

Capabilities

- ❑ Repository of available thesauri
- ❑ Description of thesauri by means of metadata
- ❑ Browsing of thesaurus content
- ❑ Edition of thesaurus content
- ❑ Exchange of thesauri according to SKOS format
- ❑ Interconnection of thesauri through WordNet lexical database

```
<meta name="HTTP-EQUIV" content="refresh; url=http://www.iaaa.es/iaaa/iaaa.htm" />
<meta name="Section" content="Introducción" />
<meta name="Description" content="Some enterprising need an image urgent re-engineering, let's take over." />
<meta name="Section" content="Diseño_Gráfico" />
<meta name="HTTP-EQUIV" content="refresh; url=http://www.iaaa.es/iaaa/iaaa.htm" />
<meta name="Section" content="Introducción" />
<meta name="Description" content="Some enterprising need an image urgent re-engineering, let's take over." />
<meta name="Section" content="Diseño_Gráfico" />
<meta name="HTTP-EQUIV" content="refresh; url=http://www.iaaa.es/iaaa/iaaa.htm" />
```

Repository of available thesauri

- ❑ Main window of the application
 - ❖ Browser of available thesauri in the local repository
- ❑ Allowed operations
 - ❖ Selection of thesauri for ulterior operations (browse content, export, delete, ...)
 - ❖ Sorting/filtering of thesauri according to descriptors values (columns)

Record Selector

Tabular

...	Unique Id	Title	Subject	Responsible Party	On-Line Linkage
...	AGROVOC	Thesaurus of agriculture AGROVOC	POLITICS, LAW ...	Food and Agriculture Organizati...	http://www.sdiger.org/dc-spatial/AGROVOC
...	EuropeanTe...	Thesaurus of territorial units of Spain ...	COUNTRIES AN...	University of Zaragoza. Advanc...	http://www.unizar.es/iaaa/thesaurus/Europee
...	GEMET	Multilingual environmental Thesaurus	SCIENCE.NATU...	European Network of Information	http://www.cen.org/dc-spatial/GEMET
...	ISO639	Codes for the representation of name...	CULTURE.LING...	International Organization for S...	http://purl.org/dc/terms/ISO639-2
...	UNESCO	Thesaurus of UNESCO	EDUCATION	United Nations Educational, Scie...	http://www.cen.org/dc-spatial/UNESCO
*					

Records count 5

Description of thesauri by means of metadata

Each thesaurus is described by means of a metadata application profile of Dublin Core

❖ http://thmanager.sourceforge.net/docthesaurus_dc_en.html

Metadata can be either visualized in HTML or edited through a form

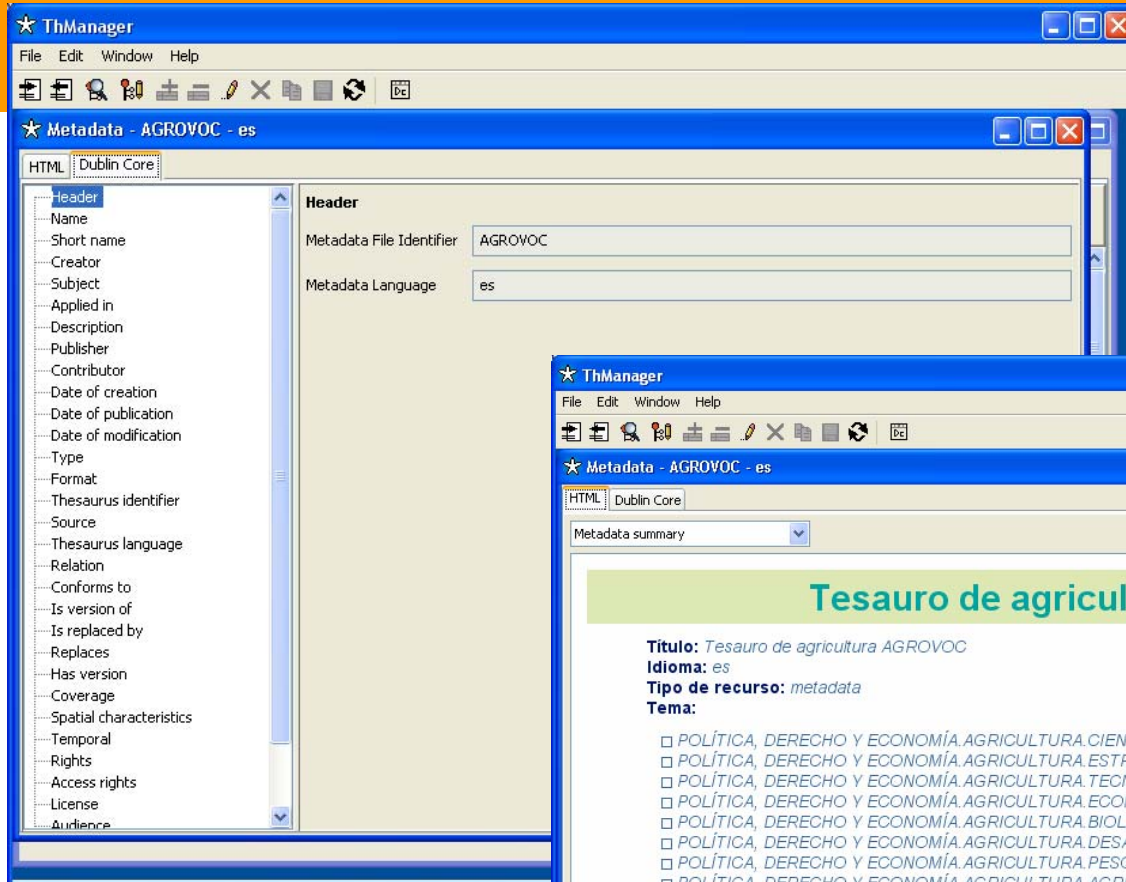
The Dublin Core Metadata Application Profile for thesaurus - Mozilla Firefox

Archivo Editar Ver Historial Marcadores Herramientas Ayuda

The Dublin Core Metadata Application Profile for thesaurus

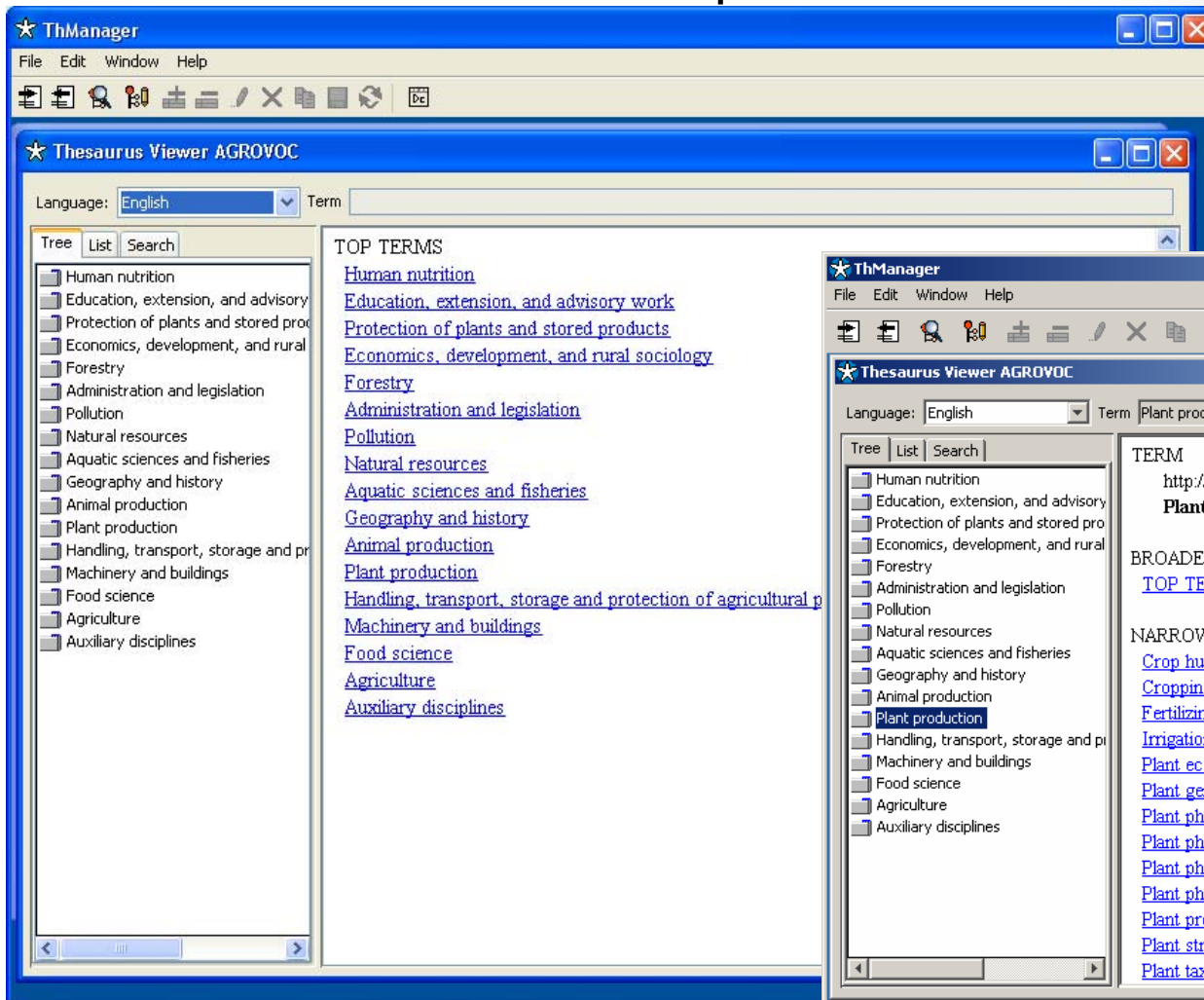
Fecha: 2005-05-04
Descripción:

Recurso	Etiqueta	Obligatoriedad	Cardinalidad	Descripción
http://purl.org/dc/elements/1.1/title	Name	Obligatorio	Unbounded	A name given to the resource.
http://purl.org/dc/terms/alternative	Short name	Obligatorio	Unbounded	Any form of the title used as a substitute or alternative to the formal title of the resource.
http://purl.org/dc/elements/1.1/creator	Creator	Obligatorio	Unbounded	An entity primarily responsible for making the content of the resource.
http://purl.org/dc/elements/1.1/subject	Subject	Obligatorio	Unbounded	The topic of the content of the resource.
http://iaaa.cps.unizar.es/iaaaterms/AppliedIn	Applied in	Obligatorio	Unbounded	Field in which the thesaurus can be used.
http://purl.org/dc/elements/1.1/description	Description	Opcional	Unbounded	An account of the content of the resource.
http://purl.org/dc/elements/1.1/publisher	Publisher	Opcional	Unbounded	An entity responsible for making the resource available.
http://purl.org/dc/elements/1.1/contributor	Contributor	Opcional	Unbounded	An entity responsible for making contributions to the content of the resource.
http://purl.org/dc/terms/created	Date of creation	Obligatorio	Unbounded	Date of creation of the resource.
http://purl.org/dc/terms/issued	Date of publication	Opcional	Unbounded	Date of formal issuance (e.g., publication) of the resource.
http://purl.org/dc/terms/modified	Date of modification	Opcional	Unbounded	Date on which the resource was changed.
http://purl.org/dc/elements/1.1/type	Type	Obligatorio	Unbounded	The nature or genre of the content of the resource.
http://purl.org/dc/elements/1.1/format	Format	Opcional	Unbounded	The physical or digital manifestation of the resource.
http://purl.org/dc/elements/1.1/identifier	Thesaurus identifier	Obligatorio	Unbounded	An unambiguous reference to the resource within a given context.
http://purl.org/dc/elements/1.1/source	Source	Opcional	Unbounded	A reference to a resource from which the present resource is derived.
http://purl.org/dc/elements/1.1/language	Thesaurus language	Obligatorio	Unbounded	A language of the intellectual content of the resource.
http://purl.org/dc/elements/1.1/relation	Relation	Opcional	Unbounded	A reference to a related thesaurus or resource.
http://purl.org/dc/terms/conformsTo	Conforms to	Opcional	Unbounded	A reference to an established standard to which the resource conforms.
http://purl.org/dc/terms/isVersionOf	Is version of	Opcional	Unbounded	The described resource is a version, edition, or adaptation of the referenced resource. Changes in version imply substantive changes in content rather than differences in format.
http://purl.org/dc/terms/isReplacedBy	Is replaced by	Opcional	Unbounded	The described resource is supplanted, displaced, or superseded by the referenced resource.
http://purl.org/dc/terms/replaces	Replaces	Opcional	Unbounded	The described resource supplants, displaces, or supersedes the referenced resource.
http://purl.org/dc/terms/hasVersion	Has version	Opcional	Unbounded	The described resource has a version, edition, or adaptation, namely, the referenced resource.
http://purl.org/dc/elements/1.1/coverage	Coverage	Opcional	Unbounded	Place covered by the thesauri (if it's the case).
http://purl.org/dc/terms/spatial	Spatial characteristics	Opcional	Unbounded	Spatial characteristics of the intellectual content of the resource.
http://purl.org/dc/terms/temporal	Temporal	Opcional	Unbounded	Temporal characteristics of the intellectual content of the resource.
http://purl.org/dc/elements/1.1/rights	Rights	Obligatorio	Unbounded	Information about rights held in and over the resource.
http://purl.org/dc/terms/accessRights	Access rights	Opcional	Unbounded	Information about who can access the resource or an indication of its security status.
http://purl.org/dc/terms/license	License	Opcional	Unbounded	A legal document giving official permission to do something with the resource.
http://purl.org/dc/terms/audience	Audience	Opcional	Unbounded	A class of entity for whom the resource is intended or useful.
http://purl.org/dc/terms/mediator	Mediator	Opcional	Unbounded	A class of entity that mediates access to the resource and for whom the resource is intended or useful.
http://www.isotc211.org/19115/MD_Metadata.dateStamp	Metadata creation date	Obligatorio	Unbounded	Date in which the metadata has been created
http://www.isotc211.org/19115/MD_Metadata.contact	Metadata point of contact	Obligatorio	Unbounded	Person who has created the metadata



Hierarchical viewer

- a tree showing the hierarchical structure of thesaurus concepts



The screenshot shows the ThManager application window with the Thesaurus Viewer AGROVOC. The language is set to English. The left pane shows a tree view of concepts, and the right pane shows the corresponding hierarchical structure of concepts.

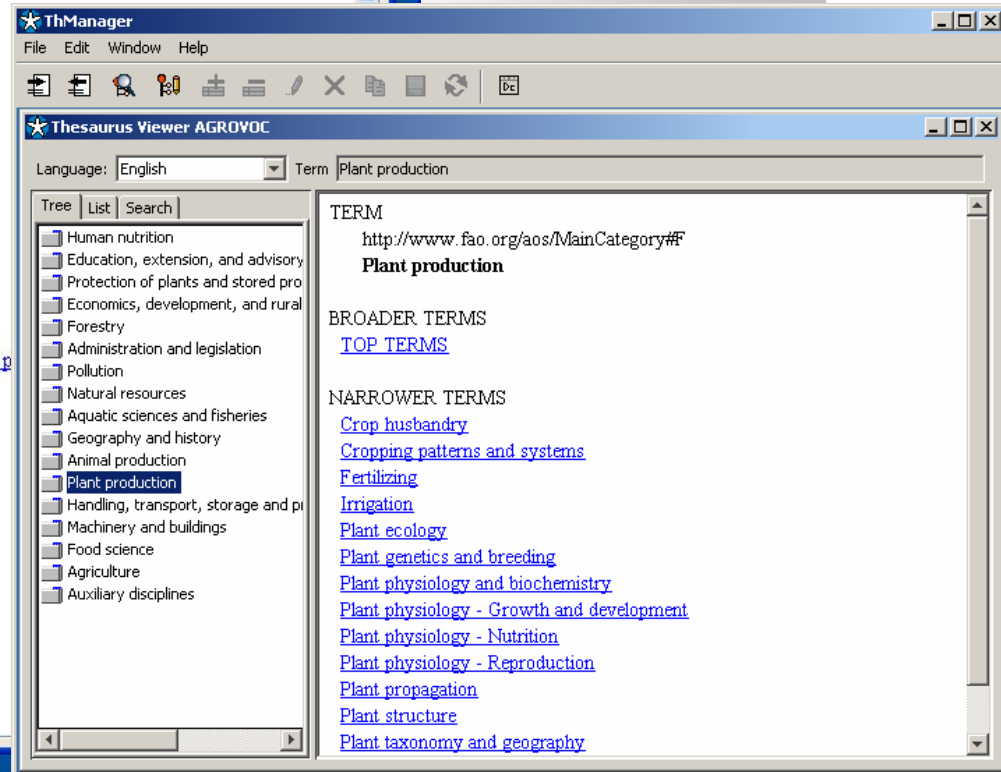
Language: English Term

Tree List Search

- Human nutrition
- Education, extension, and advisory
- Protection of plants and stored products
- Economics, development, and rural sociology
- Forestry
- Administration and legislation
- Pollution
- Natural resources
- Aquatic sciences and fisheries
- Geography and history
- Animal production
- Plant production
- Handling, transport, storage and protection of agricultural products
- Machinery and buildings
- Food science
- Agriculture
- Auxiliary disciplines

TOP TERMS

- [Human nutrition](#)
- [Education, extension, and advisory work](#)
- [Protection of plants and stored products](#)
- [Economics, development, and rural sociology](#)
- [Forestry](#)
- [Administration and legislation](#)
- [Pollution](#)
- [Natural resources](#)
- [Aquatic sciences and fisheries](#)
- [Geography and history](#)
- [Animal production](#)
- [Plant production](#)
- [Handling, transport, storage and protection of agricultural products](#)
- [Machinery and buildings](#)
- [Food science](#)
- [Agriculture](#)
- [Auxiliary disciplines](#)



The screenshot shows the ThManager application window with the Thesaurus Viewer AGROVOC. The language is set to English. The term 'Plant production' is selected in the tree view, and the right pane shows the detailed view of this concept.

Language: English Term Plant production

Tree List Search

TERM

<http://www.fao.org/aos/MainCategory#f>

Plant production

BROADER TERMS

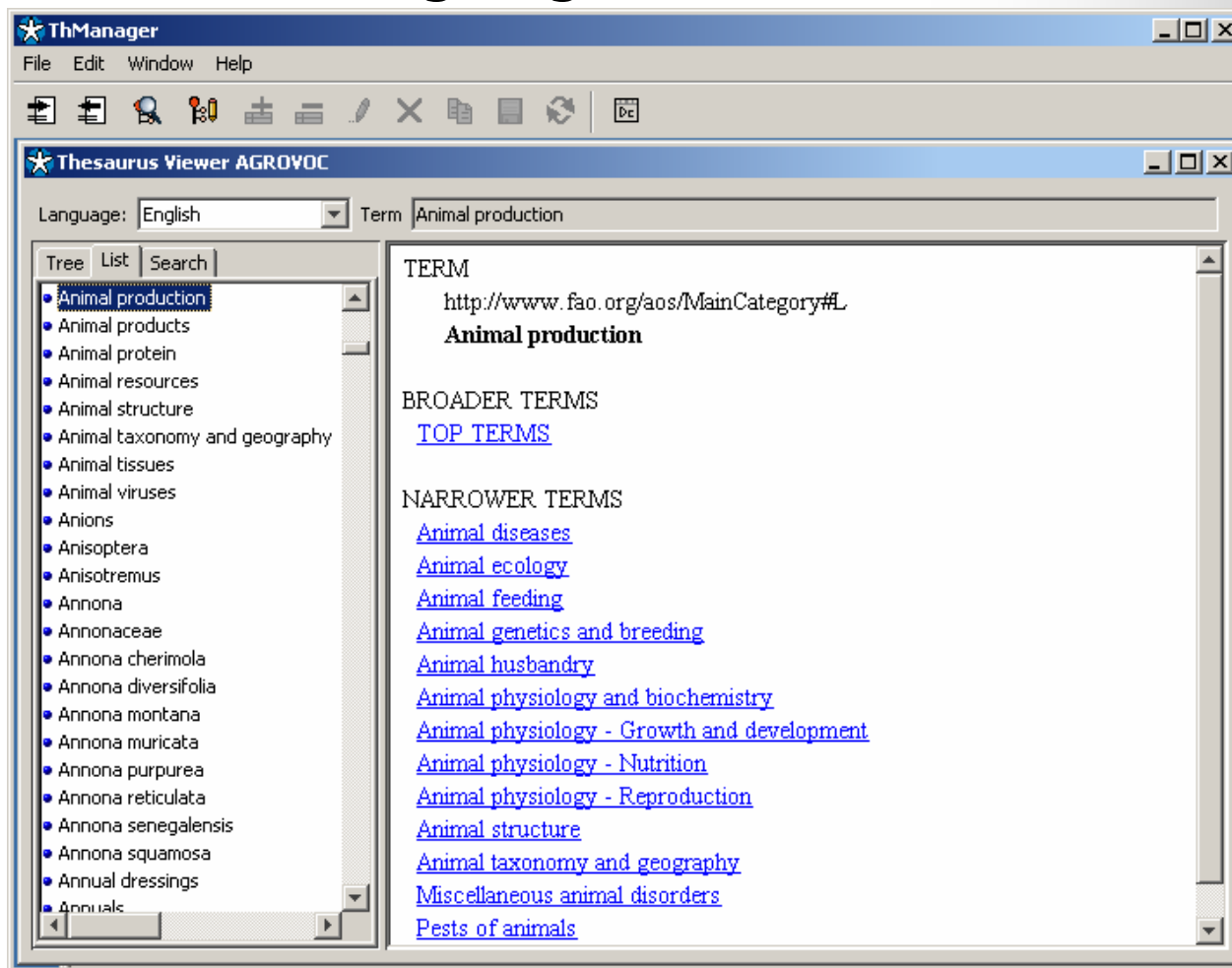
- [TOP TERMS](#)

NARROWER TERMS

- [Crop husbandry](#)
- [Cropping patterns and systems](#)
- [Fertilizing](#)
- [Irrigation](#)
- [Plant ecology](#)
- [Plant genetics and breeding](#)
- [Plant physiology and biochemistry](#)
- [Plant physiology - Growth and development](#)
- [Plant physiology - Nutrition](#)
- [Plant physiology - Reproduction](#)
- [Plant propagation](#)
- [Plant structure](#)
- [Plant taxonomy and geography](#)

Alphabetic viewer

- list of concepts alphabetically ordered in the selected language



```

<meta name="HTTP-EQUIV"
content="refresh;url=http://www.fao.org/aos/MainCategory#L" />
<meta name="Section" content="Diseño_Gráfico" />
<meta name="Description" content="Some enterpris
need an image urgent re-engineering, let's take over." />
<!-- GENMaps -->
<meta name="Section" content="Diseño_Gráfico" />
<meta name="Description" content="Some enterpris
need an image urgent re-engineering, let's take over." />
<!-- GENMaps -->
<meta name="Section" content="Diseño_Gráfico" />
<meta name="Description" content="Some enterpris
need an image urgent re-engineering, let's take over." />
<!-- GENMaps -->
<meta name="Section" content="Diseño_Gráfico" />
<meta name="Description" content="Some enterpris
need an image urgent re-engineering, let's take over." />
<!-- GENMaps -->

```



Search tool

- The searching process is based on preferred labels allowing the following criteria: "equals", "starts with" and "contains"

ThManager
File Edit Window Help

Thesaurus Viewer AGROVOC
Language: English Term: velopment, and rural sociology.Agricultural economics and policies.Production.Animal production

Tree List Search
production| Search
CONTAINS

- Adjustment of production
- Animal physiology - Reproduction
- **Animal production**
- Animal production
- Aquaculture production and mana
- Asexual reproduction
- Cut flower production
- Domestic production
- Egg production
- Feed production
- Fisheries production
- Fishery production
- Food production
- Forestry production
- Forestry production
- Honey production
- Integrated plant production
- Meat production

39 Result(s) have been found

TERM
<http://www.fao.org/aos/concept#437>
Animal production
* SYNONYMS: Animal agriculture
* SCOPE NOTE: Jako ěinnost; pro mnořství zvířat produkovaných na dané ploě USE FAKTORY VÝROBNÍ kombinované s vhodným deskriptorem

RELATED TERMS
[Feed production](#)
[Fishery production](#)
[Food production](#)
<http://www.fao.org/aos/concept#203>
<http://www.fao.org/aos/concept#8532>

BROADER TERMS
[Production](#)

NARROWER TERMS
[Aviculture](#)
[Egg production](#)
[Honey production](#)

```

<meta name="HTTP-EQUIV
Content-Length: 1047
<meta name="Section" content="Dissemination" map
<meta name="Description" content="Some enterprises
need an image urgent re-engineering, let's take over."
  
```

Edition of thesaurus content

- ❑ The tool provides an edition interface to modify the content of a thesaurus:
 - ❖ creation of concepts
 - ❖ deletion of concepts
 - ❖ edition of properties and relations
 - broader and narrower relations to define a hierarchical structure of concepts.
 - mark concepts as top concepts
 - broader concept of a micro-thesaurus
 - or concepts in a plain list
 - preferred label, alternative label, definition and scope note as multilingual properties
 - structure: property type + language + value
 - notation properties
 - useful for creating classification schemes that provide multiple coding of terms
 - example: ISO-639 list of languages has 2-letter and 3-letter codes
 - structure: type (URI) + value

```
<map name="Section" content="Section" />
<meta name="Section" content="Section" />
<map name="Description" content="Description" />
<meta name="Description" content="Description" />
<map name="PreferredLabel" content="PreferredLabel" />
<meta name="PreferredLabel" content="PreferredLabel" />
<map name="AlternativeLabel" content="AlternativeLabel" />
<meta name="AlternativeLabel" content="AlternativeLabel" />
<map name="Definition" content="Definition" />
<meta name="Definition" content="Definition" />
<map name="ScopeNote" content="ScopeNote" />
<meta name="ScopeNote" content="ScopeNote" />
<map name="Notation" content="Notation" />
<meta name="Notation" content="Notation" />
</map>
```

Edition of thesaurus content



Thesaurus editor

English

URI: <http://www.eionet.eu.int/gemet/concept/13285>

ATTRIBUTES

Top concept

Type	Language	Value
Preferred label	Greek	δυνατότητα προσφυγής στη δικαιοσύνη
Preferred label	English	access to the courts
Preferred label	Spanish	acceso a la justicia
Preferred label	Estonian	juurdepääs õigustõistmisele
Preferred label	Basque	auzitegira heltzeko bide

Type: Language:

Value:

NOTATIONS

Type	Value
*	

Type: Value:

RELATIONS

Type	URI
Broader	http://www.eionet.eu.int/gemet/concept/11583
*	

Type: URI:

Add/Remove Language

- abandoned industrial site
- abandoned vehicle
- abiotic environment
- abiotic factor
- absorption (exposure)
- acceptable daily intake
- acceptable risk level
- ACCESSORY LISTS
- access road
- access to administrative documents
- access to culture
- access to information
- access to the courts**
- access to the sea
- accident
- accidental release of organisms
- accident source
- accounting
- accounting system
- accumulation in body tissues
- accumulator
- acid
- acid deposition
- acidification
- acidity
- acidity degree
- acid rain
- acoustical quality
- acoustic comfort
- acoustic filter
- acoustic insulation
- acoustic level
- acoustic property
- acoustics
- act
- actinide
- actinium
- action group

```

<meta name="HTTP-EQUIV"
content="refresh;url=http://www.eionet.eu.int/gemet/concept/13285" />
<meta name="Section" content="Diseno_Garrito" />
<meta name="HTTP-EQUIV"
content="refresh;url=http://www.eionet.eu.int/gemet/concept/13285" />
<meta name="Section" content="Diseno_Garrito" />
    
```


Conclusions

- ❑ ThManager is a flexible tool to manage thesauri
 - ❖ It provides enhanced functionality for the improvement of classifications
 - ❖ Tested with well known thesauri
 - EEA - GEMET (General Multilingual European Thesaurus), FAO - AGROVOC, UNESCO Thesaurus, European Commission - EUROVOC
- ❑ This tool can be easily integrated in other tools
 - ❖ It is integrated within CatMDEdit to select the appropriate terms for metadata elements
 - ❖ Accesible as a Web Service (Web Ontology Service) for integration within Web applications that require selection of controlled vocabularies

