AGROVOC

Multilingual Agricultural Thesaurus

What is AGROVOC?
AGROVOC is a multilingual structured thesaurus of all subject fields in agriculture, forestry, fisheries, food and related domains (e.g. environment). It consists of words or expressions (terms), in different languages and organized in relationships (e.g. "broader", "narrower", and "related"), used to identify or search resources. Its main role is to standardize the indexing process in order to make searching simpler and more efficient, and to provide the user with the most relevant resources.

Pollution Word Tree
Of the environment; for plants, animals or products use <28317>

- Click on the circle to expand the term -
- Click on the word to view the term in different languages -
- See Legend for abbreviations.

- NT Air pollution
- NT Sediment pollution
- NT Soil pollution
- NT Water pollution
- NT Eutrophication
- NT Sea pollution
- NT Pollutant load
- NT Groundwater pollution
- NT Nonpoint pollution
- NT Pollution by agriculture
- NT Acid deposition
- NT Transboundary pollution
- UF Environmental contamination
- UF Environmental pollution
- UF Immission
- UF Pollutant emission
- UF Pollution of agriculture
- UF+ Ochre pollution
- UF+ Oil spills
- RT Dieback
- RT Environmental degradation
- RT Environmental impact
- RT Environmental monitoring
- RT Indicator organisms
- RT Pesticide persistence
- RT Pesticides
- RT Pollutants
- RT Side effects

Who developed AGROVOC?
The AGROVOC Thesaurus was developed by FAO and the Commission of the European Communities, in the early 1980s. It is updated by FAO roughly every three months, and the user can see the specific changes on the AGROVOC website.

Who uses AGROVOC?
AGROVOC is used all over the world, mostly for indexing and retrieving data in agricultural information systems. Access figures for last year (2004) reached a peak of 180, 000 hits in the month of June alone, with an average of 5,400 hits on any weekday. About ninety countries regularly access AGROVOC on-line.

In what language is it available?
AGROVOC is available in the five official languages at FAO, which are English, French, Spanish, Chinese and Arabic. It is also available in Czech, Portuguese and Thai. Other languages such as German, Italian, Korean, Japanese, Hungarian, and Slovak, are currently either being translated or revised.

Why is AGROVOC multilingual?
AGROVOC is used world-wide, so it is imperative to translate the thesaurus into as many languages as possible in order to make it easier for the users to index or search information sources in their own language. National organizations and institutes are invited to translate AGROVOC into their local languages, and should contact the AGROVOC team at FAO-Agris-Caris@fao.org to discuss the procedure.

How is AGROVOC structured?
AGROVOC is made up of terms, which consist of one or more words representing always one and the same concept. For each term, a word block is displayed, showing the hierarchical and non-hierarchical relation to other terms: **BT** (broader term), **NT** (narrower term), **RT** (related term), **UF** (non-descriptor). **Scope notes** are used in AGROVOC to clarify the meaning and the context of terms. Taxonomic and geographical terms are marked for easy searching, filtering and downloading.

Is AGROVOC available free of charge?

AGROVOC can be downloaded freely for non-commercial use. It is available in MySQL, TagText, ISO2709, XML, and Microsoft Access formats. To download the AGROVOC database, please send your request to FAO-Agris-Caris@fao.org. When sending the request, please specify the following: Full name, Email, Organization, Reason for downloading AGROVOC, and any questions you may have.

How can I suggest a term?

AGROVOC users are encouraged to propose terms for inclusion in the database. Their suitability is then assessed by the AGROVOC team in FAO. Send your suggestions to the AGROVOC team at FAO by email to FAO-Agris-Caris@fao.org.
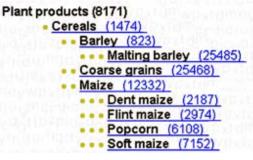
What will be the future of AGROVOC?

AGROVOC is the foundation that underpins the development of the Agricultural Ontology Service (AOS) project. Using the knowledge contained in vocabulary systems and thesauri such as AGROVOC, the AOS will be able to develop specialized domain-specific terminologies and concepts that will better support information management in the Web environment. A key objective is to add more semantics to the thesaurus, for example, by expanding and better specifying the relationships between concepts.

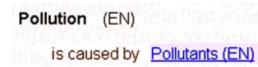## Giving more meaning to relationships in AGROVOC

A thesaurus has equivalence (USE/UF), broader term (BT), narrower term (NT), and related term (RT) relationships. These relationships provide the scope and structure for the thesaurus. For instance, knowing that a broader term for "cereals" is "plant products" and that narrow terms are "maize" and "rye" defines the scope of information represented by these terms.

There has been considerable discussion recently, relating to extending this core set of relationships. In the late 1990s, the American Library Association Sub-committee on Subject Relationships/Reference Structures examined over 165 relationships in the English language alone, and from these produced a checklist of twenty candidate subject relationships for information retrieval.

Plant products (8171)
- Cereals (1474)
  - Barley (823)
    - Malting barley (25485)
  - Coarse grains (25468)
  - Maize (12332)
    - Dent maize (2187)
    - Flint maize (2974)
    - Popcorn (6108)
    - Soft maize (7152)

We can use an extended set of relationships to perform more granular and more consistent indexing, and to enable more effective searching and browsing for users. We need to formalize rules for their development and implement processes for using them in indexing and retrieval. For example, for the term "pollution" we can describe the associations the term has with other terms. For instance, "pollutants" is formally associated with the term "pollution" using the Related term (RT) relationship. In practice, when describing the type of association, we may be able to indicate explicitly that "pollutants" cause "pollution", thus making the relationship more meaningful than simply portraying them as Related Terms (RT). A searcher requesting information about the term "pollution" would be presented with the option to limit his/her search to particular kind(s) of relationships, e.g. "Would you like to see all the causes of pollution?" The prospect for retrieval of more relevant resources is greatly increased.

Pollution (EN)

is caused by Pollutants (EN)

Ontological relationships also help to eliminate the need to do multiple searches. For example, a researcher might be interested in finding resources about the types of infestations of tomatoes. Instead of having to do multiple searches for each type of infestation (e.g. "tomatoes AND tomato mosaic tobamovirus", "tomatoes AND fungal wilt"), he/she can request the use of a formally defined ontological relationship "infecting agent" with the topic "tomatoes". Each tomato infestation resource in his/her system has been indexed using this relationship. By using it, he/she saves himself/herself the work of having to do multiple searches, and instead retrieves just what he/she needs through a single request.