



# Organic Knowledge Network on Monogastric Animal Feed OK-Net EcoFeed

## News stories 2<sup>nd</sup> project year

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## Document Versions

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## Executive summary

This deliverable D3.4 is part of the Horizon 2020 project - OK-Net EcoFeed, Work Package 3 – Coordination of innovation and thematic groups, led by the Organic Research Centre (ORC).

The overall aim of OK-Net EcoFeed (Organic Knowledge Network on Monogastric Animal Feed) is to help farmers, breeders and the organic feed processing industry in achieving the goal of 100% use of organic and regional feed for monogastrics, in particular pigs, broilers, laying hens and parents of broilers and laying hens. Within this context, the aim of Work Package 3 is to establish and maintain an environment of exchange/cocreation of knowledge among farmers, business actors, researchers and advisers as a common ground to identify needs, assess new tools and innovations and facilitate exchange. As part of WP3, IFOAM EU is providing 2 “new stories” per project year, based on the inputs of WP leaders. The Innovation Groups in the project will translate the stories and disseminate them through the most appropriate channels.

## I. Introduction

The OK-Net-EcoFeed projects aims at the 100% use of organic and regional feed in organic monogastric production. Since the start of project in 2018, the OK-Net-EcoFeed partners together with the Innovation Groups (IG) have been working hard for this. The current deliverable D3.4 presents the promotion and dissemination of project outcomes, as carried out in task 3.4. Over the course of the second year of the project, IFOAM EU has published an article to promote the Knowledge Synthesis (D2.2) and an article introducing the new version of the Organic Farm Knowledge platform. Moreover, IFOAM EU has published an article on the EIP-AGRI website and newsletter while an additional one is currently in the pipeline. These last two articles will be available in D1.8.

## II. Organic Farm Knowledge - A unique resource with tools for farmers across Europe

Launched in October 2016 by the OK-Net Arable project, the online Organic Farm Knowledge platform ([www.organic-farmknoweldge.org](http://www.organic-farmknoweldge.org)) was extended to OK-Net EcoFeed in 2018. Organic Farm Knowledge provides access to a wide range of tools and promotes the exchange of knowledge among European farmers, farm advisers and scientists. Many of the OK-Net EcoFeed tools can already be found on the Organic Farm Knowledge platform and further new tools will be uploaded in the coming months. Recently, the article "[Organic Farm Knowledge – A unique resource with tools for farmers across Europe](#)" was published on the OK-Net EcoFeed project website. The article gives useful information about the core of the platform, the toolbox. It answers crucial questions such as "How can I find a tool?" and "Can I rate and comment a tool or engage in discussions?" and it shows what are the most popular tools for a diverse number of themes. Tools may include videos, handbooks and practice abstracts covering a wide range of topics. Within the OK-Net EcoFeed's objectives, achieving the goal of 100% use of organic and regional feed in monogastrics, the theme "[Feeding and ration planning](#)" is the most popular one.

The extension of the Organic Farm Knowledge platform to the OK-Net EcoFeed project offers an important opportunity to share knowledge about organic farming and foster innovation. Moreover, it gives farmers and advisers the chance to easily find and use tools that are based on scientific and practical knowledge.

The article "Organic Farm Knowledge – A unique resource with tools for farmers across Europe" will be promoted on the IFOAM EU website, while it has already been shared with the OK-Net EcoFeed partners who are currently carrying out further dissemination through their channels and networks. The full article is attached in the section II.1.

### II.1 Full article: Organic Farm Knowledge – A unique resource with tools for farmers across Europe

**The online platform Organic Farm Knowledge ([www.organic-farmknoweldge.org](http://www.organic-farmknoweldge.org)) intends to help increase productivity and quality in organic farming across Europe. It provides access to a wide range of tools and promoting the exchange of knowledge among farmers, farm advisers and scientists.**

Organic Farm Knowledge was set up in the European funded project OK-Net Arable (2016-2019), which promoted improved productivity and quality in organic arable cropping. The platform is now expanded in the OK-Net Ecofeed project (2018-2020), which supports organic pig and poultry farmers achieve the goal of using 100% organic and regional feed. Further projects are joining, and tools addressing a variety of additional themes are being added.

**Which themes does Organic Farm Knowledge cover?**

In the projects mentioned above, relevant tools such as factsheets, guides, online calculation tools and videos are selected, translated and produced. In OK-Net Arable, the partners provided about 180 tools on arable crops, soil quality and fertility, nutrient management, pest and disease control. OK-Net Ecofeed focusses on pigs, broilers, laying hens, feeding and ration planning and the handling of harvested feed. Many of the OK-Net Ecofeed tools are now on the Organic Farm Knowledge online platform, and additional tools will follow soon.

Several European projects have expressed interest or are already committed to supplying tools on themes such as seeds, breeding and contentious inputs. These are expected to be available soon.

### **The toolbox – the core of the platform**

The core of the platform is the "toolbox". Available tools include, for instance, factsheets, guides, online calculation tools and videos. Every tool is described by metadata that helps users to find the most relevant tool addressing their needs. Metadata include the problem the tool addresses, the solution(s) it offers, a description of the tool, the theme(s) covered, the language(s) it can be found in, the year it was released, the country of origin and information about the issuing organisation.

### **Key questions**

#### **How can I find a tool?**

For each of the themes mentioned above, a dedicated theme page has been set up where the tools related to a theme can be found along with some background information.

An extensive search function is also available, and tools can be browsed by theme, keyword, tool type and language.

#### **Are the tools available in all languages?**

While not all tools are available in all languages, their summaries and key recommendations are translated - via automatic translation - into Bulgarian, Danish, Dutch, Estonian, French, German, Hungarian, Italian, Latvian, Serbian, Spanish and Swedish.

#### **How can I inform myself about new tools?**

All tools are announced on the Organic Farm Knowledge platform with a news item. We are also highlighting the latest tool with a container on the homepage and on the relevant theme pages.

The tools are also presented via social media: on [Facebook](#) and on [Twitter](#).

#### **Can I rate and comment a tool or engage in discussions?**

The Organic Farm Knowledge Platform offers the opportunity to rate tools.

For discussions, the function DISQUS on the platform itself can be used. We also offer the [Organic Farm Knowledge Facebook](#) page and the [Twitter account](#), where each individual tool is posted and can be commented upon.

### **Most popular tools by theme**

So far, tools related to [organic arable farming](#) and to [organic feeding \(focussing on monogastrics\)](#) are available.

In OK-Net Arable almost 180 tools on arable farming were gathered, which are now available under the theme "[Crop production](#)". In the future, this category will also cover horticulture. Here are the most popular tools within the theme of crop production:

- Of the **arable crop**-specific tools, the video [“Cover Crop \(Rye\) and No-Till System in Wisconsin”](#) is the most popular one.
- This video is also the most popular tool related to the theme of **soil quality and fertility**. Next comes the booklet [“How to successfully convert to organic arable farming”](#).
- Related to **nutrient management**, the factsheet [“Testing peas for legume fatigue”](#) is the most popular.
- Within the theme **pest and disease control**, a factsheet on [“Reducing the use of copper in potatoes”](#) is the most popular.
- For **weed management**, among the most popular tools is the factsheet [“Comb harrow: efficient weed control in cereals”](#).
- For **cropping systems**, one of the most popular tools is the video [“Rape pollen beetle”](#).
- In the area of livestock, with its current focus on monogastric feeding, the following tools have been rated.
- **Feeding and ration planning** is the theme in which the most tools are currently available. Tools include videos, handbooks and practice abstracts covering themes such as [“Seaweed as feed supplement”](#), [“Roughage for organic laying hens”](#), [“Foraging sows on high-protein grassland”](#), or [“Fulfilling 100 % organic poultry diets: roughage and foraging from the range”](#).
- On **broilers and laying hens** several tools have been provided, e.g. [“Proteins from organically grown green crops are promising poultry feed”](#).
- On **pigs**, tools such as [“Feeding pigs: effect of silage”](#), [“Improving health and welfare of pigs - A handbook for organic pig farmers”](#), or [“Rotating pasture for pregnant sows”](#) are available.
- In the field of **animal health**, [“Feeding grass silage to fattening pigs”](#) is the most popular.

### Expansion of the platform

An important development is that several Horizon 2020 and [CORE Organic](#) projects have joined the platform and want to use it for their practice-oriented output. These include [LIVESEED](#) (Improve performance of organic agriculture by boosting organic seed and plant breeding efforts across Europe), [RELACS](#) (Replacement of Contentious Inputs in organic farming Systems), [ReMIX](#) (Redesigning European cropping systems based on species MIXtures) and all CORE Organic projects (Coordination of European Transnational Research in Organic Food and Farming Systems).

A search by project will be soon possible, improving the visibility of the generated tools and relative projects. Furthermore, it is planned to provide information about advisory services in each of the countries represented in the projects.

### Conclusion

The work done so far shows that in Europe a lot of knowledge exists about organic farming practices, but it can be difficult to find, and in many cases, it is difficult for farmers and advisers to use it in their daily work. The online Organic Farm Knowledge platform offers tools that present scientific and practical knowledge that is designed for and by practitioners, making it easier to access and apply. The platform also offers the possibility for users to comment, discuss and ask questions about important themes and specific tools. In this way, the online platform contributes to helping farmers and advisors become more innovative and improving towards best practices. Further development collaboration among actors is needed to transform the platform into a unique and useful tool for all.

### Background OK-Net Arable and OK-Net EcoFeed

Organic Farm Knowledge was originally set up in the Horizon 2020 project OK-Net Arable (Organic Knowledge Network Arable) and is now being further developed in OK-Net EcoFeed (Organic Knowledge Network on

Monogastric Animal Feed). Both projects are thematic networks. OK-Net Arable addressed organic arable cropping. OK-Net EcoFeed aims to help organic pig and poultry farmers achieve the goal of using 100% organic and regional feed. OK-Net EcoFeed is a continuation of OK-Net Arable, linking feed cultivation, feed processing and animal production. Further projects such as Liveseed and Relacs are joining <https://organic-farmknowledge.org/about/partner-projects>.

#### Links

- <https://organic-farmknowledge.org/>
- <https://www.facebook.com/organicfarmknowledge>
- [https://twitter.com/farm\\_knowledge](https://twitter.com/farm_knowledge)
- <https://ok-net-ecofeed.eu/>

### III. Knowledge Synthesis

The amount of protein and availability of specific amino acids are major constraints in achieving the aim of feeding pigs and poultry with 100% organic and regionally produced feed. In February 2019, OK-Net EcoFeed published the [OK-Net EcoFeed Knowledge Synthesis](#), which describes the protein needs of organic monogastric animals (pigs, layers and broilers) as well as the different and innovative resources of protein feed, relative nutrient content and potential feeding value. It also proposes different feeding strategies and identifies new knowledge needs to further advance in feeding monogastrics with 100% organic and regionally produced feed.

In order to promote the knowledge synthesis, the [article](#) “Interested in feeding pigs and poultry with organic and regional feed? Read OK-Net EcoFeed’s brand new knowledge synthesis” was published on the IFOAM EU website. The full article is attached in the section III.1.

#### III.1 Full article: Interested in feeding pigs and poultry with organic and regional feed? Read OK-Net EcoFeed’s brand new knowledge synthesis

Are you working with pigs and poultry? Are you interested in learning about feeding monogastrics with 100% organic and regionally produced feed? Have a look at the OK-Net EcoFeed knowledge synthesis. In 72 pages, the document covers:

- the protein needs of organic monogastric animals (pigs, layers and broilers), including different breeds and rearing conditions.
- different resources of protein feed, focussing on new or uncommon protein sources, their nutrient content, production prerequisites, and their potential feeding value.
- small-scale, on-farm equipment for feed processing.
- different feeding strategies.

Feeding pigs and poultry with 100% organic and regionally produced feed can be a challenge. Especially getting enough protein and specific amino acids. Luckily there are two main ways to overcome this challenge.

The first solution is to use by-products like waste from various productions. Exploring new protein sources like marine products or refining the use of known products like grass are also possible. Another solution is to feed animals less intensively. For this feeding strategy slow-growing breeds are a better fit. Some slow-growing breeds are already known, some are rediscovered old breeds. Slow-growing breed pose the challenge of a smaller yield and/or less income for the farmer leading to an increase in the prices of eggs and

meat. However, there are many options to combine feeding strategies of regionally grown feed and low-yielding breeds that need to be further explored.

Read the [knowledge synthesis](#).

## **IV. Conclusions**

Over the course of the second year of the OK-Net EcoFeed project, IFOAM EU has promoted and disseminated the most important outcomes achieved so far. The work will continue in the coming months with publications on the tools developed during the project and articles in the EIP-AGRI newsletter.