

English



**Title of Paper**

**OK-Net Arable online knowledge platform**

**Subtitle**

**Presenter Name**

**Ilse A. Rasmussen, ICROFS, Denmark**

**Track:**

**Scientific Track 3**

**Hall:**

**B**

**19<sup>th</sup> IFOAM ORGANIC WORLD CONGRESS (OWC) – 2017**

9-11 November 2017, India Expo Centre and Mart, Greater Noida, India

# OK-Net Arable online knowledge platform

I. A. Rasmussen; A. L. Jensen; M. S. Jørgensen; H. Kristensen; M. Conder; C. Micheloni & B. Moeskops

# EIP-AGRI Focus Group Organic Farming Optimising Arable Yields



- Poor soil fertility management
- Inadequate nutrient supply
- Insufficient weed management
- Pest and disease pressure
- Variety choice.



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# OK-Net Arable - exchange knowledge, enhance farming

Browse the knowledge base in one of the five themes



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The Muencheberg Soil Quality Rating ...

Field manual for detecting and assessing soil properties and limitation

Latest tool 24-08-17

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A useful tool for understanding nitrogen dynamics in organic rotations

Latest comment

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It seen problems with the Google translations in Internet Explorer, where text strings are cut off when special characters occur. We recommend the use of other browsers such as Chrome or Firefox.



Back

Suggest a tool

# Crop rotation and its ability to suppress perennial weeds

Preventive control of perennial weeds through weed-suppressing crop rotation

[www.orgprints.org](http://www.orgprints.org)

Leaflets  
and guidelines



Faktaark om økologi

## SÆDSKIFTER

Er dit sædsårlige bælggrønsårligt?  
Økologisk plantevækst og høst på rodet er ikke mere end 6 år.

**THE GOOD RAD**

- Dæk minimum 20 pct. af sædskiftet med grønsædende planter, der kan stå i (bløvsen eller korset)
- Hus maksimum 50 pct. af sædskiftet med konkurrencesvage korngælder og højt to år i træk
- Vælg afgrøder, så der opnås god konkurrencesevne senest i marts med høj bestand af skrub

VÆLG AF AFGRØDER UD FRA KONKURRENCEVNE OG BEHOV FOR N-GØDNING

**MINIMUMSOPPLÆG**

Grønsædende planter for 2 år eller grønsædning

Høj to år i træk

Reduktiv afgrøder og sædskifter

Afgrøder og sædskifter der ikke er konkurrencesvage

[Related content from Organic Eprints](#)  
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[Link to the tool \(Danish\)](#)

Give your rating to the tool: ★★★★★

Average rating to the tool: 0.0 Number of ratings to the tool: 0

## Problem

The problem of perennial weeds in organic arable farming

## Solution

A well-designed crop rotation system is the key to preventive control of perennial weeds.

## Description

Weed-suppressing crop rotations are essential for sustainable organic arable farming. Preventing spread of perennial weeds will increase crop yields and quality. The tool is a factsheet created for all organic farmers as we all need renewed knowledge on weed-suppression and crop rotation from time to time. The factsheet provides practical recommendations on crop selection and composition of crop

## Applicability

### Theme

Soil quality and fertility, Weed management, Crop specific

### Languages

Danish language

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Tilbage

Foreslå et værktøj

# Sædskifte og dens evne til at undertrykke rodukruddt

## Forebyggende bekæmpelse af flerårig ukrudt gennem ukrudt-undertrykkende vekseldrift

[Relateret indhold fra Organic Eprints](#)[Link til mere information](#)[Link til værktøjet \(Dansk\)](#)Leaflets  
and guidelines

Giv din bedømmelse af værktøjet:

Gennemsnitlig bedømmelse af værktøjet: **0,0** Antal bedømmelser af værktøjet: **0**

### Problem

Problemet med rodukruddt i økologisk planteavl

### Løsning

Et godt designet vekseldrift er nøglen til forebyggende bekæmpelse af flerårigt ukrudt.

### Beskrivelse

Weed-undertrykke sædskifter er afgørende for en bæredygtig økologisk planteavl. Forebyggelse af spredning af rodukruddt vil øge høstudbytte og kvalitet. Værktøjet er et faktablad skabt for alle økologiske landmænd, som vi alle har brug for fornyet viden om ukrudt-undertrykkelse og sædskifte

### Anvendelsesområde

#### Tema

Jordkvalitet og frugtbarhed, Ukrudtsbekæmpelse, Afgrødespecifik

#### Sprog

dansk sprog

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## Crop rotation and its ability to suppress perennial weeds

{Tool} *Crop rotation and its ability to suppress perennial weeds*. [Sædskifter.] Creator(s): Askegaard, Margrethe. Issuing Organisation(s): SEGES. (2016)



**PDF** - Danish/Dansk (Sædskifter)  
3MB



**Image (PNG)** - Cover Image - English  
128kB

Online at: [https://www.landbrugsinfo.dk/Oekologi/Planteavl/Filer/saedskifter\\_fakta.pdf](https://www.landbrugsinfo.dk/Oekologi/Planteavl/Filer/saedskifter_fakta.pdf)

### Summary

Weed-suppressing crop rotations are essential for sustainable organic arable farming. Preventing spread of perennial weeds will increase crop yields and quality. The tool is a factsheet created for all organic farmers as we all need renewed knowledge on weed-suppression and crop rotation from time to time. The factsheet provides practical recommendations on crop selection and composition of crop rotations in accordance to weed competitiveness and nitrogen demand. An appropriate combination of crops and green manures, designed specifically for the conditions and needs of individual fields, prevents spread of perennial weeds. The factsheet doesn't only provide prevention but also provides recommendations in case of high weed pressure. Example: Do not sow a winter crop after legumes, as winter crops leave perennial weeds undisturbed for a long period of time. Instead, undersow a cover crop in the legumes to hold back the nutrients and sow a competitive crop in spring.

# Crop rotation and its ability to suppress perennial weeds



**NET**  
NATURAL ECOSYSTEMS TECHNOLOGY

**PROBLEM**  
Weeds that can readily spread, especially in arable areas that contain a high number of cereal crops without perennial grass/cover ley, it reduces crop yields by competing for water and nutrients.

**SOLUTION**  
Weeding thistle populations can be successfully reduced by repeatedly undertaking stubble cultivation after an early maturing crop and cultivating a densely growing catch crop.

**OUTCOME**  
Multiple cultivations lead to a repeated physical damage of the thistle. Each time it regrows, it uses further nutrients until it is exhausted and a new crop will out-compete it. This method is also effective against other root-spreading weeds such as couch grass and bindweeds.

**APPLICABILITY**  
Theme: Weed management  
Geographical coverage: Central Europe  
Application time: Before end of June and beginning of August, in case by weather  
Required time: 2-3 stubble cultivations  
Period of impact: Following crop  
Equipment: Disc plough or ring-shank cultivator  
Best after: Cereals or other early maturing crops like rapeseed

**Practical recommendation**  
After harvesting cereals, perform stubble cultivation with a disc plough or a completely following ring

[Related content from Organic Eprints](#)  
[More about the tool on Organic Eprints](#)

[Link to the tool \(English\)](#)



Give your rating to the tool: ★★★★★

Average rating to the tool: 4.0 Number of ratings to the tool: 1

## Problem

Perennial weeds like thistle and couch-grass hinder growth and yields of arable crops. Without a proper focus on perennial weeds (through a good crop rotation system) organic arable cropping systems may not manage for more than 6 years without facing major weed problems.

## Solution

Crop rotation is a key tool for preventive control of perennial weeds in arable farming. Weed-suppressing rotations include an appropriate percentage of competitive crops and green manures. Selection of the right crops and their proper management are important for successful weed prevention.

## Description

## Applicability

### Theme

Soil quality and fertility, Weed management

### Languages

English language

Show more information



## Practical recommendation

### Basic rules

- Implement green manures, such as clover or lucerne, in at least 20 % of the rotation.
- Do not grow more than 50 % of cereals with low weed competitiveness in the rotation. Do not cultivate such crops for more than 2 consecutive years.
- In fields with prevalent high weed pressure cultivate only crops with high weed competitiveness.

### Crop selection and composition of crop rotation

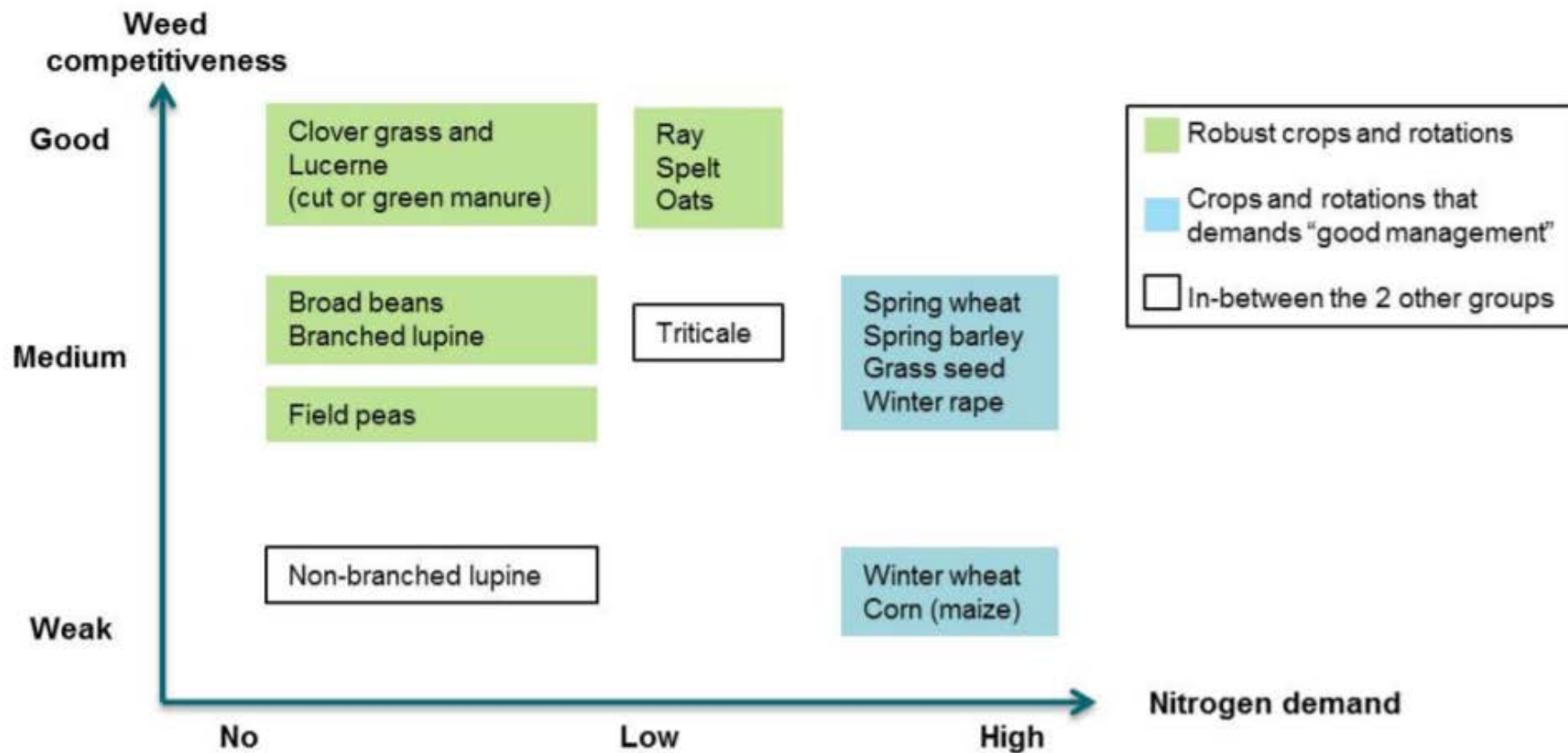


Figure 1: Crop selection in accordance to weed competitiveness and nitrogen demand

## Discussion forum


Here you can discuss your problems and solutions for this theme

5 Comments farmknowledge.org

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Solutions, potentials & challenges for organic farming in the UK


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Désherber mécanique

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 **Carlo Ponzio** - 5 months ago  
Finger harrow and wide crop rotation

 **Bram Moeskops** Mod - 9 months ago  
What methods do you use to control weeds? Do you apply mulch? Do you recommend it to others?

 **Zoltan Dezsény** Mod  **Bram Moeskops** - 5 months ago  
We grow vegetables on small scale, so not under arable conditions. See [www.acta.fapz.uniag.sk/journal...](http://www.acta.fapz.uniag.sk/journal...)  
However, it is only the result of the first year of a multiple-year trial.

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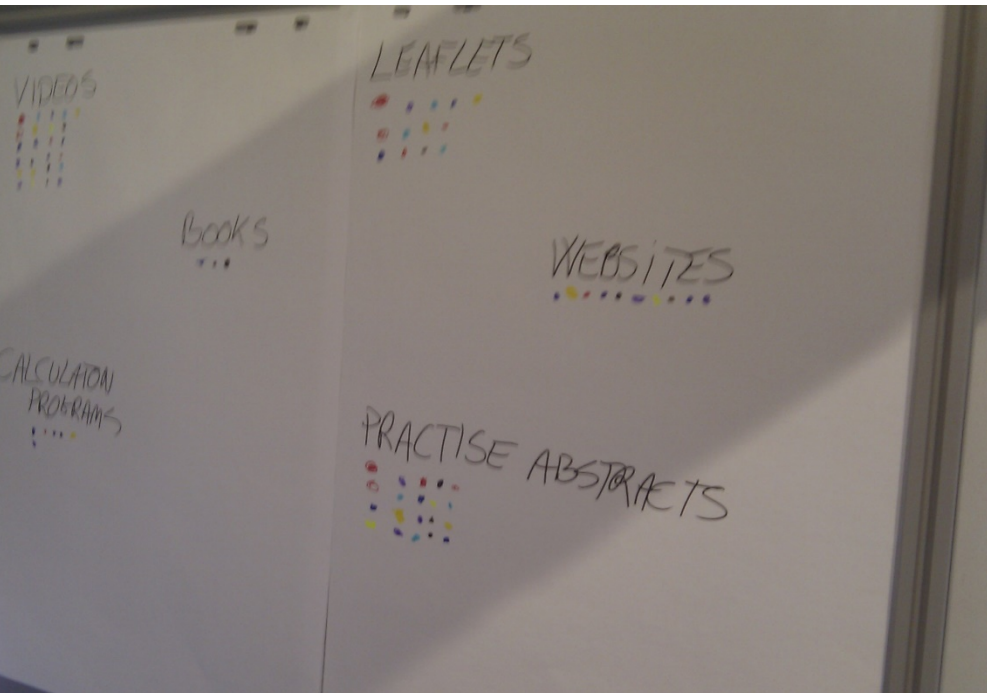
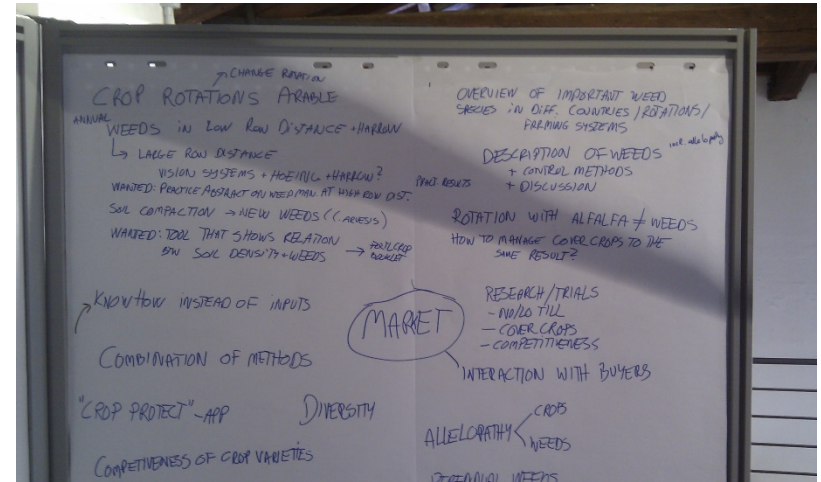
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The OK-Net Arable Team



# Farmer groups discuss and evaluate tools





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## - knowledge platform of OK-Net Arable

Developed by ICROFS/AU

- Allan Leck Jensen
- Ilse A. Rasmussen
- Margit Styrbæk Jørgensen
- Helene Kristensen
- Dennis Christensen

# About Organic Knowledge Network Arable (OK-Net Arable)

If you are involved in organic arable farming, the information and knowledge exchange on this site can help you in your daily work.

The OK-Net Arable platform provides access to [a wide range of tools and resources](#) that can help improve production, and a [virtual meeting place](#) for cross-border learning.

The OK-Net Arable knowledge platform promotes exchange of knowledge among farmers, farm advisers, and scientists, with the aim of increasing productivity and quality in organic arable cropping across Europe

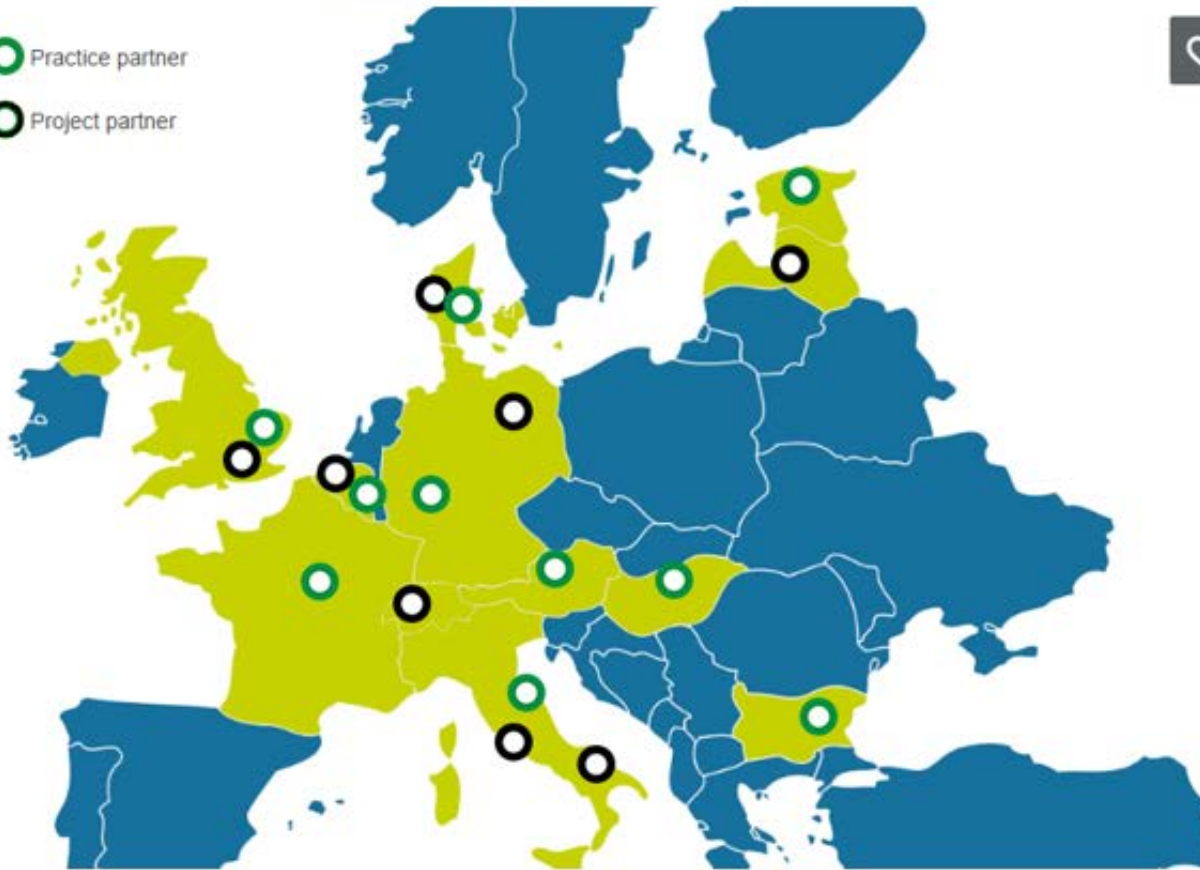
It is the web-based platform for the [OK-Net Arable project](#), which is coordinated by IFOAM EU, and involves 17 partners from 12 European countries, shown below on the map.

The project is financed by Horizon 2020, the EU's main funding instrument for research and innovation.

For more information, please visit [www.ok-net-arable.eu](http://www.ok-net-arable.eu).

 Practice partner

 Project partner



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# More information

- Contact: [Bram.Moeskops@ifoam-eu.org](mailto:Bram.Moeskops@ifoam-eu.org)
- Visit: [www.ok-net-arable.eu](http://www.ok-net-arable.eu)
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OK-Net Arable has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 652654.

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