

Per Kudsk Aarhus University Denmark







Case studies

- Comparative analysis of crop protection practices in different countries (specific crop/pest combinations)
 - o Description of practices in different countries/regions
 - o Reasons for differences between countries/regions
 - o Can "best practices" in one country/region be adopted by other countries/regions



Case studies

- Output:
 - o Reports
 - o Guides for advisors and farmers (From Science to Field)
 - o Scientific papers
 - o Input for training activities
 - o Input to Endure Information Centre

From Science to Field
Wheat Case Study - Guide Number 1

Using Cultivar Resistance to Reduce Fungicide Input in Wheat

Lise Nistrup Jergensen, Aarhus Universidensark Beill Clark, Rothamsted Research, UK Marca Jahn, IKI Germann Tomasz Góral, IHAR, Poland Huub Schapers, Wageningen UR, The Noth Philippe Lucas and Bemard Rolland, INRA, David Gousche, Arushis, France Legis Vened, CTE, Nasans



endure

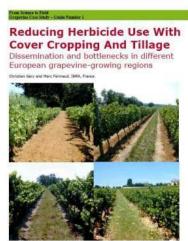
food Quality and Salvey

Commissioning crops production













Case studies

Pest
Foliar diseases
Late blight
White flies
Scab, brown spot & codling moth
Row crops (maize)
All pests
Biofumigation & landscape management
Mycosphaerella, black weevil & nematodes
Diseases, grape berry moth & weeds



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System case studies

- Redesigning the cropping system and looking at longer term innovations to further reduce the dependence on pesticides
 - o Promote a system approach
 - o Identify science-based sources of innovation for implementing alternative crop protection strategies (e.g. DNA based monitoring methods, robotics, IT, resistance genes, semiochemicals, landscape management)
 - o Identify relevant criteria for assessing the sustainability of crop protection strategies
 - o Design *ex ante* assessment tools that makes it possible to evaluation innovative strategies



System case studies

- Cropping systems studied:
 - o Winter crops based cropping systems
 - o Maize based cropping system
 - o Orchard system case study
- Scenarios analysed:
 - o Current system
 - o Advanced system (short term innovations)
 - o Innovative system (long term innovations)



System case studies

- Ex ante assessment:
 - o DEXiPM
 - Agronomic assessment
 - Environmental assessment
 - Social assessment
 - o DEXiPM slightly modified for the maize based cropping system
 - o DEXiPM extensively modified for the orchard system case study (DEXiOS)



Session programme:

From crop pest focus to system approach

- 1. Wheat case study (Lise Nistrup Joergensen)
- 2. Winter crops based cropping systems (Bo Melander)
- 3. DEXiPM (Gabriele Fortino)

Examples on results of case and system case studies

- 1. Maize case study and maize based cropping systems (Jozsep Kiss)
- 2. Pomefruit case study and orchard system case study (Bart Heijne)

