ENDURE

European Network for Durable Exploitation of crop protection strategies

Project number: 031499

Network of Excellence
Sixth Framework Programme

Thematic Priority 5
FOOD and Quality and Safety

Deliverable DI4.8

Platform with information on research projects made available to Endure partners

Due date of deliverable: M28

Actual submission date: M30

Start date of the project: January 1st, 2007 **Duration**: 48 months

Organisation name of lead contractor: AU

Revision: V1

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)	
Dissemination Level	
PU Public	**X**

Table of contents

Glossary

Non-chemical plant protection
Non-chemical plant protection covers all measures carried out in order to prevent or control pathogens, pests and weeds. It does not include measures used to introduce low-risk pesticides, reduce the input of pesticides (fungicides, insecticides, herbicides etc.) or improve the effect of these, nor decision support systems to this end.

Preventive measures
Preventive measures are measures carried out to prevent or lessen the impact of pathogens, pests and weeds such as crop rotation, healthy seed material, avoiding infection, using resistant varieties etc.

Direct control measures
Direct control measures are measures carried out to achieve control of the pathogens, pests or weeds in the field, such as mechanical weed control, application of non-pesticide compounds, biological control etc.

Summary

A searchable database with information about past and ongoing research projects in non-chemical plant protection in wheat, tomato, pomefruit and potatoes has been developed. At present there are 158 projects in the database, and these projects can be searched by crop, pest, region and topic. The database is available at the Endure Information Centre (EIC) at the URL http://www.land-lab.org:8888/alps/search.xhtml. The EIC will be accessible to public in autumn 2009; it is restricted to ENDURE members until then. The database has also an input mask to add new projects and upload documents.
A content-related survey of all projects has been already given with *Deliverable DI4.4* "Directory of relevant written and digital knowledge, resources and tools in each European state promoting sustainable alternatives to pesticides".

Definitions

Keywords
Crop and Pest names followed the EPPO codes (http://www.eppo.org/)
Region followed the Nomenclature of territorial units for statistics (NUTS)[1] of EUROSTAT. The keywords in the Topics-list followed the general topic-list that was agreed between the participants of working group IA4.1 and SA4.1 after the Kleinmachnow-meeting ultimo January 2009.

[1] http://ec.europa.eu/comm/eurostat/ramon/nuts/basicnuts_regions_en.html

1. Project database in Endure Information Centre

1.1. Design of database

1.1.1. Commons Data

Commons Data includes all basic tables, shared by all Technical Task Force (TTF) members. Here only the relevant common tables are explained.

1.1.1.1. Table Crop

- All crops known by EIC
- Crops are described by EPPO Code

1.1.1.2. Table Pest

- All pests known by EIC
- Pests are described by EPPO Code

1.1.1.3. Table Topic

- The topic tree created by SA4.1

1.1.1.4. Table Region

- European regions described by NUTS[2] Code
- Note that this table is currently discussed and may be changed later

1.1.1.5. Table Organization

- A list of organisations relevant for the ENDURE network in any way
- Organisations can be part of ENDURE or not

1.1.1.6. Table Contact

- A list of contact persons relevant for the ENDURE network
- Contacts can be members of ENDURE or not

1.1.1.7. Table Language

- List of languages

1.1.2. Project Data

Project Data are those tables containing the relevant information for each record.

1.1.2.1. Table Knowledge

- containing basic information for all records of EIC
- Knowledge can be referred by additional type tables defining a certain type of record and offering additional type-dependent information

[2] http://ec.europa.eu/comm/eurostat/ramon/nuts/basicnuts_regions_en.html

- Only projects are relevant here so table project is the only type-table, listed here.

1.1.2.2. Table Project

- Containing basic information for project records.
- Any project must define a project type
- Any project may define an according organisation

1.1.2.3. Table Project_type

- Containing several types of projects

1.1.2.4. Table Content

- Contains the texts associated with each record
- Any content entry always have to define the enclosing knowledge record
- Any content entry always have to define the language, the text parts are written in
- Any record can have multiple contents, one for any language

1.1.3. Annex Data

- Annex Data includes those tables containing the optional attachments for each record.
- Any Annex is always an instance of the types Link, Document or Literature

1.1.3.1. Table Knowledge_annex

- Contains the associations between records and annexes
- Any record can have no or many annexes
- Any annex can be attached to no or many records

1.1.3.2. Table Annex

- Containing all annexes no matter of a certain type

1.1.3.3. Table Link

- Contains only those annexes which reference internet resources directly

1.1.3.4. Table Literature

- Contains only those annexes which references any external document that are not reachable by application

1.1.3.5. Table Document

- Contains only those annexes which references EIC-managed files

1.1.4. Mapping Data

Mapping Data includes those tables used to give each record a context

1.1.4.1. Table Crop_knowledge

- Associates a record with crops in a many-to-many relation
- Any record can be associated with no or many crops

- Any crop can be described by no or many records

1.1.4.2. Table Pest_knowledge

- Associates a record with pests in a many-to-many relation
- Any record can be associated with no or many pests
- Any pest can be described by no or many records

1.1.4.3. Table Topic_knowledge

- Associates a record with topic in a many-to-many relation
- Any record can be associated with no or many topics
- Any topic can be described by no or many records

1.1.4.4. Table Region_knowledge

- Associates a record with regions in a many-to-many relation
- Any record can be associated with no or many regions
- Any region can be described by no or many records

1.1.4.5. Table Expert

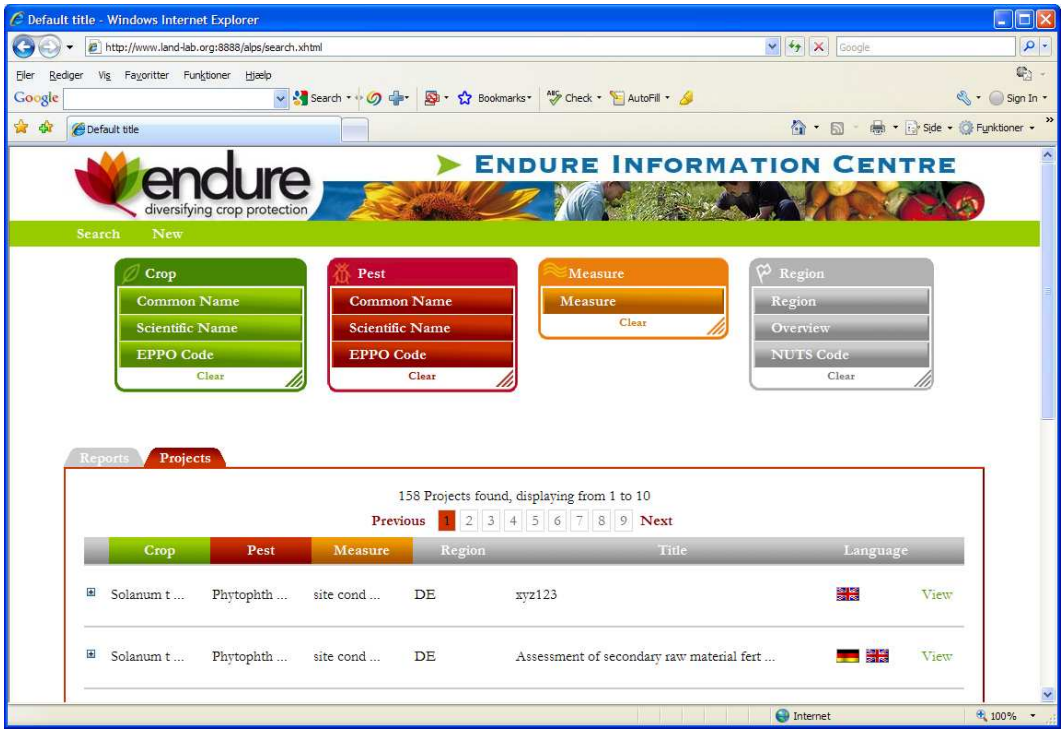
- Extends an existing contact by defining this contact as an expert

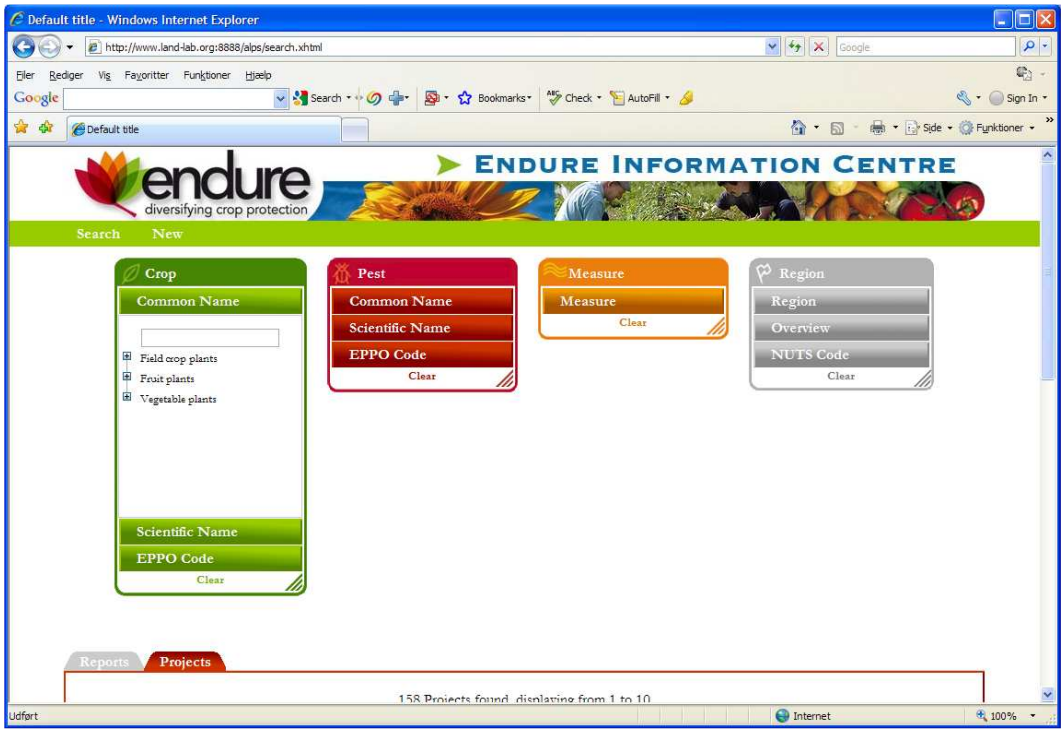
  Any knowledge record has to be defined by a responsible expert

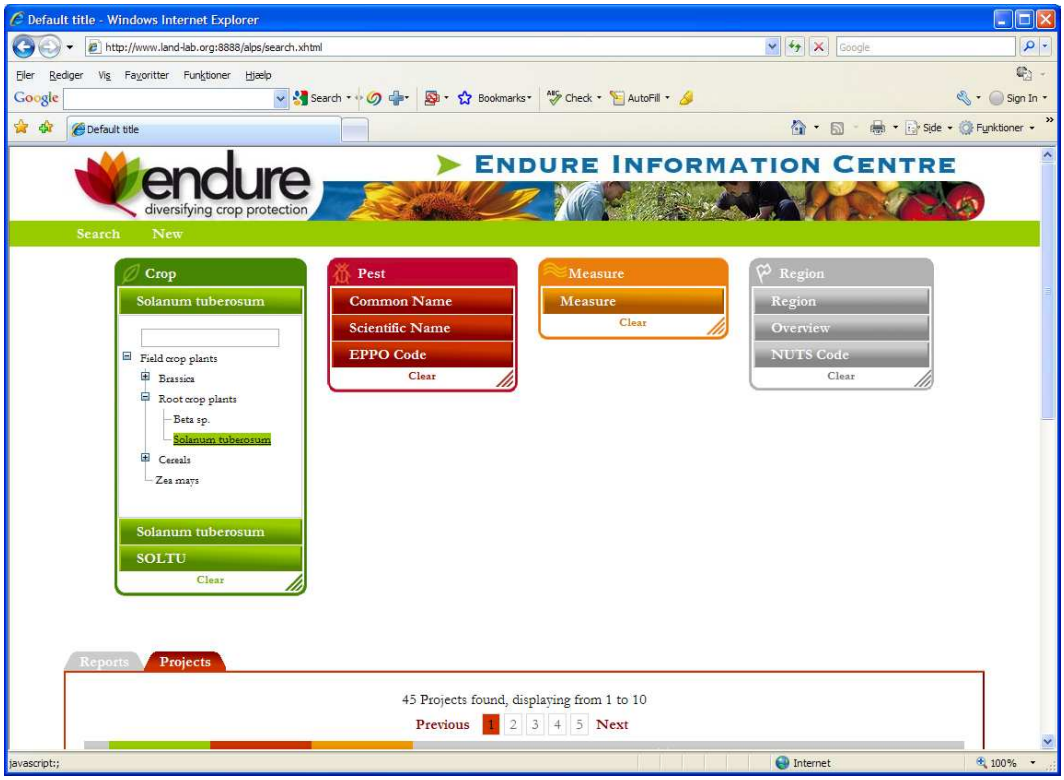
1.2. Doing searches at EIC

When entering the Endure Information Centre it is possible to select between two taps with either *Reports* or *Projects*. Here *Projects* must be selected. Initially all projects in the database are listed in the bottom window.

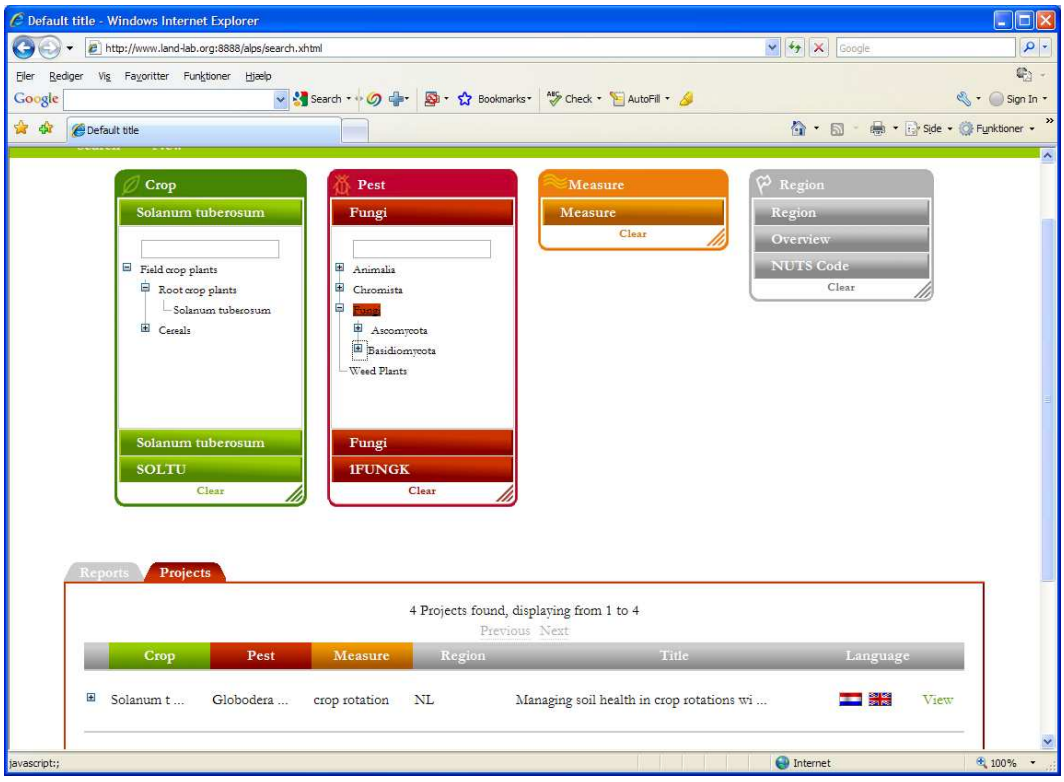
In the four coloured squares (green, red, orange and grey) in the upper part of the window it is possible to filter the projects according to the combinations of crop, pest, measure and region.


Default title - Windows Internet Explorer
http://www.land-lab.org:8888/alps/search.xhtml
ENDURE INFORMATION CENTRE
endure
diversifying crop protection
Search
New
Crop
Common Name
Scientific Name
EPPO Code
Clear
Pest
Common Name
Scientific Name
EPPO Code
Clear
Measure
Measure
Clear
Region
Region
Overview
NUTS Code
Clear
Reports
Projects
158 Projects found, displaying from 1 to 10
Previous 1 2 3 4 5 6 7 8 9 Next
Crop
Pest
Measure
Region
Title
Language
Solanum t ...
Phytophth ...
site cond ...
DE
xyz123
View
Solanum t ...
Phytophth ...
site cond ...
DE
Assessment of secondary raw material fert ...
View
Internet
100%

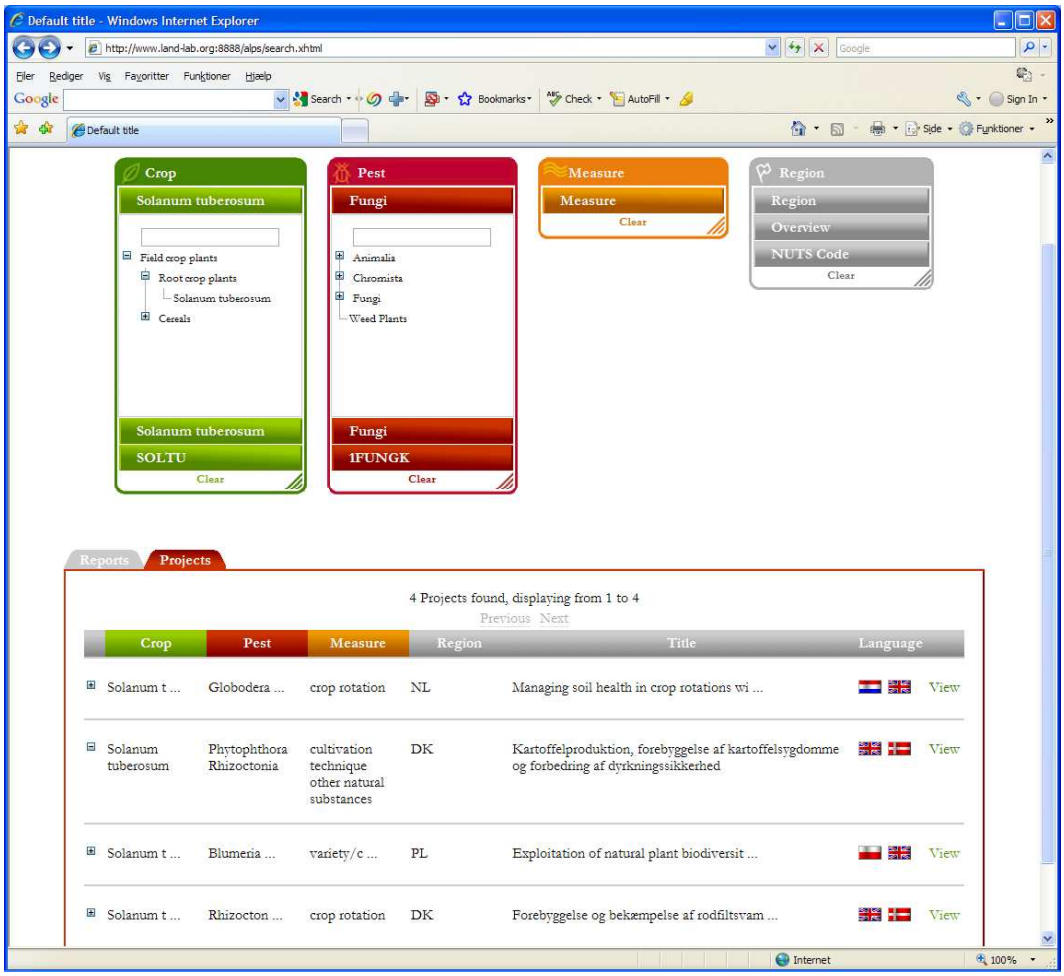

Default title - Windows Internet Explorer
http://www.land-lab.org:8888/alps/search.xhtml
ENDURE INFORMATION CENTRE
endure
diversifying crop protection
Search
New
Crop
Common Name
Field crop plants
Fruit plants
Vegetable plants
Scientific Name
EPPO Code
Clear
Pest
Common Name
Scientific Name
EPPO Code
Clear
Measure
Measure
Clear
Region
Region
Overview
NUTS Code
Clear
Reports
Projects
Udført
Internet
100%



By doing stepwise filtering in the four squares it is possible to reduce the number of hits making the search easy to grasp. In this example by selecting potato (*Solanum tuberosum*) the number of hits is reduced from 158 to 45. And by selecting Fungi in the pest square, the number of hits is reduced to four (see below).



In the lower part of the window the result of the search is shown. By clicking on the + button in the left hand side it is possible to extend the information which is presented for each result. The crop/pest/measure/region combination is shown as well as the title of the project and flags of the available languages the information is presented.



1.3. Selecting single project for further reading

By clicking on the green View button on the right, all available information of the selected project is presented.

The title on the original language is presented, as well as the expert that uploaded the information. Under the name of the expert a one-line summary is presented. The colour-coded text indicates the crop/pest/measure combination. The map shows the region which the project has been conducted and below the map it is possible to select which language the reader wants to use (in this case either English or Danish). Below the flags a more detailed description of the project is presented.

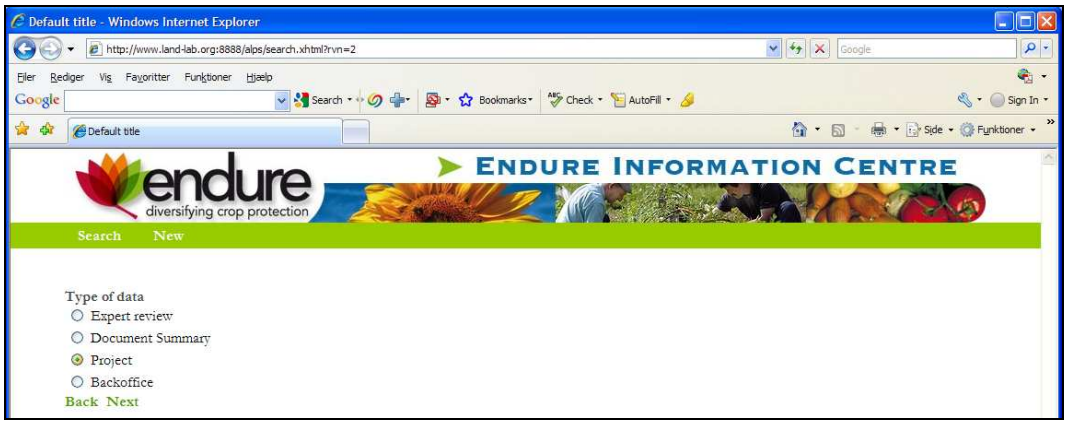
1.4. Uploading information on new projects

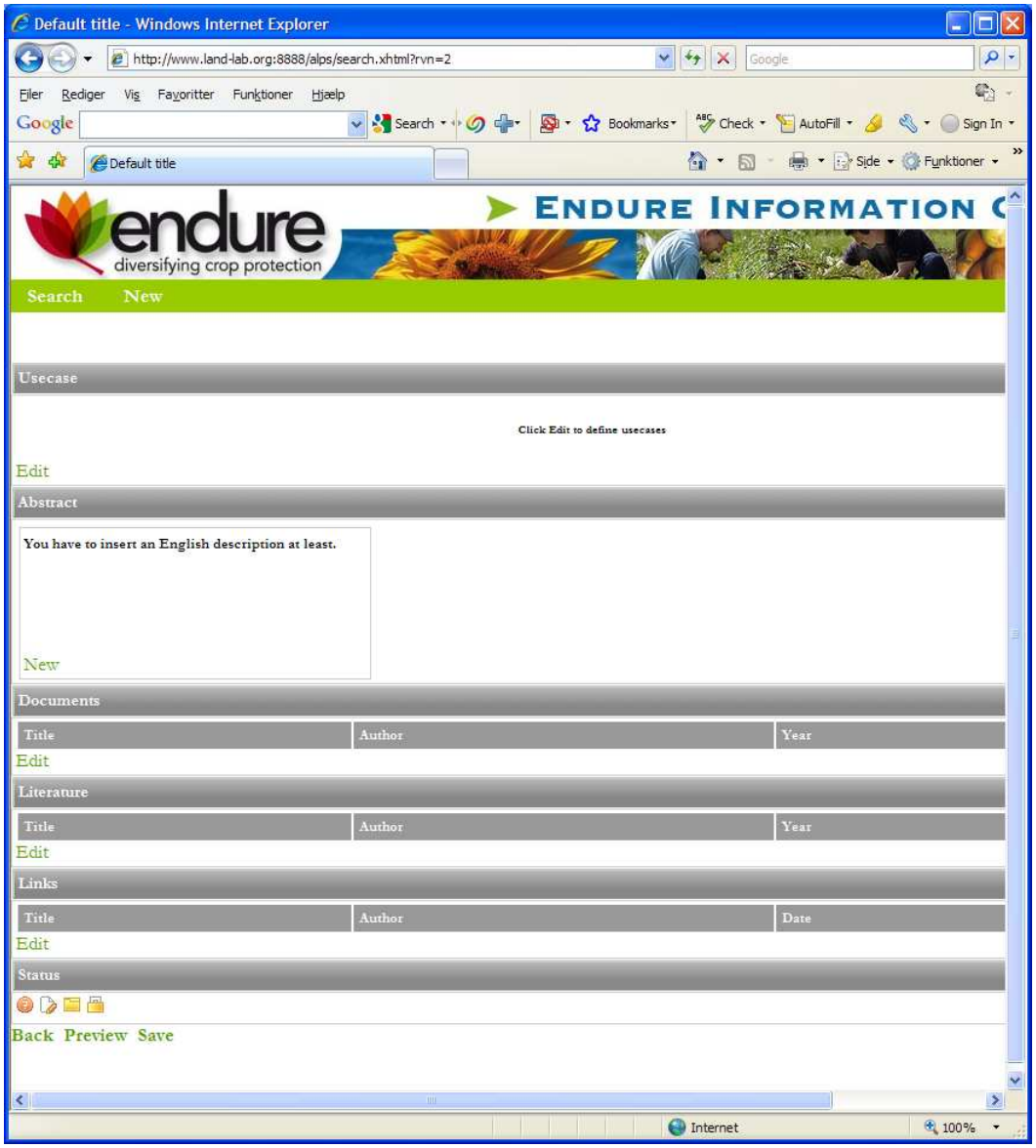
Before it is possible to upload information of new projects, it is necessary to be registered as an expert.
Each expert who wishes to upload information needs to be registered for a certain crop(s) and pest(s). Therefore please contact **silke.dachbrodt-saaydeh@jki.bund.de** or **alexander.herr@jki.bund.de** and name the crop(s) and pest(s) you wish to upload content for. Your log in will be send by e-mail.


Default title - Windows Internet Explorer
http://www.land-lab.org:8888/alps/search.xhtml
endure
diversifying crop protection
ENDURE INFORMATION CENTRE
Search
New
Crop
Common Name
Scientific Name
EPPO Code
Clear
Pest
Common Name
Scientific Name
EPPO Code
Clear
Measure
Measure
Clear
Region
Region
Overview
NUTS Code
Clear
Reports
Projects
158 Projects found, displaying from 1 to 10
Previous 1 2 3 4 5 6 7 8 9 Next
Crop Pest Measure Region Title Language
Solanum t ... Phytophth ... site cond ... DE xyz123 View
Solanum t ... Phytophth ... site cond ... DE Assessment of secondary raw material fert ... View
Solanum t ... Phytophth ... site cond ... NL Latent tuber infections: the route from a ... View
Solanum t ... Phytophth ... micro wav ... NL UV illumination of potato crops to preven ... View
Solanum t ... Globodera ... crop rotation NL Managing soil health in crop rotations wi ... View
Solanum t ... Globodera ... other nat ... UK Multitrophic interactions in the rhizosphere View

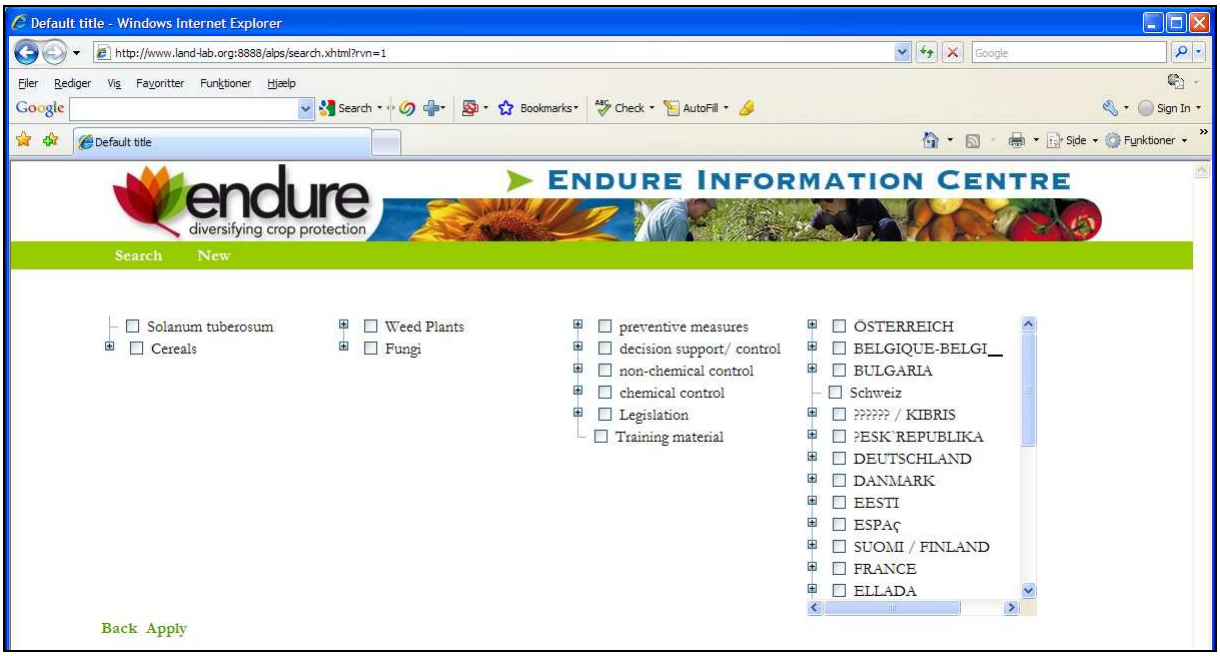

Default title - Windows Internet Explorer
http://www.land-lab.org:8888/alps/detail.xhtml?knowledge=5008&vn=6
endure
diversifying crop protection
ENDURE INFORMATION CENTRE
Search
New
Potato production, prevention of diseases and increasing production security
by preben klarskov hansen
A study of prevention of potato diseases by cultural practises
Solanum tuberosum / Potato (SOLTU)
Phytophthora / Phytophthora (1PHYTG)
Rhizoctonia (anamorphic genus) / Rhizoctonia (1RHIZG)
cultivation technique
other natural substances
DANMARK
It is the purpose of the project to aid innovation, research and development in the potato production business by development of preventive strategies such as cultural methods (plowing, harrowing), biological and chemical methods which can assist in limiting the attack of rhizoctonia and phytophthora and thereby increase the safety of the production.

In the top left side of the page it is possible to upload new information. By pressing the “new” bottom the user is asked which type of data that will be uploaded, use the “project” bottom, and press “next.”

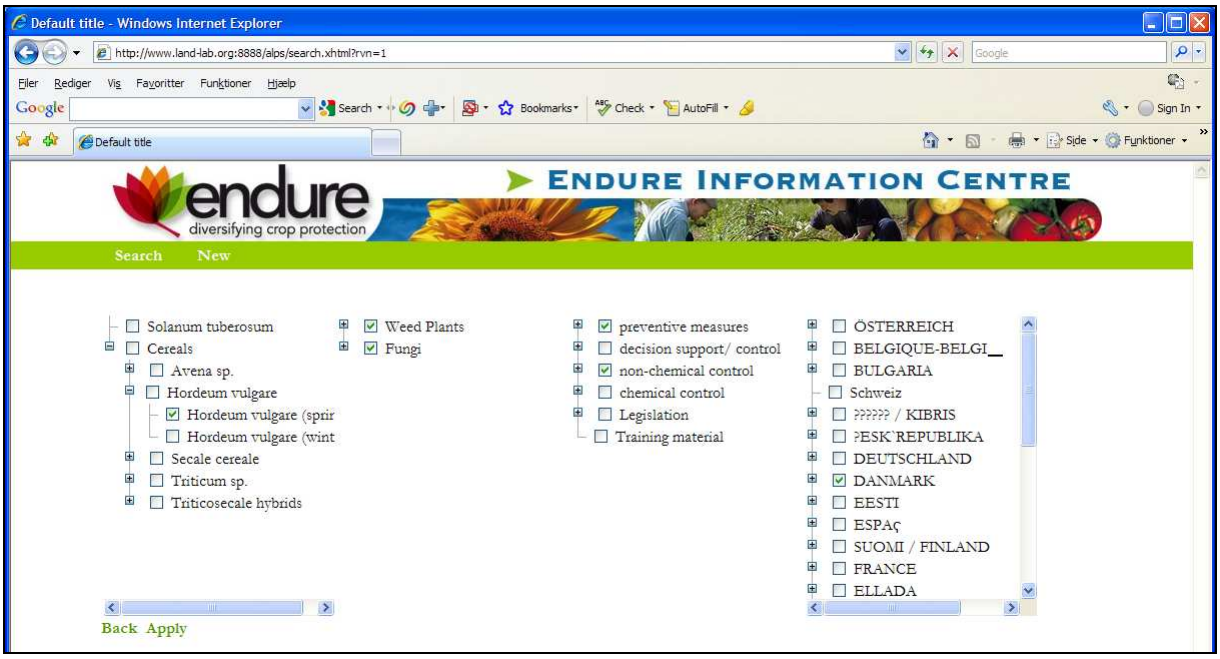




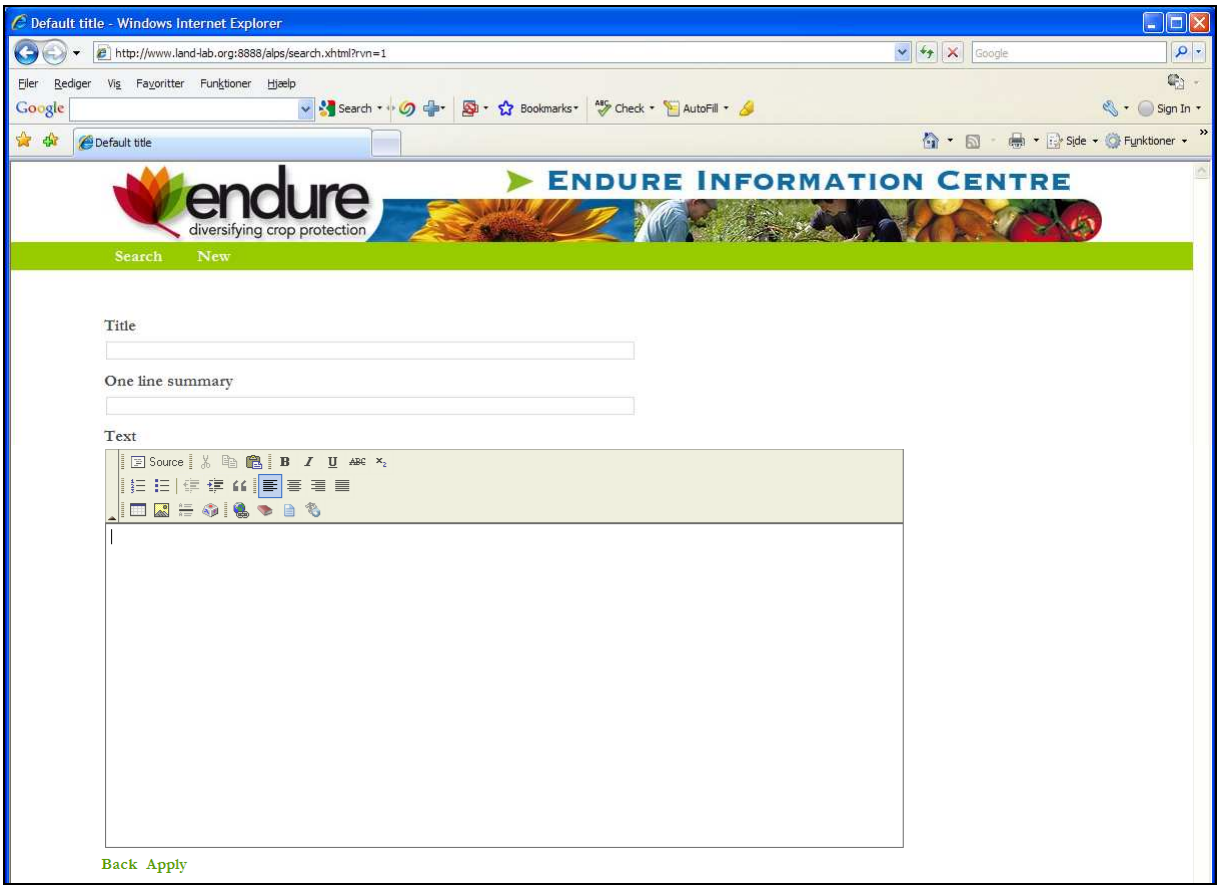
By pressing edit in the “usecase” -part of the window following windows appear.



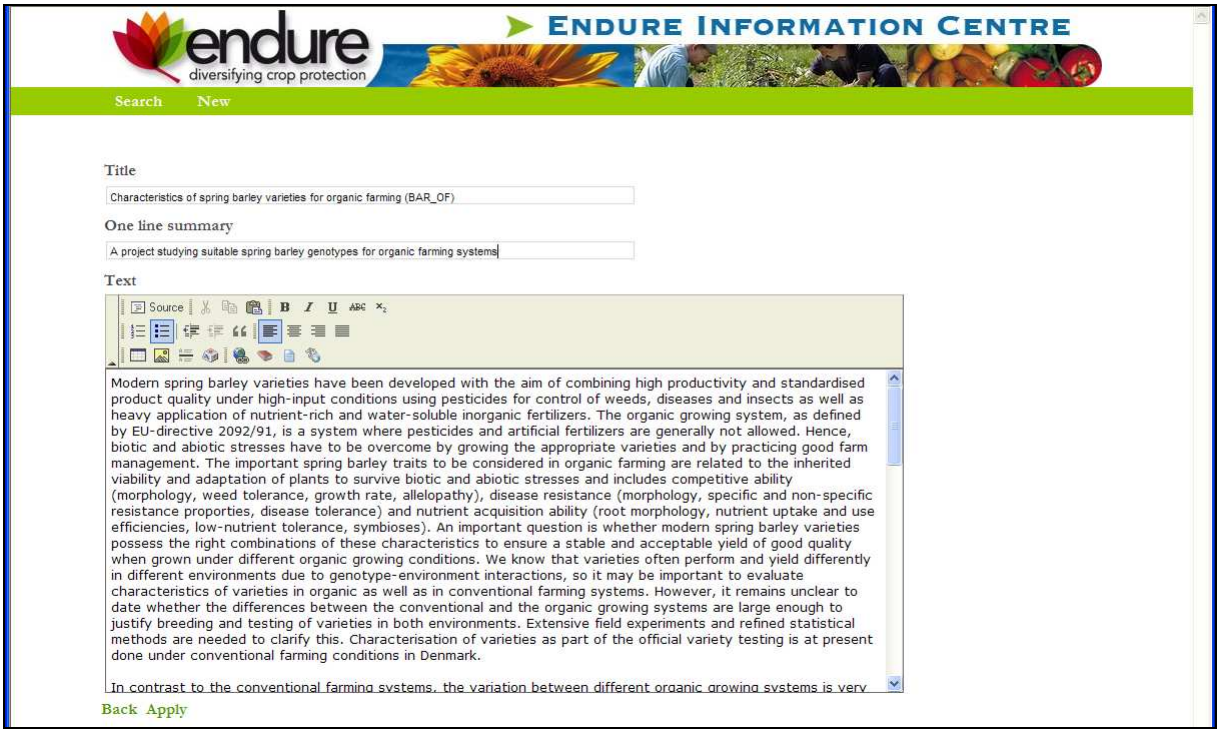
Select crop, pest, topic and region by marking the squares. And press apply.



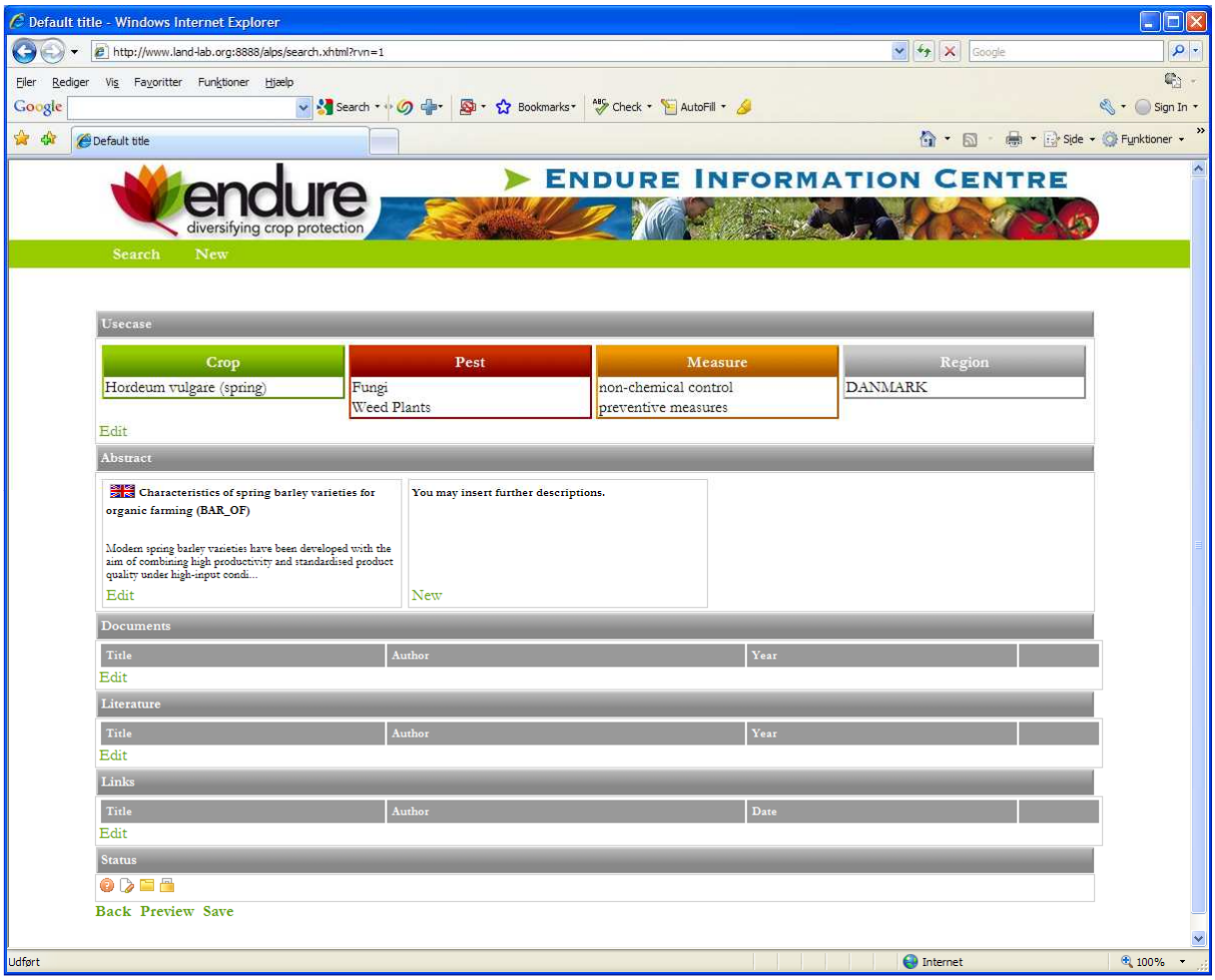
Next step is to give an English title, one line summary and a description.



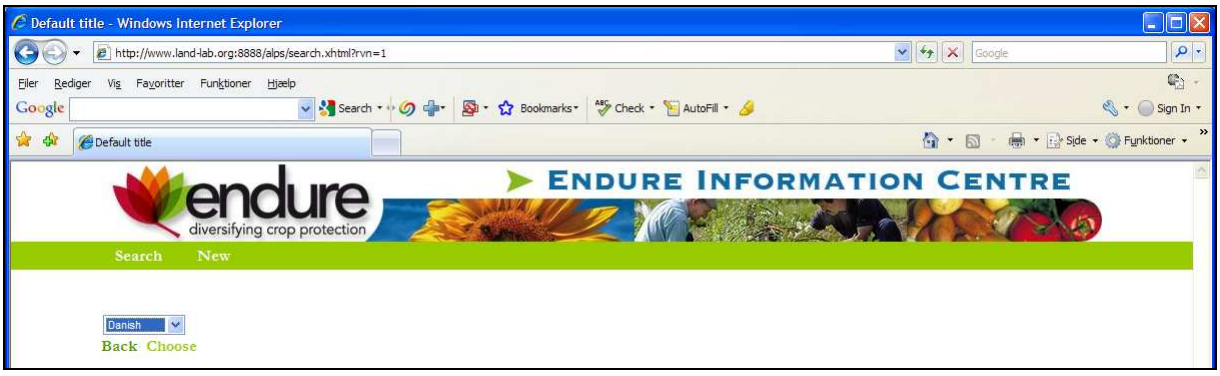
Just fill in the different boxes and press apply.

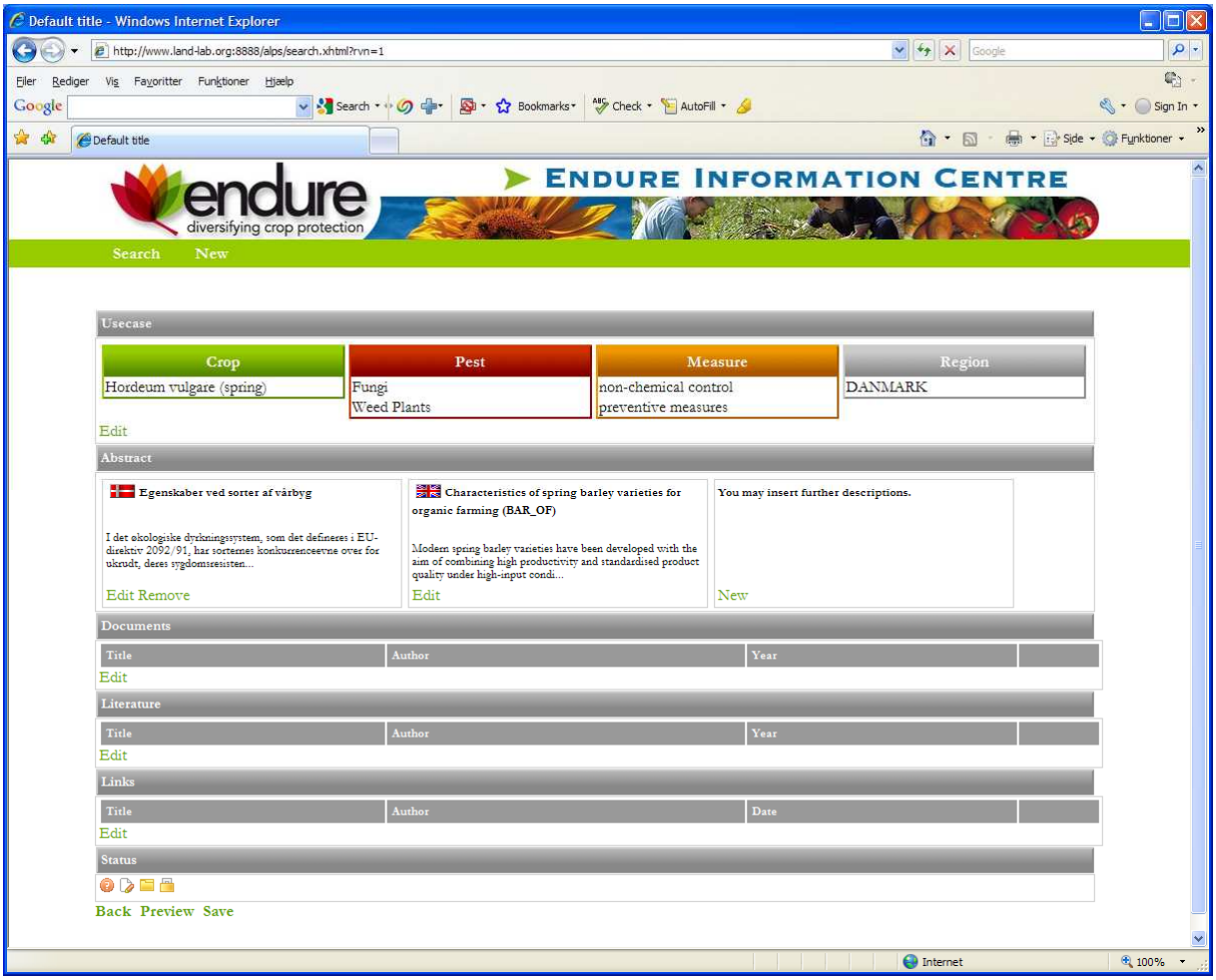


If you want to give a description in another language you may press “edit” in the “further description” box.



Here you must select language.





When you have input all relevant data, just press “save” and the project is available in the database.

Annex

Project scheme