ENDURE Information Centre (EIC)

Description and Manual

This paper explains the intentions of the ENDURE Information Centre (EIC) and gives information about the main target groups (advisors and researchers).

It is a working document describing the workflow for each potential information supplier such as ENDUREs CS/SCS, external experts and organisations.

A clear description of the content structure including the format is given to each potential supplier, the search and upload procedures are explained. For any questions please contact Silke Dachbrodt-Saaydeh from the JKI (silke.dachbrodt-saaydeh@jki.bund.de).

Table of contents

1. Introduction

1.1. What is the ENDURE Information Centre (EIC)?

The ENDURE Information Centre (EIC) is an web application which disseminates information on crop protection of various European countries in English. It creates an overview of the ways sustainable crop protection can be implemented in European agriculture. The EIC is a central point of reference for extending expert knowledge, recommendations and advice for mainly extension services, advisors and researchers concerning all aspects of crop protection.

For the users it provides a search of crop – pest/disease combination with IPM measures and regions as the result.

The EIC is to support the reducing the reliance on pesticides by offering IPM measures including prevention, chemical pest and disease control as well as non-chemical alternatives such as biological control measures.

1.2. Target group

This manual is aimed at participants of the ENDURE network who are or will be involved in identification, collection, description and uploading documents for EIC.

The coordinating activities (SA4.1 and IA4.1) expect from all contributing activities of the network to scrutinize and collect information pertinent mainly to advisors including non-chemical control measures with good experience already adopted in the field or with potential to become solutions for implementation into practice. This work should be done in the course of their work. The information provided to the EIC should be in line with the instructions for structure and format given in this document.

1.3. What kind of information?

The EIC offers information and expert knowledge about all aspects of Integrated Pest Management. The information and knowledge of best practices and non-chemical methods shall support the advisors in the phase of decision making by offering them the opportunity to search for information about best available practise across different regions in Europe in relation to crop protection.

1.4. Quality selection

The aim is to present a quality selection to the user of the EIC and enable them to easily search for information which usually is only available in national languages or gives information about very regional practices. Such practices could inherit the potential for adoption in different regions or reflect very valuable potential for disease or pest control. Such national information is summarized in English and validated by experts in order to spread the information European wide.

All information is scientifically sound and the different levels of their practicability are indicated.

1.4.1. Ready to use measures

Ready to use information means: The measures are tested in the field, practical to adopt and cost-effective. Ready to use information is for extension services and advisors.

1.4.2. Measures in experimental stage

Other measures (named **experimental**) which have the potential to provide a solution for a given problem but cannot be recommended as best practice yet, are tested on experimental fields, an adoption is possible or is cost efficient only with subsidies or under special conditions. The target group of this information are researchers and advisors who are interested in developing those methods, testing or adapting them.

2. Collection procedure

In order to ensure a high quality of the EIC content, it is necessary to ensure a harmonised collection of information and expertise. The ENDURE CS/SCS and sub-activities will collect the information from a variety of information providers or in the course of their work, write abstracts (document summaries or expert reviews) and upload their abstracts and documents on EIC following the procedure described in this document (chapter 4).

Our intention is not to duplicate information about the use of pesticides but the promotion of IPM, innovative methods and especially non-chemical alternatives.

Sources can be research reports, PhD thesis, journal and magazine articles, "grey literature" such as trial reports and other documents such as websites, leaflets, reports, videos, articles, newsletters, books etc. This also includes review documents and information about national projects contributing to IPM and the promotion of non-chemical alternatives.

2.1. *Identification of documents*

Find the documents and source who you think have the potential to be shared across Europe. Select practices with an added value going beyond the level of good plant protection or farming practice. Remember we do not intend to reproduce common knowledge!

Categorise the information about best practices in IPM, non-chemical measures and projects concerning non-chemical alternatives in your activity and country by:

Type of pest, disease or problem

Method of Integrated Pest Management and/or non-chemical measure

Practicability of the measures

2.2. **Collection of documents**

After the identification of documents find out whether they are public or the access to the source is restricted. From public sources you can write the abstract in English and attach the source to the summary documents or expert reviews. For sources which are not publicly available follow the IPR rules (Annex1).

2.3. Provision of meta data

Define the metadata of the sources in the course of your work; you will need them in the upload and referencing procedure. The following meta-data are needed:

Author: Name, F. (please follow this input format)
Title
Source
Year
Language

3. Writing instructions for abstract or summary

The abstracts (in English) of validated documents and sources (see 2) about integrated crop protection are the unique point of EIC. This will be the main source of information for the users and uploaded to the data base. Consequently methods and important results must be pointed out in the abstracts.

3.1. Abstract types

The data base comprises two kinds of abstracts: **document summaries** with validated information based on single documents such as websites, leaflets, reports, videos, articles, newsletters, books etc. and **expert reviews** comprising extracted and validated information from a number of sources summarised by an expert in a particular field.

3.2. Abstract/summary structure

ENDURE CS/SCS and sub-activities will collect the pertinent information and documents in the course of their project work.

In order to ensure content quality and to present a clear structure to the user we will exclusively implement the following structure for the abstracts or summaries in the EIC: English title, One line summary, English description and Evaluation of the practicability of the measure in the country/region of origin

The English title of the document. In order to support the text based search authors should give the scientific name of the pest or disease and the common name of the crop here. The input box provides a limited space of 255 characters (including space).

The One line summary.. The author should keep in mind that during the search the end-user decides based on the title and the first line if he wants to know more or not. So write in max 255 **characters** (including space) info about the measures described, an indication of results and type of document.

The English description. We aim at an abstract of maximum one page. Depending on the report the summarised information will be more useful for different **end-users** e.g. **advisors** or **researchers** Referring to **advisors** keep in mind what the **advisors** can use in daily practice. What use-case is it? Give an indication of results, why and when should or can he/she use the measure/method? Are there special conditions for implementing the measure? What is the added value of it? What is to be considered for the application? Is the measure scientifically sound and tested in field?

For measures which might not be fully applicable in practice, mainly of interest for **researchers**, give information about the 'scientific' foundation. Give a description of results in more detail (tables, graphs),: used methods, region, climatic conditions and conclusions. What is the added value of it? What are the bottlenecks? Are there special conditions for the implementation of the measure?

Practicability: The evaluation of the practicability of measures enables the end user to assess the value of the measure for potential adoption in different regions or adaptations. For experimental measures please describe conditions supporting the implementation of the measure or limitations. Based on the formerly elaborated selection criteria: practical to adopt; cost-effective; aim to result in less input and less dependency on chemical inputs, indicate whether the described measure is:

> ready to use **or**
>
> experimental.

Formatting: Please allow a harmonised lay out of the English description as far as possible. Put the scientific names in italics.

3.2.1.   Example document summary

By Harro Spits, WUR-PPO, 29-04-2008

1	Title	Fungicide dose rate & cultivar resistance
2	First line summary	This PowerPoint presentation informs about the use of lower dose rates of Shirlan in potato cultivars with a higher level of resistance against Late Blight.
3a	Application	A reduction of the pesticides input in potato can be achieved by optimizing the dose rate of fungicides by making use of the level of resistance of varieties against late blight. In the more resistant varieties a reduction up to 75 percent is possible in the first half of the growing season (leaf growth). Essential is that the fungicide is sprayed before a critical period and that the resistance level of a variety is reliable. The use of a decision support system can be a great help by determine critical periods. In the second half of the growing season, when the risk for tuber blight is present, the possibilities to reduce the dose rate of Shirlan is limited.
3b	Description	The results are based on 5 years of field experiments in the Netherlands. In the first three years of this research program the aim was to determine the possibilities of reduced dose rate of Shirlan in the first half of the growing season. In the last two years the aim was to determine the effect of lower dose rate of Shirlan on tuber protection. In each year a polycyclic field experiment, with spreader rows was carried out. During the epidemic Late Blight was assessed every 5 days. In the last two years tuber blight was also assessed. Calculated dose rate of Shirlan was calculated per variety based on several epidemic parameters. Calculated dose rates of Shirlan are shown

		in table 1. For Shirlan the 100% label dose rate is 0.4 l/ha.
		Table 1.Calculated dose rate (in l/ha) per variety in first half of growing season.
		<table><tr><td>0,1</td><td>0,1 - 0,2</td></tr><tr><td>Aziza (7,5)[1]</td><td>Diamant (6)</td></tr><tr><td>Biogold (8)</td><td>Kondor (4,5)</td></tr><tr><td>Festien (8)</td><td>Karnico (8)</td></tr><tr><td>Innovator (8)</td><td>Katinka2 (6,5)</td></tr><tr><td>Kantara (7)</td><td>Seresta (7)</td></tr><tr><td>Kartel (8)</td><td>Aveka2 (7)</td></tr><tr><td>Menco (9)</td><td>Pimpernel (8)</td></tr><tr><td>Mercator (8)</td><td></td></tr><tr><td>Mercury (9)</td><td></td></tr></table> [1]) Between brackets resistance level of foliage
4	Practicability	ready to use

3.2.2. Example of expert review

By Silke Dachbrodt-Saaydeh, JKI,

1	Title	Reduction of infections by *Alternaria sp.* in different varieties
2	First line summary	This expert review from Germany presents the effects of different varieties and maturity groups and the infection with Alternaria sp. in potatoes. First trial results show in one maturity group different development of infestation in different varieties.
3a	Application	The Alternaria infections can be reduced by the cultivation of varieties that are less vulnerable and/or respond less to heat and drought with premature ripeness (5). Early maturing and soft varieties are more susceptible (7). Especially for early varieties of medium to late maturity large economic losses are caused by Alternaria (8). Scheid found in trials noted that Alternaria causes especially in late varieties yield losses (11). There was no correlation between the maturity group, and initial infestation, but between maturity group and epidemic onset.
3b	Description	Basically all potatoes maturity groups are affected by the pathogen, middle and late yielding varieties are particularly affected. The reason is the biology of the fungus, occurring at very early growth stages, but usually reaches the epidemic phase only after the end of July in Germany (6). In multi year trials was examined whether the maturity group of the variety has

		an influence on the start of infestation (time of onset of symptoms) and the epidemic onset (time of infestation increase). The first symptoms of Alternaria (beginning infestation) in the varieties of different maturity groups were visible 2-4 weeks after emergence. Less susceptible varieties such as "Christa", "Junior", "Marabel", "Tessi", "Linda", "Agria", "Granola", "Sante", "Treff" are recommended.
4	Practicability	ready to use

3.3. Identification of source

The sources (e.g. literature, documents, URL) are attached to each abstract to enable the user to comfortably find more detailed or additional information in the full text version. See section 4.2. step 6 for detailed instructions. The original documents will be attached but not translated. Attachments in English should be marked accordingly in the end of the filename with: (en).

3.4. Provision of abstract or summary in another language

Voluntarily the same abstract can be uploaded in other languages (additional to English). Thus users unfamiliar to English are given the opportunity to share the collected and validated knowledge on IPM measures. To insert an additional abstract please follow the instruction given in sections 4.2. step 4.
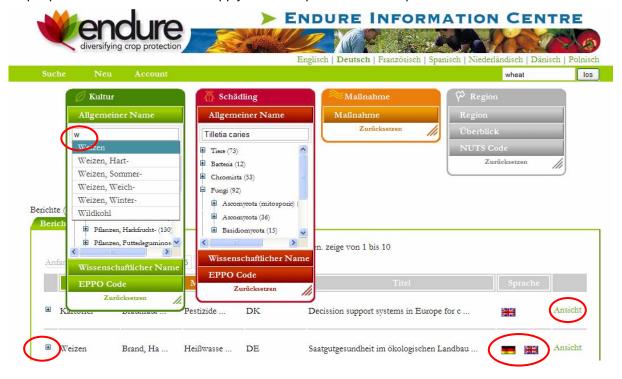
4. Instructions for search and upload

The ENDURE Information Centre is accessible on

http://eic.endure-network.eu:8080/webui/search.xhtml

IMPORTANT: **To ensure a full quality in the presentation of Common names for crops and pests you need to set up/change your browser language into ENGLISH.**

4.1. Instructions for search

Search the ENDURE Information Centre by selecting a combination of crop-pest/disease for a given problem. To do so open the crop search box by clicking on "Common Name" or "Scientific Name" or use the auto fill function by typing the first two letters. Choose the crop as precise as possible. To set a crop – pest/disease - combination apply the same procedure in the pest search box.

All available search results for your combination are listed below. The overview enables you to search easily in various control measures appropriate for your specific problem and region. When moving the cursor over a title more information regarding the selected report is given by automatically displaying the one-line summary. Click the plus box to enlarge the display of a selected content. "*View*" fully displays the selected abstract/summary. The choice of the report language (if available) is indicated by flags.

To shortcut your search use the currently installed free text search in the green top line.
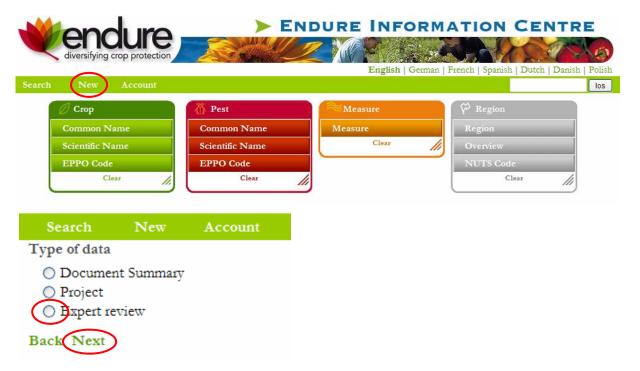
Results of the free text search are listed and the number of records found is indicated below the search box. For each result the searched criteria, measure, region, title, and text preview are shown. The view link allows to easily access the abstract text.

For further reading upload linked documents and URLs by clicking the respective icons.
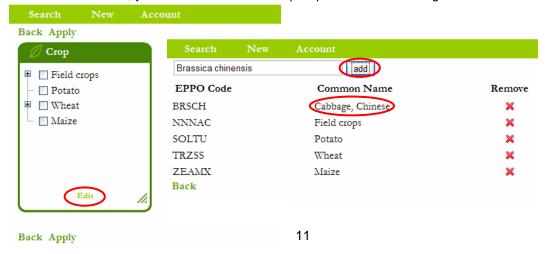
4.2. Instructions for upload

Each expert who wishes to upload information needs to be registered.. Therefore the EIC management will invite potential experts or please contact Silke Dachbrodt-Saaydeh (**silke.dachbrodt-saaydeh@jki.bund.de)** or Alexander Herr (**alexander.herr@jki.bund.de)**. Your log in will be send by e-mail. **Please notice**, after revising the **use case editor** as part of the upload procedure every expert can now prepare his/her personal upload tree for crop and pest.

Step 1: If you wish to upload a new report click on "*NEW*" in the search screen. Choose "*Expert review*" or "*Document Summary*" click on next and the input mask will open.

Step 2: To prepare your personal upload tree for crop and pest click on the "Edit" at the bottom of the according box. As next you will find an input field, where you are ask to type the crop/pest of your interest. The application will open a list of suggestions, matching your input. Choose your crop or pest, and click on the "add" button and assure yourself, that your item was added to the table below. Existing crops / pests in your personal list are listed underneath.
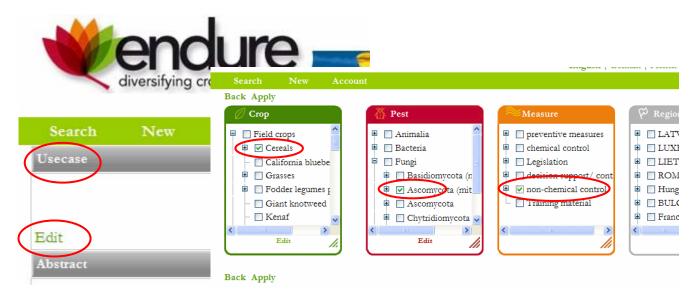
You have to apply this procedure for crop and pest separately in the relevant table. If you now return to the use case editor, you will find the added crop or pest in the according box.
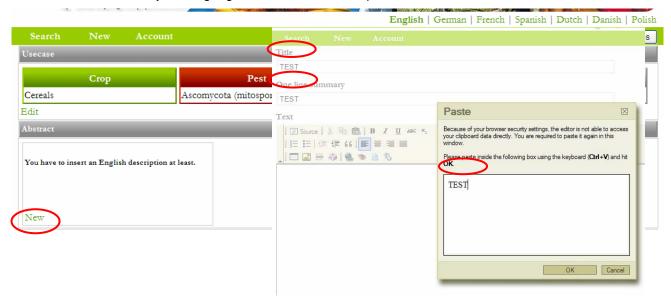

11

Please note, that these dialogs do not allow you to create new crops or pests. You're only able to select already existing crops or pests (in the ENDURE commons DB).

Generally the application expects from you to enter your local-specific name depending on the selected website language. For example, a French user, looking for potato, should start typing "pomme de terre" whereas the Spanish user starts to type "patata". If the dialog does not suggest your crop or pest, please try the scientific or English name.

Step 3: To proceed with your uploading edit the usecase (= crop-pest/disease-measure combination) by clicking "*Edit*". Choose the crop, pest, measure and region and confirm with "*Apply*". It is important that you select the crop, pest and measure as specific as possible.
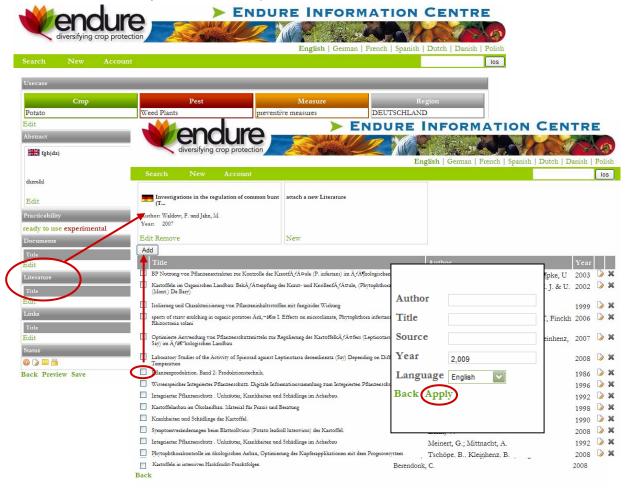

Step 4: **Please note** you are requested to upload at least the English abstract. Insert your content in the Abstract section by clicking on "*New*". Fill in the title and the one-line summary here (use copy and paste). The abstract text is to be inserted (use copy and paste) into the up popping window. Please follow the instructions regarding the context structure and format provided in section 3.2. With "*Apply*" you add the abstract in the data base. If you wish to upload the abstract in your native language use the second box, choose your language and follow the same procedure.

Step 5: Please indicate the practicability by clicking on ready to use or experimental.

Step 6: Fill in the source(s) you used for writing the abstract. Choose document, literature and/or link -> "*Edit*" and after "*New*" and fill in the required boxes and upload with "*Apply*".
If you make use of a document/literature/link you uploaded before just use the tick box and "Add".
Leave this page with "Back".
For documents and links you use the same procedure.

Step 7: After filling all boxes please check your upload with preview and finally save.
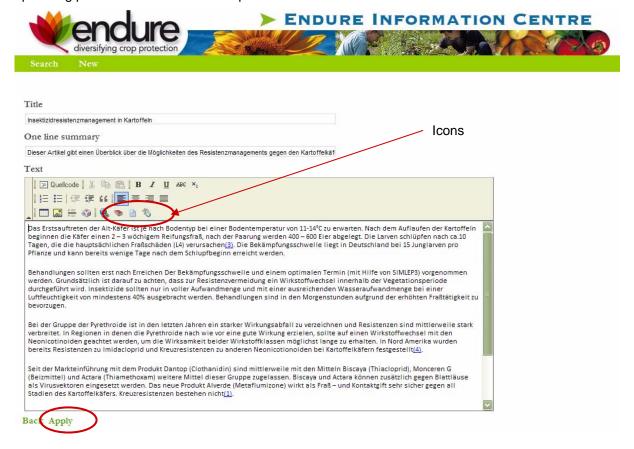
4.3. Editing abstracts

In the bottom and top of each detail page you find "*Edit*" and "*Back*".

With "*Edit*" you can edit your own abstracts. After editing or adding new content you upload with "*Apply*" and see the changes you have made in the preview.

Using the 3 icons in the editor bottom row you can insert existing references for literature, documents and links into your text. The existing references are the literature, documents or links from the uploading procedure. You finalise the procedure with "*Save*".

Annex 1

IPR procedure for inclusion of documents not publicly available in the ENDURE Information Centre (EIC)

1. Copyright owner identified

2. ENDURE copyright agreement *(available at: ENDURE workspace)* signed by legal signatories of ENDURE partner and copyright owner (can be for 1 or more documents as listed in copyright agreement schedule)

3. ENDURE copyright agreement signed by legal signatories of ENDURE partner and INRA-Transfert (for documents listed in copyright agreement schedule)

4. Document uploaded onto ENDURE Information Centre