Connecting European Researchers and Advisors

The ENDURE Information Centre

Huub Schepers

FOOD QUALITY AND SAFETY

SIXTH FRAMEWORK PROGRAMME

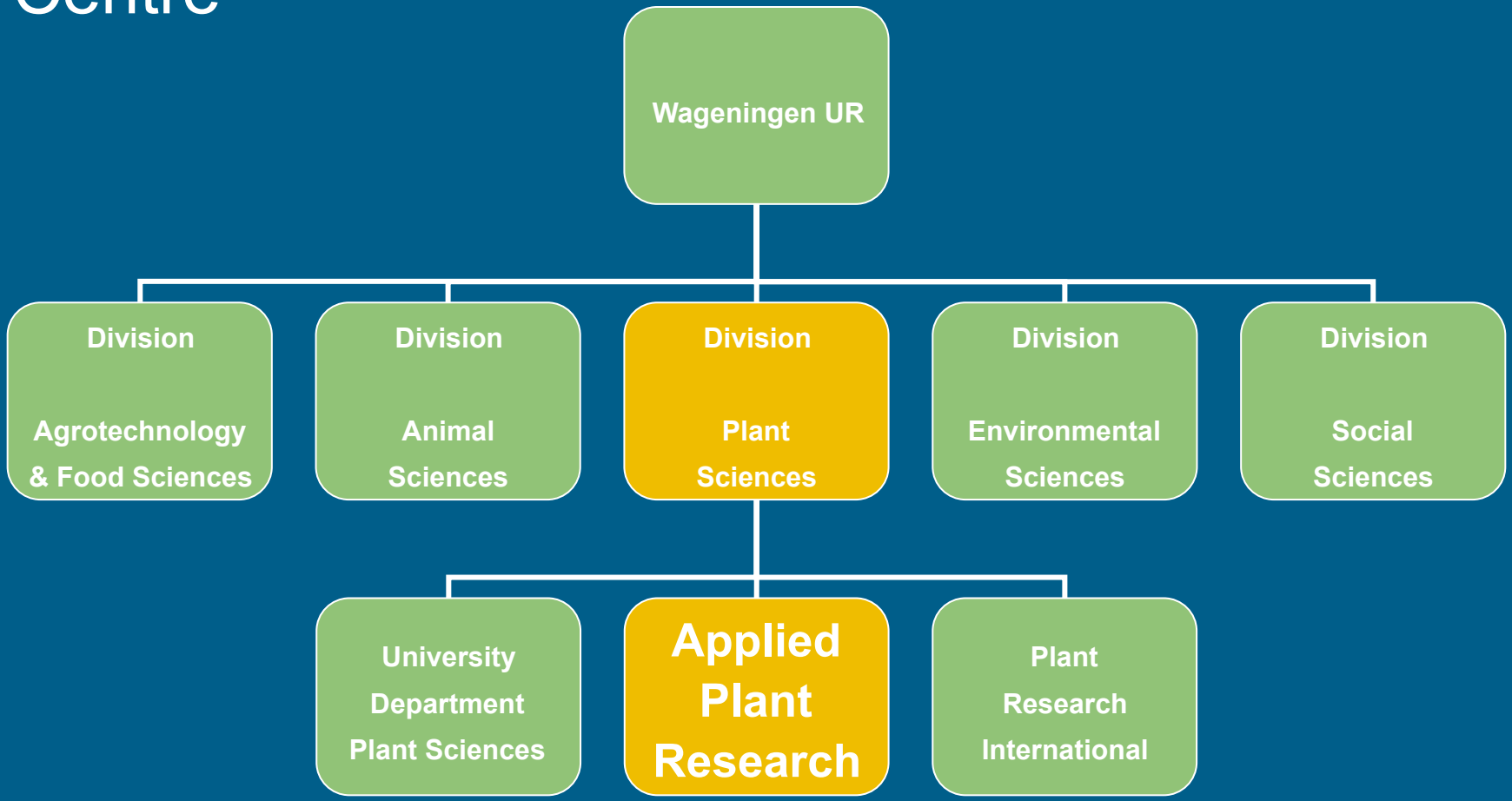
endure
diversifying crop protection

Applied plant research: profile and position

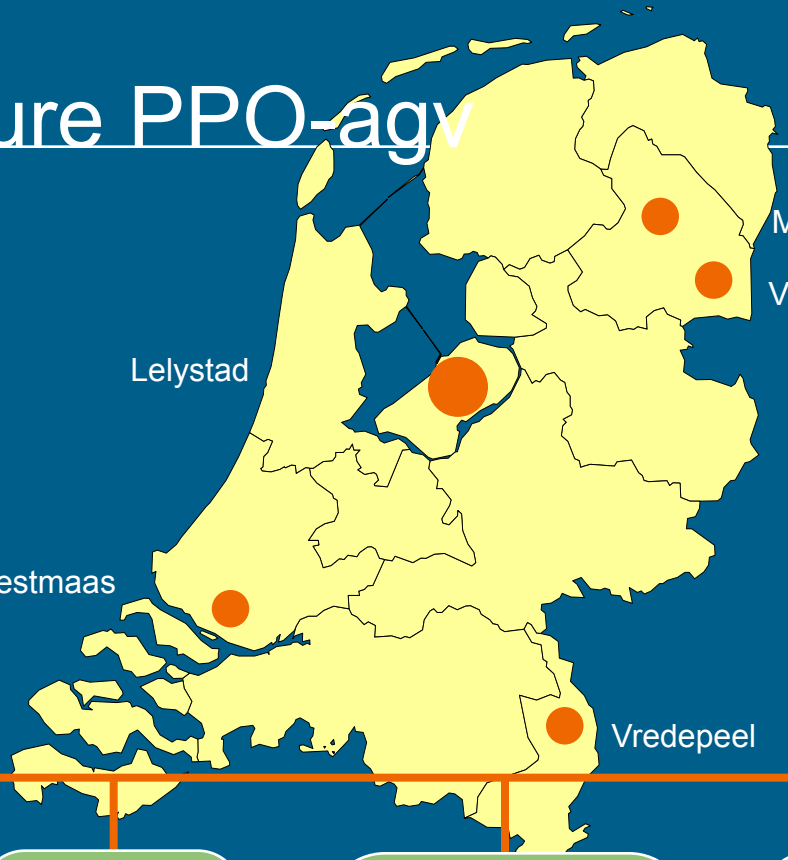
PPO-AGV, Partner for research and co-innovation!

APPLIED PLANT RESEARCH
WAGENINGEN UR

Unit of Wageningen University and Research Centre



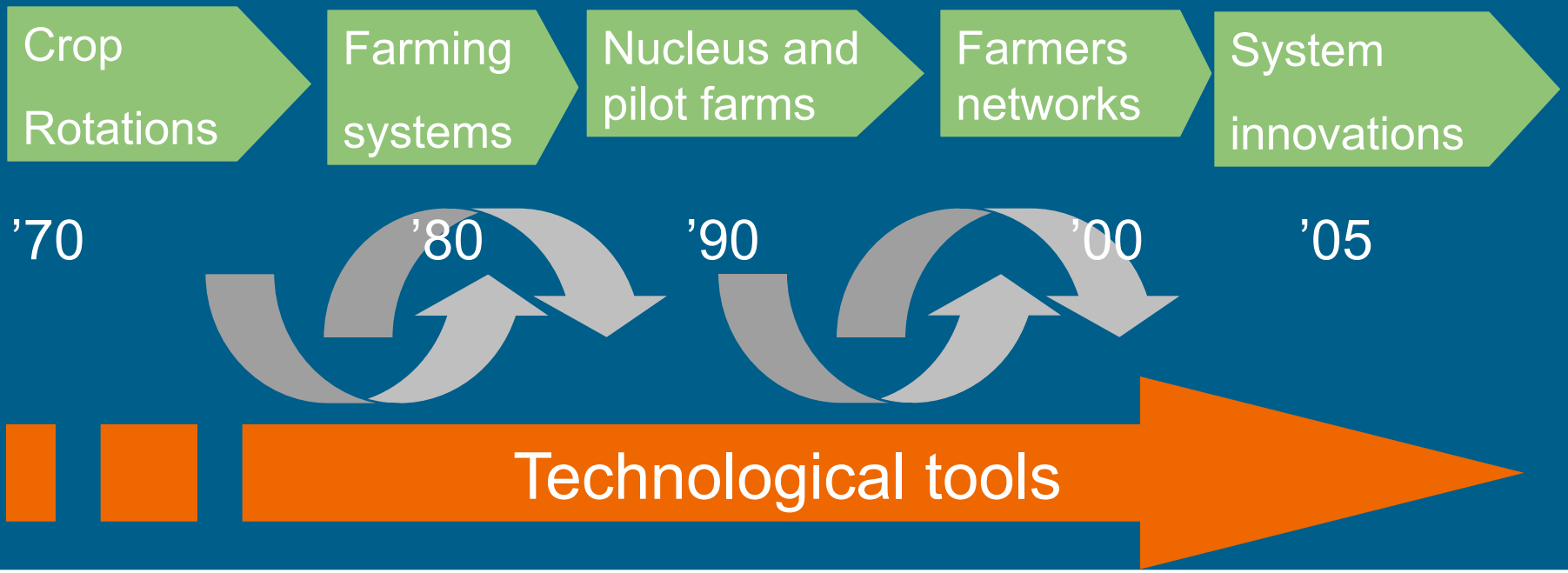
Organisation structure PPO-agv



Bu-Manager
A.T.J. van Scheppingen

- Multifunctional agriculture
  Management,
  Nematodes
  E.K. Pinxterhuis
- Crop protection
  Fungi
  Weeds
  Pests
  P.M. Spoorenberg
- Farm system research
  B.J.M. Meijer
- International
  Nutrient Management
  Product and crop innovations
  C.L.M. de Visser
- Experimental Farms
  Laboratory
  T.A. Brouwer

Transition to sustainable agriculture



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ENDURE Information Centre

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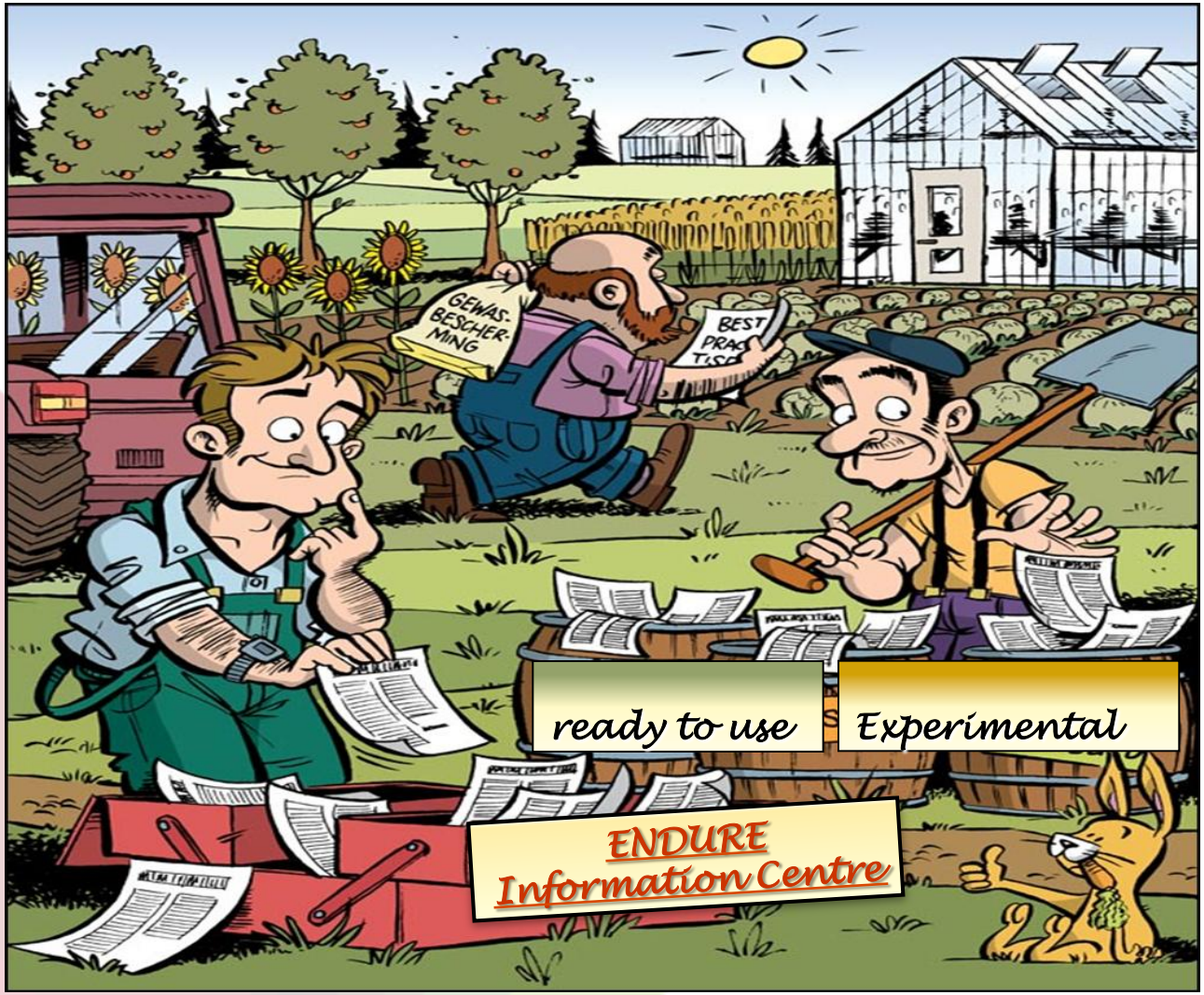

Modified Farming with future, NL

- for advisers & extension service
- Linking between researchers & crop protection advisors
- Access to practical IPM-relevant information from
- a wide range of European countries
- Validated by ENDURE scientists.

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ENDURE IC - content 1200 entries

- **Ready-to-use information about integrated crop protection**
  - scientifically sound,
  - tested in field,
  - practical to adopt,
  - cost-effective
- **ENDURE and national sources summarized in English**
- **Role of the scientists**
  - Identification, collection and validation of content
  - Description with keywords and writing English abstracts

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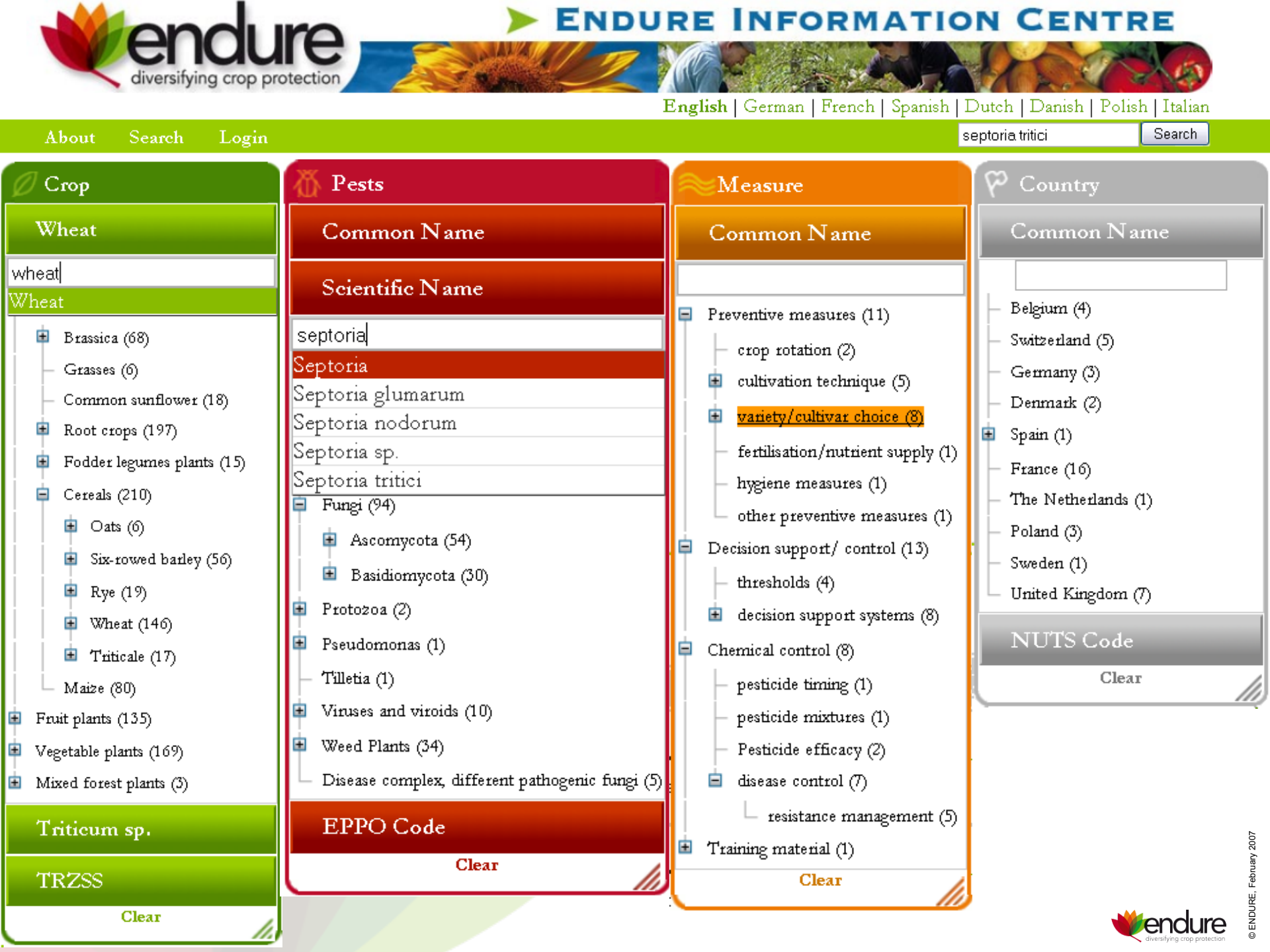
endure
diversifying crop protection
ENDURE INFORMATION CENTRE
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Cereals (210)
Oats (6)
Six-rowed barley (56)
Rye (19)
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Maize (80)
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Vegetable plants (169)
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TRZSS
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Scientific Name
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Septoria
Septoria glumarum
Septoria nodorum
Septoria sp.
Septoria tritici
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Common Name
Belgium (4)
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Germany (3)
Denmark (2)
Spain (1)
France (16)
The Netherlands (1)
Poland (3)
Sweden (1)
United Kingdom (7)
NUTS Code
Clear
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7 Reports found, displaying from 1 to 7

First Previous Next Last

Crop	Pests	Measure	Country	Title	Practicability	Language	
Wheat	Septoria	variety/c ...	BE	EuroWheat.org: a new research-based websi ...	ready to use		Read more
Wheat	Septoria	disease r ...	BE	Using Cultivar Resistance to Reduce Fungi ...	ready to use		Read more
Wheat	Septoria	variety/c ...	BE	Report on Best control practices of disea ...	ready to use		Read more
Wheat	Septoria	disease r ...	DE	EUROWHEAT Platform	experimental		Read more
Winter wheat	Speckled ...	Tolerant ...	ES	Diseases of winter cereals	ready to use		Read
Wheat	Septoria	variety/c ...	FR	A NEW INDICATOR TO EVALUATE WHEAT CULTIVA			
Wheat	Speckled ...	variety/c ...	UK	Wheat seed health & seed-borne diseases – ...			more

Wheat seed health & seed-borne diseases – a guide

This guide aims to help farmers make more informed decisions on using seed treatments in wheat.

7 Reports found, displaying from 1 to 7

First Previous Next Last

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Wheat seed health & seed-borne diseases – a guide

summarized by Bill Clark

last update: 28-Feb-2010

This guide aims to help farmers make more informed decisions on using seed treatments in wheat.

Practicability: ready to use

Wheat / Triticum sp. (TRZSS)

Microdochium / Microdochium (anamorphic genus) (1MICDG)
Ergot of cereals / Claviceps purpurea (CLAVPU)
Fusarium spp. / Fusarium sp. (FUSASP)
Speckled leaf blotch of wheat / Mycosphaerella graminicola (SEPTTR)
Common bunt of wheat / Tilletia tritici (TILLCA)

variety/cultivar choice
certification

United Kingdom

By understanding the principles of seed testing and processing, the nature of the diseases that threaten seed and the products now available, farmers can:

- make informed decisions
- reduce their costs
- achieve high standards of seed health
- improve profitability
- reduce environmental impact

Certified seed
Modern seed treatments offer very high levels of efficacy and have become an integral part of the seed production process. Thus, most seed bought by farmers is already treated. Seed treatment cost varies from £40/t to £150/t. On a cost/hectare this is less than foliar sprays. Nevertheless it is a significant cost. Seed loading (active ingredient/kg seed) and uniformity of application are important. Many seed treatment manufacturers have developed quality assurance schemes for operators to ensure high application standards. This has not only led to improvements in quality of treatment, but also to increased operator and user safety.

Farm-saved seed
The term 'farm-saved' can imply taking grain from a heap in the barn for sowing. This is bad practice. Producing seed from home-grown grain should be planned as meticulously as if it were seed grown for certification. Field history, rotation, weed burden, seed source and treatment of the parent crop should all be taken into account. The crop should be carefully managed and monitored regularly through the season. Seed should be kept separate at harvest. Farmers who choose to save their own seed need to consider whether or not to treat. However, decisions should be based on results of tests for seed-borne diseases. Potential seed lots should be tested after harvest. Decisions on whether or not to treat should be based on thresholds. Whether treated or not, seed should be cleaned before sowing. This should be the case whether the seed is grown by a specialist seed grower or by a farmer for his own use.

Previous

Wheat | Septoria | variety/c ...
A NEW INDICATOR TO EVALUATE WHEAT CULTIVA ...

Wheat | Speckled ... | variety/c ...
Wheat seed health & seed-borne diseases – ...

Previous

Next

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ENDURE IC - numbers

crops	entries
arable	600
cereals	220
maize	85
potato	180
oil seed rape	70
pome- and stonefruit	110
vegetables	170
vine grapes	67

measures	entries
preventive measures	380
decision support/ control	185
non-chemical control	310
chemical control	340
legislation	93
training material	80
assessment of crop protection strategies	6

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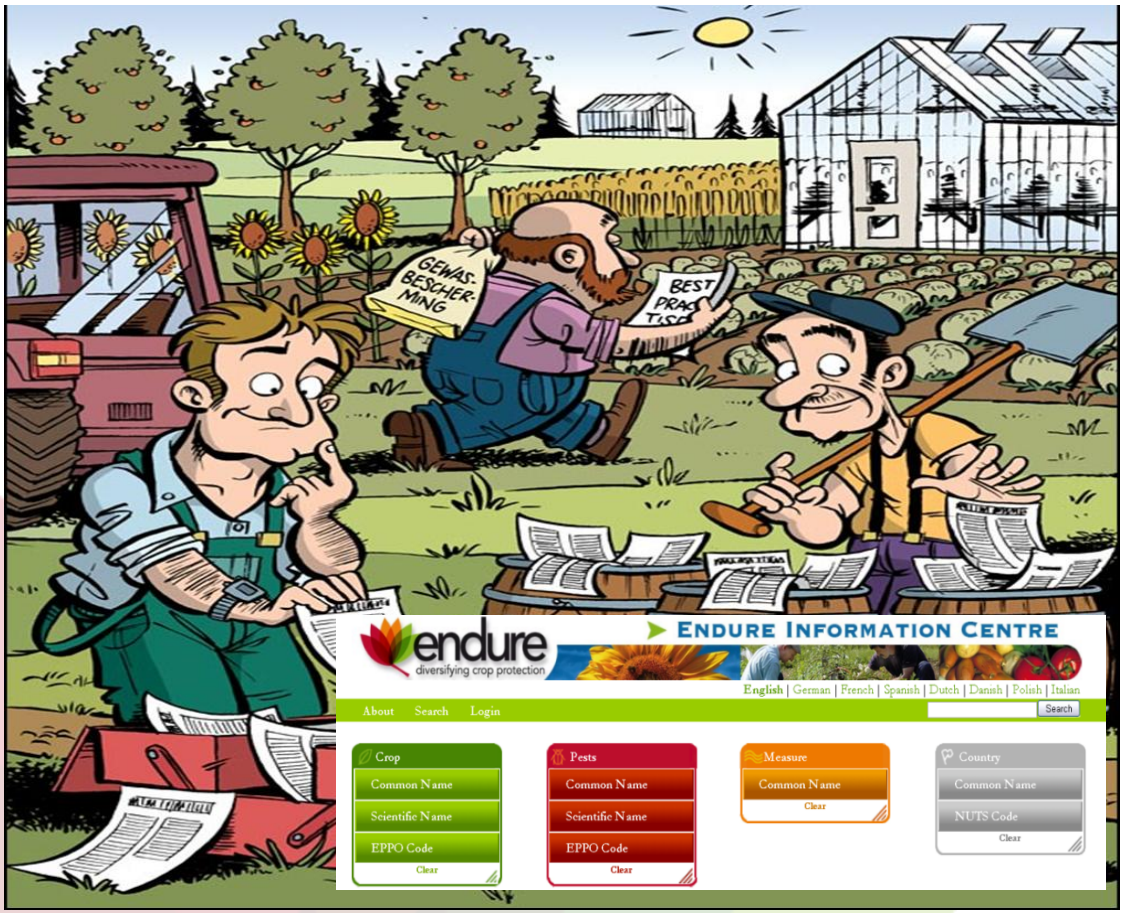

Source: Farming with Future, NL (modified)

It is up to you to!

Share, adapt and combine existing knowledge and tools in IPM

Visit the ENDURE IC!

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EuroBlight

A potato late blight network for Europe

04 September 2011

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Password:

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Forgot your password?

Workshop in St Petersburg 9-14 October 2011

The EuroBlight 2011 Workshop will be held between October 9th - 14th, 2011 in historical St. Petersburg.

2nd announcement. Updated 23July. link to hotel booking updated

Participants list Updated 18 August

Scientific program

News

16 August 2011 Scientific program for St Petersburg workshop

Please find the scientific program for the St Petersburg workshop here

Jens G. Hansen

---

23 July 2011 New link for hotel booking

The local organisors inform that the confusion with on-line hotel booking has been sorted out.

1. For the participants who want to arrive earlier and depart later to St. Petersburg Park Inn Pulkovskaya hotel offers special room rates from the 5th to 21st of October.
2. Every participant chooses dates of staying individually when booking accommodation on-line.
3. Tourist visa support documents are issued by Park Inn Pulkovskaya hotel according to the hotel booking dates indicated by a participant.

Here is the updated link to hotel booking

Jens G. Hansen

---

16 July 2011 EuroBlight workshop: 85 participants from 22 different countries

Please find the list of participants regeistered by 15 July for the St Petersburg workshop here

If you have registered please check your name on the list. If you have changes regarding the title of your presentation or poster then please contact Jens G. Hansen

Please take notice about the instructions regarding visa and hotel in the 2nd announcement available on this page.

EuroBlight publications

Find the proceedings from Arras workshop in 2010 and previous workshops since 1996 here NEW!

All EuroBlight protocols here

Blight surveillance 2011

Norway. Early blight attacks in Norway from Mid June. First blight recorded in more fields after June 28 in the UK.
See detailed results from: DK NO SE FI All Nordic countries Infection pressure DK

Surveillance in other countries:
Fight against Blight (UK)
Dacom/Masterplan (NL)
Phytopre+2000 (CH)
Phytophthora Modell Weihenstephan (DE)
DARD Blight-Net (Northern Ireland)

Participants Arras WS, 2010

EuroBlight

A potato late blight network for Europe

Home | Partners | Pathogens | Fungicides | Decision support | Publications

- DSS systems overview
- Sub-models description
- Compare submodels
- Best Practice
- Weather data

Case - Denmark

Case A: In Denmark farmers have been using reduced dosages for years.

In Denmark, data from the national monitoring network, weather based infection pressure, cultivar resistance and crop growth stage determine strategies with reduced dosages.

Dose Model Results 2009

Cases - the Netherlands

Case A: Test of strategies with reduced dose rates.

Test of control stategies including use of a DSS to

ents of an Integrated Control strategy for late blight in Europe are presented and
expert judgement) for implementation, barriers and contribution to input reduction are

	mentation	Barriers	Contribution to input reduction	Organic
Crop Rotation	Only on best farms/in some regions/in some countries	Economic/costs AND limited influence on blight	Intermediate	Applicable in organic farming
Primary inoculum sources	Only on best farms/in some regions/in some countries	Economic/costs AND risk perception	Intermediate	Applicable in organic farming
Planting time and density	Only on best farms/in some regions/in some countries	Economic/costs AND limited influence on blight	Small	Applicable in organic farming
Fertilization	Only on best farms/in some regions/in some countries	Limited influence on blight	Small	Applicable in organic farming
Irrigation	Widespread in practice	Limited influence on blight	Small	Applicable in organic farming
Cultivar resistance	Only on best farms/in some regions/in some countries	Economic/costs AND risks AND risk perception	Lower dependency on chemicals AND Large	Applicable in organic farming
Fungicides	Widespread in practice	Economic/costs AND risk perception	Intermediate	Not applicable in organic farming, except that some countries allow use of Copper
DSS	Only on best farms/in some regions/in some countries	Economic/costs AND risk perception	Intermediate	Applicable in organic farming, excluding fungicide modules etc.
Desiccation	Widespread in practice	Risk perception	Small	Applicable in organic farming, excluding dessication by applying chemicals
Harvest	Widespread in practice	Economic/costs		Applicable in organic farming

English (United States)

Best Practice: Use resistant varieties

From Science to Field
Potato Case Study – Guide Number 4

Using Cultivar Resistance to Reduce Inputs Against Late Blight

Summary

The late blight resistance of a cultivar offers significant potential in reducing fungicide inputs as part of an integrated control strategy. Both partial resistance (lower susceptibility) and fungicides can slow the development of late blight and many reports show that partial resistance in the foliage can be used to complement fungicide applications, cutting fungicide use through reduced application rates or extended intervals between sprays.

The use of resistant cultivars varies across Europe. In Western Europe, resistant cultivars are not grown on a large scale because commercially important characteristics such as quality, yield and earliness are usually not combined with late blight resistance in the same cultivar. However, in countries where fungicides are not available or very expensive, the use of resistant cultivars is one of the most important ways to reduce blight damage.

Breeders are constantly trying to produce cultivars that combine commercially important characteristics with late blight resistance, either by conventional breeding or using GMO techniques. Using cisgenesis - genetic modification using a natural gene from a crossable plant - may prove more publicly acceptable. However, a major barrier remains the durability of resistance, testing for which should be conducted according to EUCABLIGHT's harmonised protocols.

This Guide examines the current situation in Europe, the prospects for further progress and sources of information for advisers and growers.

For further information please contact:
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About ENDURE

ENDURE is the European Network for the Durable Exploitation of Crop Protection Strategies. ENDURE is a Network of Excellence (NoE) with two key objectives: restructuring European research and development on the use of plant protection products, and establishing ENDURE as a world leader in the development and implementation of sustainable pest control strategies through:

- Building a lasting crop protection research community
- Providing end-users with a broader range of short-term solutions
- Developing a holistic approach to sustainable pest management
- Taking stock of and informing plant protection policy changes.

Eighteen organisations in 10 European countries are committed to ENDURE for four years (2007-2010), with financial support from the European Commission's Sixth Framework Programme, priority 5: Food Quality and Security.

Website and ENDURE Information Centre

www.endure-network.eu

This publication was funded by EU grant (Project number: 031499), under the Sixth Framework Programme, and is catalogued as ENDURE Potato Case Study – Guide Number 4, published in September 2008.

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From Science to Field
Potato Case Study – Guide Number 4

Using Cultivar Resistance to Reduce Inputs Against Late Blight

Didier Andrivon, INRA, France; Bert Evenhuis and Huub Schepers, WUR, Netherlands;
Denis Gaucher, ACTA, France; Jozefa Kapsa and Renata Lebecka, IHAR, Poland;
Bent Nielsen, AU, Denmark; Michelina Ruocco, CNR, Italy

Photo © INRA, France

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Best Practice: Targeted use of fungicides

From Science to Field
Potato Case Study – Guide Number 3

Fungicides for Tackling Late Blight

Summary

Fungicides play a crucial role in the integrated control of late blight. Integrated Pest Management strategies to control late blight balance a number of factors concerning fungicides including efficacy and side-effects (both environmental and toxicity) but also economic and social factors in addition to the legislation in place.

Control strategies are primarily preventive, but when blight enters the crop the strategy must focus on stopping or reducing the epidemic. This means growers and advisors need all the information and tools necessary to control blight efficiently.

A control strategy can be based on a schedule with more or less fixed intervals or based on recommendations derived from a Decision Support System (DSS). In a strategy, the first spray, product choice, dose rates, timing and last spray are important elements that can differ from country to country depending on growing conditions, varieties, registered fungicides and weather conditions.

Important phases in crop growth can also be identified: emergence to start of rapid haulm growth, rapid haulm growth, end of rapid haulm growth to start of senescence and start of senescence to complete haulm destruction. It is important that information on all these elements is available and that the adviser and/or farmer make his decisions accordingly.

This Guide identifies sources for obtaining this information and a table of fungicides registered for late blight control in five European countries.

For further information please contact:

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From Science to Field
Potato Case Study – Guide Number 3

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Best Practice: Decision Support Systems

From Science to Field
Potato Case Study – Guide Number 2

Using Decision Support Systems to Combat Late Blight

Summary

Decision Support Systems (DSS) integrate all relevant information to generate spray recommendations and much can be gained by their wider adoption. DSS increase the efficacy of control strategies without increasing risk and can also be used to justify fungicide inputs and as a source of advice in situations where the number of sprays or product choice is limited by legislation.
ENDURE's Potato Case Study has considered all DSS in Europe, where all potato growing regions have one or more DSS available. These DSS can improve the efficacy of control strategies and optimal timing of sprays can, on average, produce a saving of one or two sprays per season. Applying an effective preventive strategy can also avoid dramatic disease outbreaks that have to be stopped by using intensive spraying regimes.
This Guide examines the DSS currently in use in Denmark, France, Italy, The Netherlands and Poland and what the immediate future holds for these systems. The Danish system (www.planteinfo.dk), for example, is part of the wider Web-blight monitoring network which covers all countries around the Baltic Sea. A Nordic test-and-development DSS called Blight Management is currently being used to test new applications before implementation in each country's own DSS. In France, the Plant Protection Service and ARVALIS have each developed a DSS, but are now working on a single DSS scheduled to go online from 2009.

For further information please contact:
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Photo © Bernd Hommel, JKI

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EuroWheat

Home | Project information | Pathogens | Fungicides | Cultivars | Wheat IPM | Public documents

04 September 2011

Comparison of Fungicide efficacy across countries

Find information on the efficacy of the most important compounds against cereal diseases across countries in Europe.
Read more ...

Find presentations and conclusions from EPPO's septoria workshop held at Rothamsted, December 2010 here

Survey on the use of disease thresholds

New guideline on monitoring of diseases in wheat and a survey on control thresholds used in different countries

Read more ...

Login

Login name:

Password:

Welcome to EuroWheat

EUROWHEAT is an Internet based platform aiming at collating and displaying host - and pathogen characteristics, and pesticide efficacy on a European scale. Bringing together existing information from national programs and ensuring that these data are in a format, which can be readily understood trans-nationally, are expected to provide significant added value on a European scale. New disease - and resistance data will be published on the platform as soon as possible to support effective disease control, deployment of host resistances and breeding programs.

Present information available are:

- Virulences in the yellow rust population
- Ranking of wheat cultivars for susceptibility to Fusarium and different testing methods
- Disease names in six different languages
- Effectiveness of fungicides ranked in different countries
- Fungicides international trade names
- Fungicide resistance as present in Europe
- Survey on pesticide use and yield responses to fungicides in EU countries
- Yield level and yield losses from specific diseases in 8 EU countries
- Information on disease thresholds and DSSs used in Europe
- Cultural practices impact on disease development
- National documents on disease management

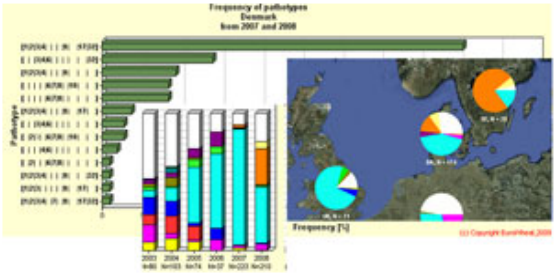
EuroWheat is funded by the ENDURE project and Aarhus University.

Contact

For further information, please contact:
Lise Nistrup Jørgensen, e-mail: LiseN.Jorgensen@agrsci.dk
Mogens S. Hovmøller, e-mail: Mogens.Hovmoller@agrsci.dk

Web site provided by Aarhus University, Faculty of Agricultural Sciences, Department of Agroecology and Environment.

Yellow rust pathotypes in Europe



Most important pathotypes in Europe 1993-2009...
Evolution of pathotypes over years and countries
Pathotypes on Europe map
Track single, rare virulences on Europe map

Publications about EuroWheat

EuroWheat.org : A support to integrated disease management in wheat. Outlooks on Pest Management, Vol 21, No 4 - August 2010, p 173-176

EuroWheat.org: a new research-based website supporting integrated disease management in wheat. From Science to Field Wheat Case Study - Guide Number 3, 2010

EuroWheat : Supporting IPM in Wheat, including Information on Fusarium Head Blight. Poster for The 11th European Fusarium Seminar 'Fusarium - Mycotoxins, Taxonomy, Pathogenicity and Host Resistance', Radzikow, Poland, 20 - 24 September 2010.