type	DT (TC)	Y	Y
Geographic Term, CABA and other	GT	Y	Y

SELECT, ANALYZE, and SORT Fields (cont'd)

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
International Standard Book Number	ISBN	N	Y
International Standard (Document) Number	ISN	Y **(4)**	N
International Standard Serial Number	ISSN	N	Y
Journal Title	JT	Y	Y
Journal Title, Abbreviated	JTA	Y **(5)**	Y
Journal Title, Full	JTF	Y **(5)**	Y
Language	LA	Y	Y
Named Person	NA	Y	Y
Note	NTE	Y	N
Occurrence Count of Hit Terms	OCC	N	Y
Publisher	PB	Y	Y
Publication Year	PY	Y **(2)**	Y
Source	SO	Y **(6)**	N
Summary Language	SL	Y	Y
Supplementary Term	ST	Y	N
Title	TI	Y (default)	Y
Word Count, Title	WC.T	Y	Y

(1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g., SEL HIT CT.
(2) SELECT HIT and ANALYZE HIT are not valid with this field.
(3) Extracts first author, publication year, volume, and first page with a truncation symbol appended and with /RE appended to the terms created by SELECT.
(4) Selects or analyzes the CODEN, ISBN, and ISSN with /ISN appended to the terms created by SELECT.
(5) Appends /JT to the terms created by SELECT.
(6) Selects or analyzes the CODEN, ISBN, and ISSN with /SO appended to the terms created by SELECT.

Sample Records

DISPLAY ALL OF JOURNAL

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AN      2022150053   AGRICOLA
DN      IND607951225
TI      Wildland fire prevention: the impact of the Modifying Industrial
        Operations Protocol on the growth of industrial forestry-caused wildland
        fires in Ontario, Canada
AU      Granville, Kevin; Woolford, Douglas G.; Dean, C. B.; McFayden, Colin B.
SO      International journal of wildland fire (2022), Volume 31, Number 9, pp.
        825-834, 10 p.
        ISSN: 1049-8001
        DOI: https://doi.org/10.1071/WF22074
        Published by: CSIRO Publishing
        Source Note: 2022, v. 31, no. 9
NTE     https://dx.doi.org/10.1071/WF22074
DT      Journal
LA      English
AV      DNAL
ED      Entered STN: 5 Oct 2022
        Last updated on STN: 9 Jan 2025
AB      Background Industrial forestry operations in Ontario, Canada, may be
        restricted to reduce the risk of wildland fires. This is currently done
        according to the Modifying Industrial Operations Protocol (MIOP), which
        was implemented in 2008 as a replacement for the Woods Modification
        Guidelines that had been in place since 1989. One of MIOP's
        objectives is to limit the negative impact or damage caused by fires
        ignited by industrial forestry operations. Aims Treating the incremental
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growth between discovery and final sizes as a measure of suppression effectiveness, we aimed to characterise and contrast growth distributions for three successive time periods using data spanning 1976–2019 on Crown forest areas of Ontario. Methods Stratifying by first responding group (Ontario Ministry vs forestry personnel), we tested for evidence of changes in the growth distribution using the Kruskal–Wallis and Mann–Whitney U tests. Key results We found iterative improvements between successive time periods (Pre-Woods, then Woods Guidelines, then MIOP) in the growth distribution of fires first responded to by forestry personnel. Conclusions MIOP appears to be successfully limiting the negative impact of industrial forestry fires while increasing operational flexibility relative to the Woods Modification Guidelines. Implications MIOP has been implemented in a manner that still encourages safe operations while not contradicting this objective.

GT Ontario

CT fire prevention; forests; human resources; industrial forestry; risk reduction; wildfires; wildland

ST empirical cumulative distribution function; fire growth; fire size; forest fire; initial response group; Kruskal-Wallis test; Mann-Whitney U test; regulations; wildfire risk mitigation

DISPLAY BIB OF MONOGRAPHY

AN 2016015032 AGRICOLA

DN CAT31396536

TI Drosophila: methods and protocols

AU Dahmann, Christian

SO (2016), xii, 355 pages : illustrations ; 27 cm
Series Title: Methods in molecular biology (Clifton, N.J.) Springer protocols (Series)
ISBN: 9781493963690; 1493963694
Published by: Humana Press,

NTE http://www.springerprotocols.com/BookToc/doi/10.1007/978-1-4939-6371-3
https://link.springer.com/book/10.1007/978-1-4939-6371-3
http://link.springer.com/
edited by Christian Dahmann.
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LOC Control.: 2016948818

CY United States

DT Bibliography

LA English

ED Entered STN: 6 Mar 2019
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