D5.1 Overview of existing knowledge gaps and research needs & catalogue of 50 new tools

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Document Summary

The Project

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Dissemination level

P	Public	x
CO	Confidential, only for members of the consortium (including the Commission Services)	
CI	Classified, as referred to Commission Decision 2001/844/EC	

Type

R	Document, Report	x
DEM	Demonstrator, Pilot, Prototype	
DEC	Websites, Patent Fillings, Videos, etc	
Other	(Please describe the type)	

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Executive Summary

The OrganicAdviceNetwork project, funded by Horizon Europe and the Swiss Agency for Education, Research and Innovation (SERI), aims to create the first European-wide network of advisors and strengthen advisory services for organic farming across Europe.

One goal of the project is to establish a network of 1,000 advisors from 27 EU Member States and additional countries to facilitate knowledge exchange.

This report identifies knowledge gaps and research needs for the project's planned training of advisors.

With surveys and their analysis, we identified key areas where more support for organic farm advisors is needed. The key areas cover climate change adaptation, new production systems, pest control, variety selection, and nutrient management.

Organic farming is not only a set of production practices but has a regulatory and market context and emphasises system thinking as expressed in the four principles of health, ecology, fairness and care, and there is a need to inform about the benefits of organic farming, which will also be considered in planed education and training programs.

Planned training measures like the Basic Course in the format of a Massive Open Online Courses (MOOCs), self-learning pathways but also cross visits should address these key areas. More research is needed for topics like adaptation to climate change, beyond knowledge exchange.

To support advisors, project partners identified 529 practical tools, of which 59 have been uploaded to the "Organic Farm Knowledge" platform so far. The tools cover viticulture and arable, fruit, vegetable production and cattle husbandry as well as tools that support the conversion to organic farming.

The project partners also identified knowledge reservoirs for organic farming. Knowledge reservoirs are digital platforms containing a collection of tools.

This document provides a solid foundation for the further development of training for organic farming advisors across Europe and beyond.

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Abbreviations

Abbreviation	Explanation
AP	Advisory Partner
BIOFRUITNET	Horizon 2020 project Boosting Innovation in ORGANIC FRUIT production through Stronger Networks
Core Organic	The Horizon Europe transnational research program **CORE Organic** stands for "Coordination of European Transnational Research in Organic Food and Farming Systems."
CV	Cross Visits
EIP-AGRI	The European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI)
EU	European Union
EU-FarmBook	Horizon Europe project that is working at regional, national, and European (EU) level to build an online platform for gathering and sharing agricultural and forestry knowledge.
MOOC	Massive Open Online Courses. In the context of the OrganicAdviceNetwork project, we use the term basic course as a synonym for MOOC. This rather describes the content of the course. Technically, it is implemented as a MOOC
OFK	Organic Farm Knowledge Platform www.organicfarm-knowledge.org is a platform administered jointly by FiBL CH, IFOAM OE and ICROFS. Tools identified in the OrganicAdviceNetwork project are uploaded on the OFK platform.
OrgPrints	Organic Eprints: International open-access archive for papers and projects related to research in organic food and farming (www.orgprints.org)
SLP	Self-Learning Pathways In the context of the OrganicAdviceNetwork project, we use the term Learning Path course as a synonym for Self-Learning Pathways.
SRIA	Strategic Research and Innovation Agenda TP Organics
TNL	Thematic Network Leader

Terms & Definitions

Term	Definition
Basic Course	In the context of the OrganicAdviceNetwork project, we use the term basic course as a synonym for MOOC. The term Basic Course rather describes the content of the course. Technically, it is implemented as a MOOC.
Cross Visit	This is a key activity of the project and consist of peer-2-peer knowledge exchange across borders. Partners organise in-person visits/excursions for advisors from neighbouring countries to learn from innovative cases.
EIP-AGRI	The EIP-AGRI has been launched in 2012 to contribute to the European Union's strategy' Europe 2020' for smart, sustainable and inclusive growth. The EIP-AGRI brings together innovation actors (farmers, advisors, researchers, businesses, NGOs and others) in agriculture and forestry, at EU level. Some of the activities developed in the context of the EIP-AGRI funding addressed conversion to organic farming.
e-Learning	e-Learning refers to a variety of online educational resources and courses designed to support professionals and newcomers in a specific field. E-Learning courses have various formats, including self-learning pathways (SLF) and massive open online courses (MOOCs) or webinars.
Innovative solution	In the context of this project, the term refers to new approaches, technologies, and practices to address challenges in organic farming / organic farming systems. These practices potentially improve soil health, pest management, crop yield, feeding strategies in animal husbandry and environmental impact while adhering to organic principles and regulations.
Knowledge gap	In this report, the term “knowledge gap” refers to a lack of information about a particular topic related to organic farming. For example, there may be a lack of understanding and information about the control of plant diseases in organic farming. This could be due to • due to a limited understanding of the organic production system. Training and educational programs should be provided. • due to limited exchange between advisors across Europe. Thus, the problem is solved in one region, but the problem persists in other but similar regions. Cross visits could be organised to overcome knowledge gap as well as information exchange platforms.
Research gap	A research gap is a question or a problem that has not been answered by any of the existing studies or research within a field. The term research gap refers to specific areas where existing knowledge is insufficient, or non-existent. These research gaps highlight the need for further research to address unanswered questions. Identifying research gaps typically involves a thorough literature review to assess what has already been studied and where there are opportunities for new contributions. In this report, we do not use the term "research gap" often but the term "research needs".

Knowledge reservoir	The term "knowledge reservoir" in the context of the OrganicAdviceNetwork stands for a digital platform containing a collection of tools and information. It compiles best practices, research findings, and regulatory information mainly for farmers and agricultural professionals/advisors but also for other stakeholders. A knowledge reservoir is designed to be easily accessible, allowing users to retrieve information efficiently. A knowledge reservoir remains relevant, if it is updated regularly with the latest research and developments in the field. In this project, we refer to digital platforms and libraries. An example of a knowledge reservoir on organic agriculture is the platform Organic Farm Knowledge.
MOOC	MOOC stands for “Massive Open Online Course”. In the context of the project OrganicAdviceNetwork this is a Basic Course about the organic farming principles, its contexts, its practices and frequently occurring issues regarding the conversion process.
Research needs	A research need refers to an area or topic that has not been sufficiently explored or addressed by existing research activities. The term “research needs” is an aspect of “research gaps”. Research needs arise from practical problems or societal issues that require scientific inquiry. In this report, identifying research needs is relevant as new research can contribute to the further development of organic farming. In this report, we focus on "research needs".
Self-learning pathway	A structured process consisting of a selection of interrelated learning sequences through which learners (in the context of this projects mainly advisors) can work independently on specific content, practice and check their own learning progress. Self-learning pathways allow learners to work on content at their own pace and to learn more independently of time and place. This flexibility, the constant feedback on learning progress and the overview of the entire learning process can have a positive effect on learning activities. In the context of the OrganicAdviceNetwork project, we use the term Learning Path course as a synonym for Self-Learning Pathways.
Tool	In the context of this project and Organic Farm Knowledge Platform, a "tool" typically refers to a resource, e.g. practice abstracts, technical leaflets, guides, reports, videos or web platforms designed to support farmers, agricultural professionals, and other stakeholders in sustainable and organic farming practices. Tools can contribute / support / enable the implementation of best practice in organic farming, but also to the further development of organic farming practices.

List of Project Partners

Abbreviation	Name Project Partner	Country	Role
FIRAB	Fondazione Italiana per la Ricerca in Agricoltura Biologica et Biodinamica	IT	Advisory Service
Bioselena	Fondatsiya za Biologichno Zemedelie Bioselena	BG	Advisory Service
CAFS	Kmetijsko Gozdarska Zbornica Slovenije	SL	Advisory Service
CDAF	Chambres d'agriculture France	FR	Advisory Service
CCBT	Coördinatiecentrum praktijkgericht onderzoek en voorlichting Biologische Teelt	BE	Advisory Service
CONSULAI	Consultoria Agroindustrial LDA	PT	Advisory Service
ECOVALIA	Asociación Ecovalia	ES	Advisory Service
EOFF	Eesti Mahepollumajanduse Sihtasutus	EE	Advisory Service
FiBL CH	Forschungsinstitut für biologischen Landbau	CH	Advisory Service
FiBL DE	Forschungsinstitut für biologischen Landbau Deutschland e.V.	DE	
HNEE	Hochschule für Nachhaltige Entwicklung Eberswalde	DE	
IFOAM EU	International Federation of Organic Agriculture Movements European Union Regional Group	SE	Co-ordination
INAGRO	INAGRO, Privinciaal extern Verzelfstandigd Agentschap in Privaatrechtlelijeke Vorm VZW	BE	Advisory Service
ICOEL	Innovationscenter for Økologisk Landbrug P/S	DK	Advisory Service
Inter-Bio	Asociatia Inter-Bio	RO	Advisory Service
IPN	Institut za Primeneu Nauke u Poljopriverdi	RS	
ITAB	Institute Technique de l'Agriculture Biologique	FR	Advisory Service
LKÖ	Präsidentenkonferenz der Landwirtschaftskammern Österreichs	AT	
LK NÖ	Landwirtschaftskammer Niederösterreich	AT	Advisory Service
LWKS	Landeskammer für Land- und Forstwirtschaft in Steiermark	AT	Advisory Service
MoFA	Ministarstvo Poljopriverde	HR	
OEBG	Ökoberatungsgesellschaft MBH	DE	Advisory Service
ÖMKI	Ökológiai Mezőgazdasági Kutatóintézet Közhasznú Nonprofit Kft	HU	Advisory Service
SEASN	Mreza Savjetodavnih Sluzbi Jugoistocne Europe	HR	Advisory Service

1 Introduction

Knowledge and access to information are particularly important for organic farmers, as organic farming is complex and based on system thinking. Organic Farmers need to master a wide range of practices to develop a sustainable and productive system and adapt to regional and changing environmental conditions. Organic farming is also subject to regulations, private standards and certification requirements. Knowledge sharing among organic farmers is relevant to spreading best practices, integrating new ideas, and learning from the experiences of others. For such knowledge-sharing processes, advisors with expertise in organic farming and innovative advisory methods play a key role.

With the EU's target of reaching at least 25% organic farmland by 2030, an entry of about 700,000 new farmers in the organic sector is expected. All of these organic farmers need qualified organic advisors who can support them, for example, with the conversion to organic farming, and with other topics like pest control, soil management, or the legal framework. On the one hand, this support helps farmers improve their practices, and on the other hand, it makes organic farming more attractive. It is estimated that the sector needs about 15,000 new advisors in the EU who can support organic farmers in reaching the 25% target**.** Training advisors and giving them access to relevant knowledge and information is crucial and is the focus of the Horizon Europe project OrganicAdviceNetwork. During the project, we are building an EU-wide network of 1'000 organic advisors from all 27 EU Member States and seven other European countries. This network will support learning, knowledge-sharing, and collaboration, bringing together experienced organic advisors, conventional advisors transitioning to organic practices, young graduates, and newcomers.

In order to strengthen and improve the capacity of advisors, the OrganicAdviceNetwork will provide peer-to-peer exchange, increased access to and visibility of tools to support organic advisors, and e-learning:

- E-learning: **Basic course**s in the form of a Massive Open Online Course (MOOC) and various **learning path**s (Self Learning Pathways) to develop the professional and soft skills of both newcomers to the consultancy sector and experienced consultants.
- Peer-to-peer exchange: **Cross visits** (CV) across five geographical zones addressing arable production, ruminant husbandry, vegetable and fruit production and viticulture. The CV increase the knowledge base of organic advisors about innovative solutions.
- Increased access and visibility of tools that support advisors in the organic sector: **New tools** like fact sheets, videos, and apps will be available via the platform Organic Farm Knowledge and potentially also via the EU-FarmBook.

To ensure that the planned training is tailored to the heterogeneous needs of advisors, we identified knowledge gaps but also tools within the OrganicAdviceNetwork consortium to support advisors. These are presented in this deliverable D5.1, providing a solid background for the next steps of the project and the design of e-learning modules and peer-to-peer learning events. We also report on tools that have been added to the Organic Farm Knowledge platform.

1.1 Specific objectives of this deliverable

Based on the overall objective of the OrganicAdviceNetwork project, this deliverable mapped the knowledge gaps and research need among advisors in different regions and organic farming sectors across Europe. We focus on organic plant production (arable and vegetable farming, fruit production and viticulture), cattle husbandry, conversion and advisory soft skills.

In the context of these projects, the term knowledge gap refers to a lack of understanding or information on a particular topic or field. For example, there may be a lack of understanding and information about the control of plant diseases in organic farming. This could be due to

- A limited understanding of the organic production system. Training programs will be provided during the course of this project to overcome these gaps.
- Limited exchange, as the problem is solved in one region but persists in other but similar regions. The knowledge gap exists because there is limited exchange between advisors or farmers across Europe. The planned Cross Visits will bridge this kind of knowledge gap; moreover, existing toolboxes could be improved, and new exchange platforms could be established.
- Specific or new environmental conditions regarding pests and diseases. These are research needs and regional, national or European-wide research programs are needed.

The identification of knowledge gaps and research needs is crucial for advancing organic farming. Both aspects were derived from the survey among the projects partners and complemented by the output of previous projects relevant to the organic sector like RELACS, LIVESEED, BIOFRUITNET and OrganicTargets 4 EU as well as activities of TP Organics.

The identified knowledge gaps should support and improve organic advice provided to farmers, while the research needs should inspire the regional, national or European research agenda about organic farming (Figure 1).

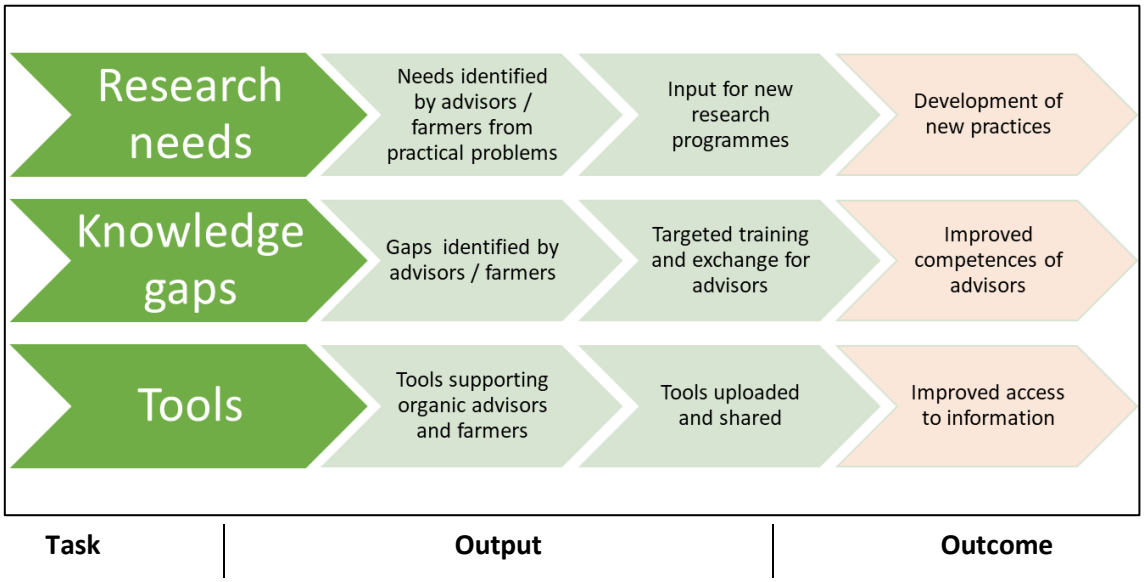

Figure 1: Direct output and expected long-term outcome generated by the project OrganicAdviceNetwork

The deliverable also provides a compilation of more than 50 practical, informative, and user-friendly tools to support agricultural advisors and farmers in adopting and implementing organic farming practices. In terms of format, we collected individual tools such as practice abstracts, videos, podcasts, reports, checklists, and toolboxes that combine different tools. Out of the 50 tools, 10 for each of the five thematic networks (arable, vegetable, fruit, viticulture, ruminants) were identified and uploaded on Organic Farm Knowledge (OFK).

The web-based platform organic-farmknowledge.org was launched in 2016, aiming to fill the gap in the exchange of information between farmers and with researchers across Europe. Since the first project (OK-Net Arable) collected the first tools (videos, practice abstracts, reports, APPs, calculation tools) for OKF, partners and projects across Europe, have contributed to the increasing knowledge base about organic farming. An important development is that several Horizon 2020 and CORE Organic (Coordination of European Transnational Research in Organic Food and Farming Systems) projects have joined the platform and used it to disseminate their practice-oriented output. Examples are 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 recent CORE Organic projects (2016–2022). Furthermore, on Organic Farm Knowledge also information about advisory services across Europe are available.

The project OrganicAdviceNetwork is the first, that will identify tools, that are also relevant for advisors in the organic sector.

2 Procedure to collect knowledge gaps, research needs and tools

The mapping of knowledge gaps, research needs, and tools relevant to organic advisors started with a survey involving the Advisory Partners (AP) and Thematic Network Leaders (TNL) of the Organic Advice Network. In doing so, we used the project partners' knowledge and experiences in the fields of viticulture, fruit and vegetable production, arable production, ruminant husbandry, and conversion to organic farming.

The tool collection was based on the structure developed for the OK-Net Arable project tool collection. The Appendix 5.1 of this document gives further information about the survey.

The survey was based on an Excel document sent to all AP and TNL in July 2024. Partners had time until mid-September 2024 to complete the survey and returned it to the task leader for further analysis. After the responses were analysed (see Sections 2.1 and 2.3), the results were discussed and validated with the TNL in an online workshop at the end of October 2024.

Afterwards, the TNL received a consolidated list of all knowledge gap responses and tools and were invited to add additional material and information with the objective of specifying the results towards the knowledge gaps. Additional material and information were included in the data analysis.

2.1 Identification of knowledge gaps relevant to organic farming advice

We conducted a qualitative coding process to analyse the responses received towards the knowledge gaps. For this purpose, all responses were collected in an Excel table and categorised by country and the thematic network (arable, vegetable, fruit, viticulture, animal/ruminant husbandry). Responses

were allocated either to one thematic network or to several networks if the responses were directly referring to several thematic networks (e.g. “arable farming, vegetables: successful management of wildlife damage by hares, pigeons, crews”) or indirectly to topics relevant to several thematic networks (e.g. "links between pest and disease control strategies and climate change"). On top of that, some responses were categorised as "general" as they were referring to general farming topics such as “certification” or “farm management”.

Having finalised the country assignment and thematic network categorisation, an intuitive coding process started. The objective of this coding process was to categorise and condense the content of the responses. For this purpose, a first person reviewed the responses and assigned codes to the responses, whereby responses could receive more than one code if the response covered several aspects. For example, the response "Effectiveness of organic fertilisers (cycle of N, P, K) for feeding cereals" was coded with “Fertilisation / Nutrient Management”. Further responses with similar content were also coded with “Fertilisation / Nutrient Management”. After all responses were finally coded, a second person checked the coding process and gave feedback on some changes of the codes to the first person. The coding was adjusted and finalised by the first person. After coding, the codes were quantitively analysed using Excel table calculations.

2.2 Additional activities used for the collection of knowledge gaps and research needs

2.2.1 FIBL Online Open Day

The FiBL online Open Day took place on the 27th of November 2024. FiBL CH and FiBL DE were presenting the project OrganicAdviceNetwork and the preliminary results of the knowledge gap and tool survey to an online audience of about 45 attendees. The audience was invited to add further knowledge gaps encountered among advisors in their countries with an online survey tool. On top of that, we asked the audience about the needs of young advisors in their countries as this target group is of special interest to the project and its offers.

2.2.2 Previous projects relevant to the organic sector

We looked for results of EU projects that addressed knowledge gaps in organic farming. A full literature review was not possible, but several relevant projects were identified and considered: BIOFRUITNET and OrganicTargets4EU, OK-Net Arable, OK-Net EcoFeed, RELACS and LIVESEED. In the remaining time of the project a special effort will be made to collect outputs from EIP-AGRI Operational Groups and the recent Core organic projects (2016 – 2022).

2.2.3 TP Organics Strategic Research and Innovation Agenda

TP Organics[1] is one of the 40 European Technology Platforms (ETP) officially recognised by the European Commission. The platform develops research and innovation agendas and roadmaps for research action at the EU and national levels. The mission of the platform members is to shape research and innovation for organic and other agroecological approaches that contribute to sustainable and resilient food and farming systems.

[1] Further information about TP organics and the platform members is available here

For this study, the research needs relevant to organic farming were identified based on the compilation of TP organic, which results from a consultation process involving many actors from the organic sector.

2.3 Collection of tools to support organic farming advice

The first step was to look at the tools addressing the fields of viticulture, vegetable production, arable production, horticulture, ruminant husbandry and conversion that had been developed in different projects. For this purpose, we searched for tools (e.g. videos, practice abstracts, podcasts) of the websites of EIP-AGRI[2] and Organic Eprints[3], which is the international open access repository of electronic documents related to research in organic food and farming.

After the survey among the AP and TNL was completed, we started to screen and sort the tools they shared with us in a second step. The sorting was done according to i) the type of tool, ii) the topics covered, iii) the possibility of use of the tools regionally or across regions, iv) the date of publication of the tool and v) the publisher.

All the knowledge tools in the collection were then subject to a review and individual assessment based on the Organic Farm Knowledge criteria. These criteria were defined by the editorial board of the platform and formalised in a checklist. The criteria are designed to ensure that the tools proposed for the Organic Farm Knowledge Platform are relevant to the target group, come from reliable sources, are scientifically sound and have been tried and tested in practice.

The following criteria belong to the checklist:

- Contained information directed at organic farmers and advisors, NOT conventional information with some sentences on how to adapt to organic,
- Practice relevant and recommendations found easily,
- Document easily navigated and user-friendly,
- Easy to understand - technical terminology is clarified where necessary, abbreviations are explained,
- Up-to-date information – not older than 5 years,
- Information is relevant to European conditions,
- Photos and graphics are relevant and referenced,
- Relevant further information/links/contacts provided,
- Sources and imprint provided: Title, year, author and issuing organizations,
- Language is appropriate, and grammar is correct.

[2] More about EIP-AGRI /CAP can be found here

[3] More about organic Eprints can be found here

3 Results

3.1 Results from the survey among the Thematic Network Leaders and Advisory Partners

We received 130 single responses on knowledge gaps, of which three single responses were not understandable and, thus, were excluded from further analysis. Most responses were collected from French, Italian, Danish, and German partners (Table 2). The answers were allocated to the thematic areas of arable, vegetable, fruit production, viticulture and ruminant husbandry. General topics that were not assignable to a thematic area were collected under "General". Most of the answers referred to arable production topics, followed by general topics and vegetable production topics (Table 1). Note that responses could refer to several thematic network topics at the same time.

The coding process of the responses revealed 51 codes covering different aspects of farm, plant and animal production and overarching topics (e.g. "Biodiversity"). All 51 codes with their frequencies of mention are shown in the diagram below (Figure2).

Table 1: Number of single responses per thematic network

	Arable	Vegetable	Fruit	Viticulture	Animal	General
No. of responses per thematic network	48	25	23	19	21	27

Table 2: Number of single responses per country

	No. of single responses per country
France	52
Italy	18
Denmark	15
Germany	10
Bulgaria	9
Hungary	8
Belgium	7
Croatia	5
Spain	2
Romania	2
Switzerland	2

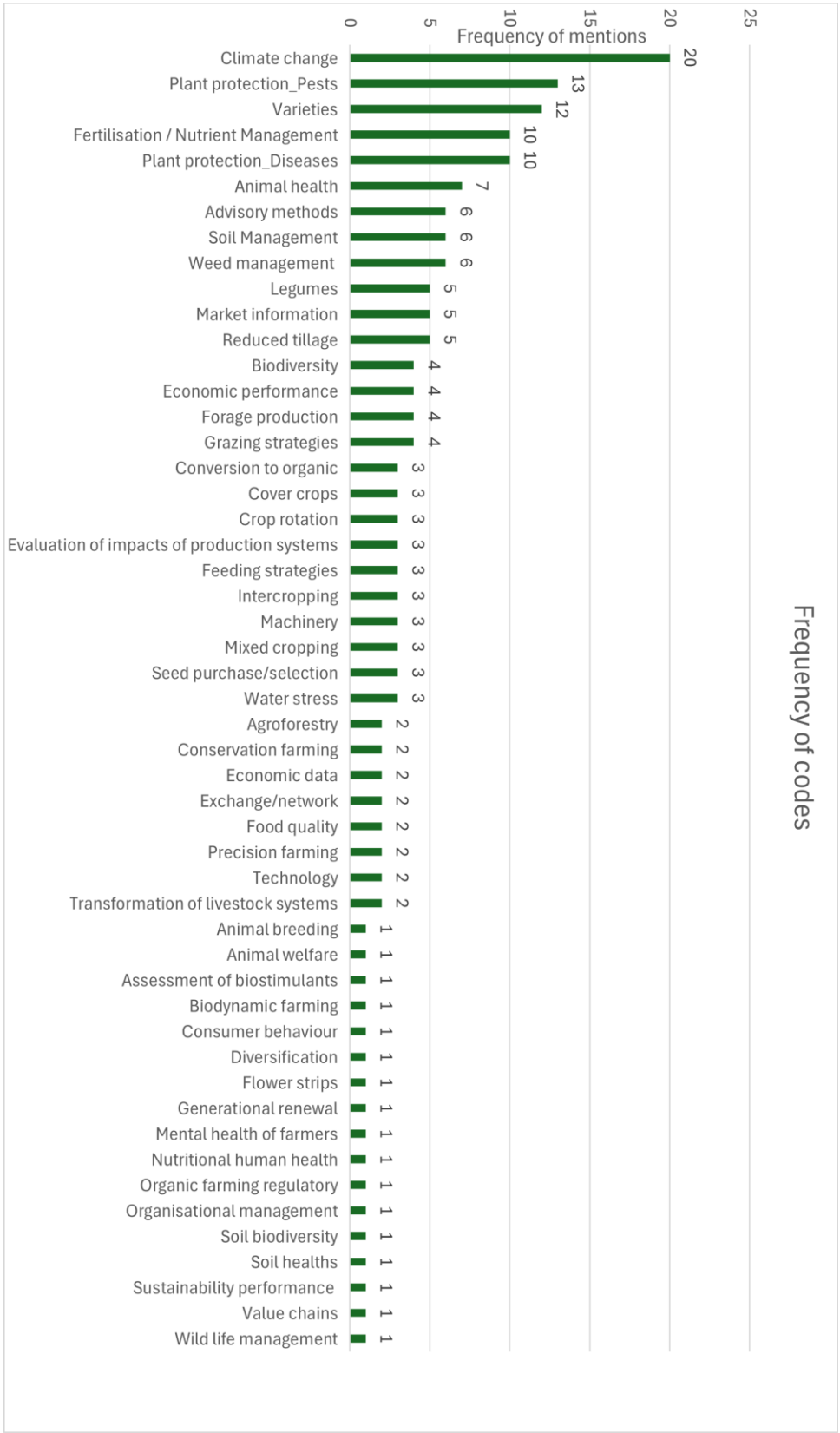

Figure 2: Number of frequencies of mentions of all 51 identified codes

Despite the heterogeneity of feedback received (Figure2), the top knowledge gaps mentioned by the respondents are connected to the following five issues:

- Adaptation to climate change
- Pest control
- Variety selection
- Improvement of fertilisation and nutrient management
- Disease control

The following table (Table 3) displays how the top five issues are distributed among the thematic network topics with their frequencies of mentions. Fertilisation and nutrient management are most relevant to arable production. Adaptation to climate change is also most relevant to arable production, followed by fruit production and animal husbandry. Pest control is mainly an issue in vegetable and fruit production, according to the feedback of partners.

Table 3: Number of frequencies of mentions of the top five codes per thematic network area.

	Arable	Vegetable	Fruit	Viticulture	Animal	General
Climate change	7	3	6	4	6	1
Pest control	4	7	7	3	0	0
Variety selection	4	4	3	2	0	0
Fertilisation & nutrient management	10	1	1	0	0	0
Disease control	4	4	5	5	0	0

Table 4 gives an overview of all identified codes per thematic network topic, with arable production being the most diverse thematic network in terms of number of identified codes. Most of the codes emerged in different thematic areas at the same time, whereas some codes were specific for one thematic area (e.g. “wildlife management” in vegetable production; “flower strips” in fruit production).

The results have been validated with the consortium. The consortium added to the compilation that organic farming is more than just a set of specific practices or techniques, but a complex production system. Advisors also need to be trained in their way of thinking (systemic knowledge/thinking).

Table 4: All identified codes per thematic network area

Arable 29 codes	Vegetable 19 codes	Fruit 14 codes	Viticulture 15 codes	Animal 13 codes	General 19 codes
– Climate change – Plant protection / Pests – Varieties – Fertilisation / Nutrient Management – Plant Protection/Diseases – Soil Management – Weed management – Legumes – Reduced tillage – Biodiversity – Forage production – Conversion to organic – Cover crops – Crop rotation – Evaluation of impacts of production systems – Intercropping – Machinery – Mixed cropping – Seed purchase /selection – Water stress – Agroforestry – Conservation farming – Economic data – Precision farming – Technology – Diversification – Soil biodiversity – Value chains – Wildlife management	– Climate change – Plant protection / Pests – Varieties – Fertilisation / Nutrient Management – Plant Protection / Diseases – Soil Management – Weed management – Biodiversity – Crop rotation – Mixed cropping – Seed purchase/ selection – Water stress – Economic data – Precision farming – Technology – Diversification – Soil health – Value chains – Wildlife management	- Climate change - Plant protection / Pests - Varieties - Fertilisation / Nutrient Management - Plant Protection/Diseases - Weed management - Biodiversity - Water stress - Food quality - Technology - Diversification - Flower strips - Soil biodiversity - Value chains	– Climate change – Plant protection / Pests – Varieties – Plant Protection/Diseases – Soil Management – Weed management – Biodiversity – Cover crops – Machinery – Water stress – Food quality – Technology – Diversification – Soil biodiversity – Value chains	– Climate change – Animal Health – Biodiversity – Forage production – Grazing strategies – Conversion to organic – Evaluation of impacts of production systems – Feeding strategies – Agroforestry – Economic data – Transformation of livestock systems – Animal breeding – Animal welfare	– Climate change – Advisory methods – Market information – Biodiversity – Economic performance – Conversion to organic – Machinery – Exchange/ networking – Precision farming – Technology – Assessment of bio-stimulants – Biodynamic farming – Consumer behavior – Generational renewal – The mental health of farmers – Nutritional human health – Organic farming regulatory – Organisational management – Sustainability performance

3.2 Results from additional activities used for the collection of knowledge gaps

3.2.1 FiBL open day

During the FiBL Open Day, we received additional topics from the live session participants, who complemented the list of identified codes of the survey (Table 5).

Table 5: Feedback collected from the participants during the FiBL Open Day session (online)

Topic	Specific topics
Regulation, control and certification	Regulatory requirements / key changes with the new EU regulations/conversion and application in the certification system/quality management
Management	Administrative tools and techniques/communication skills
Residues	Preventing residues / avoiding residues of pesticides in organic products
Plant protection	Coping with snails in horticulture/pest and disease management
Plant production	Varieties adapted to abiotic stress/variety selection
Production techniques	Soil fertility/application of regenerative practices in organic agriculture/conversion/adaptation of crop production to climate change/agroforestry
Animal husbandry	Animal disease prevention/animal welfare

In addition, participants in the session highlighted several needs of young advisors that go beyond expertise and expert knowledge. These include access to practical experience, knowledge exchange as well as the lessons learned from past decades.

Scientific evidence is also crucial in this regard, as it provides the evidence behind the advice given to practitioners. It is also important to recognise that new practices that are currently being developed require evidence generation to validate their effectiveness.

In addition, there is a recognised need for specific training and continuing education. Visits to other countries can be particularly beneficial, as they show that similar challenges are faced elsewhere.

Finally, feedback from the FiBL Open Day underlines the diversity of common challenges faced by advisors in the organic sector. In particular, there is a lack of organic advisors specialised in one field of production. Moreover, organic advisors often have to focus on administrative support for farmers (control and certification, access to subsidies), leaving insufficient time to address the core issues of the organic sector. In addition, these advisors often rely on project funding rather than stable public funding, which can affect their ability to provide consistent and effective support.

3.2.2 Identification of research needs

In November 2024, the SRIA list of TP Organics has identified 35 research needs and research questions connected to organic farming. Among them are the potential ways in which organic farming methods will help mitigate climate change (e.g., the relevance of soil carbon sequestration)

and how to adapt to climate change, e.g., related to water management strategies, agroforestry and mixed cropping.

A second area is how organic farming can support and increase biodiversity. This is also connected to access to various genetic resources, including crop species, varieties, and animal races.

Other challenges for organic farming persist, including managing soil fertility, crop rotations, producer-consumer interactions, and the need to uphold high animal welfare standards.

Beyond the farming sector, research is needed to further the fair and equal development of supply chains, integrate artificial intelligence and robotics into organic production systems, and contribute organic farming to rural development. The publication of the TP Organic Research and Innovation Agenda is expected in late autumn 2025.

3.2.3 Mapping of tools from previous EU projects

3.2.3.1 The EU CAP Network (EIP AGRI)

The EU CAP Network website provides a range of resources and initiatives related to agriculture and rural development, including some materials that may be relevant to organic farming. While the website explicitly lists 1982 tools about organic farming, these resources and initiatives can provide valuable information and support for farmers and stakeholders interested in organic practices. We have started screening these search results, but we did not yet include them in this first collection of tools that have been uploaded. The screening will continue throughout the project

3.2.3.2 Thematic Network «Organic Knowledge Network Arable» - OK Net Arable

The overall aim of the thematic network 'OK-Net Arable' was to improve the exchange of innovative and traditional knowledge among farmers, farm advisors and scientists to increase productivity and quality in organic arable cropping all over Europe. The project lasted from March 2015 to February 2018.

The project initiated the platform Organic Farm Knowledge in order to support exchange across Europe, offering innovative materials for farmers and advisor and support researcher-to-advisor-to-farmer learning. Out of the project, 163 tools covering crop production (e.g. videos, practice abstracts, technical leaflets, Apps, e-learnings, calculation tools, were identified and already uploaded on OFK. Among them, 59 are available only in English, 50 are available also in English but translated into up to three other languages. There are only five other tools from the project, that are only available in one language: Greek[4], Spanish[5] and Swedish[6].

About one third of the tools have been developed by the private Research Institute of Organic Farming – FiBL based in Switzerland. Despite the age of the material, some are still relevant and will be used as additional materials in the context of the planned Basic course and Learning path. Examples are practice abstracts which received a high rating on the platform, like

[4] A Healthy soil for healthier food. CAPSELLA Soil Health APP SPOLapp!

[5] Understanding of the nitrogen supply and organic matter cycling in arable rotations. NDICEA – Nigroen Planer

[6] FODER I ekologisk production - Common feed resources in Swedish organic production and how to use them.

- Nutrient Management
    - Efficient use of nitrogen from livestock manure, SEGES
    - Intercropping grain peas with barley, FiBL (DE, EN)
      Winter field peas as green manure before maize, FiBL (DE, EN)
- Weed Control
    - Comb harrow: efficient weed control in cereals, Bioselena
    - Autumn cover crops, AIAB
    - Control of creeping thistle by stubble cultivation, FiBL (DE, EN NL)
- Pest control
    - Controlling potato beetles with Bt, FiBL (DE, EN)
- Reducing the use of copper in potatoes, FiBL (DE, EN)

3.2.3.3 Thematic Network «Organic Knowledge Network on Monogastric Animal Feed» - OK Net EcoFeed

The overall aim of OK-Net EcoFeed[7] was 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. The lack of organic and regional feed was identified as a potential threat to both the sustainability of organic agriculture as well as consumers' confidence. The project lasted from 2018 to 2021.

Out of the project, 130 tools covering the topic of monogastric animal feed were identified and uploaded on OFK. Again, most of the tools are available in English, flowed by French and German tools. Only one tool is available in Czech and Dutch. The tools origin from different European Countries. Again, Switzerland contributed a relevant share developed, followed by Denmark, the UK, Denmark and Austria.

The project brought relevant knowledge about monogastric animals to the platform. As the project OrganicAdviceNetwork focuses on cattle ruminant husbandry, we do not consider the tools for further use.

3.2.3.4 LIVESEED

LIVESEED aimed to improve the performance and competitiveness of the organic sector by boosting organic seed and plant breeding efforts. The project lasted from mid of 2017 to mid of 2021. Out of the project, 86 tools were uploaded on OFK. Most of the tools (59) are available in English only.

Regarding the topic of variety selection, high quality material is available and could be used for the learning activities. However, the tools uploaded are relevant for ether farmers interested in self-supply of seeds or breeders interested in working for and with the organic sector. Even the topic of crop varieties is of high relevance, the tools are not covering the interest of the target audience in the OrganicAdviceNetwork. Moreover, the tools are not rated on the OFK platform.

In the framework of the LIVESEED project, several information gaps were identified regarding the availability and quality of organic seeds. The key identified gaps include:

[7] https://ok-net-ecofeed.eu/about-ok-net-ecofeed/project-partners/

- **Lack of transparency in the organic seed market**: In many EU member states, there is a lack of transparency regarding the available quantities and qualities of organic seeds. This makes it difficult for farmers to find suitable varieties for organic farming.
- **Insufficient national seed databases**: Some countries only have rudimentary or incomplete databases for organic seeds, making it harder for farmers to obtain relevant information.
- **Missing data on farm-saved seeds**: There is often no official data on the quantity and quality of seeds that farmers reproduce themselves, which hinders the assessment and promotion of quality standards. (

3.2.3.5 RELACS -Replacement of Contentious Inputs in organic farming Systems

The overall objective of the Horizon Europe project RELACS was to foster development and facilitate adoption of cost-efficient and environmentally safe tools and practices, to phase out the dependency on and the use of contentious inputs in organic farming systems. RELACS aimed at reducing the use of copper and mineral oil, manure from conventional farms, provide alternatives to the use of anthelmintics in small ruminants, reduce antibiotic use in dairy cattle and moderate reliance on vitamin supplementation in cattle and poultry production.

The project lasted from spring 2018 until spring 2022. During the project, 12 practice abstracts and one video have been produced. The tools are relevant, as alternatives to existing practices like copper application will be demanding for farmers as there is additional knowledge needed for their successful use. The tools are mainly available in English (13) but would have relevance also in other languages. The Material is partly useful for the planned activities in this project. Examples considered for a translation during the project are:

- Vitamin E supplementation - revised recommendations for organic dairy cow production, NIBIO (EN)
- Copper reduction strategies in viticulture, FiBL (EN)

3.2.3.6 OrganicTargets4EU

The Horizon Europe project"OrganicTargets4EU" (2022 – 2026) aims at creating scenarios for reaching the 25% organic farmland by 2023. Also, ongoing SRIA activities (see chapter 3.2.2) are part of WP6 of the Organic Targets Project, but no information is available yet.

The project analysed the role of the AKIS (Agricultural Knowledge and Innovation System) to support organic farming. The study focussed on seven countries (AT, DK, FR, DE, HU, RO, IT) and analysed the advisory services and the access to information and knowledge exchange (Nagy et al. 2023)[8]. In the framework of the OrganicTargets4EU project, several knowledge gaps and structures have been identified concerning, that hinder or support the development of organic farming and aquaculture in the EU (Figure 3). For example, in countries with well-established advisory services, there is a need for information about the further development of organic farming. In regions with a less developed organic advisory sector, there is a need to improve practical know-how.

[8] Nagy, G. M., Jahrl, I., Jonasz, G., Feher, J., Setiawan, N. N., Kretzschmar, U., Padel, S & Krall, A. (2023). Deliverable 1.1: Assessment of the knowledge and innovation systems for organic agriculture, aquaculture and value chain actors. The document is available here: https://orgprints.org/id/eprint/51867/

Aggregated results of the main differences are shown in Figure 3 and illustrate the heterogeneity of organic advisory services regarding the needs and support provided to organic farmers. Moreover, the key identified gaps include:

- **Insufficient advisory capacities**: There is a need to strengthen advisory services to support farmers and aquaculture operators in transitioning to organic practices.
- **Lack of exchange between science and practice**: The exchange of scientific and practical knowledge is insufficient, making it difficult to implement new insights in practice.
- **Variations in the development of Agricultural Knowledge and Innovation Systems (AKIS)**: The development of AKIS differs significantly across Europe. In countries with less developed AKIS, private market actors often take on roles that would otherwise be provided by these systems.

Countries	Support provided	Needs
Austria Denmark Germany	• Main focus on production and technical related aspects (DK, AT, DE) • Direct marketing assistance provided by some larger advisory organisations (DK) • Production and technical related assistance, some market integration, branding, and marketing provided by organic farmer associations (DE)	• Assistance in digitalization, new production technologies, diversification, market development, especially for niche products (AT) • New forms of marketing, and processing (AT)
France Italy	• Good support to organic conversion (Gab and CDA networks) (FR) • Incomplete support for organic farmers ("knowledge gaps") (FR) • Assistance in production and technical related issues, sales and direct marketing (IT)	• Assistance in market development and up-to date market information, branding, processing, use of social networks, rural development, sustainable management of soil and other land resources, re-design of farming systems after conversion (FR) • Expand advisors focus from only certain crops or themes (soil fertility, plant disease) (IT)
Hungary Romania	• Administrative support to organic subsidies application process (network of Agricultural Chamber) (HU) • Assistance in production and technical related issues provided by advisors, international input providers and grain traders (RO, HU) • Specialised support for cereal farmers mainly rely on their business associations (RO) • Assistance in sales support, in internationalization and B2B negotiations, branding, marketing, and business plan development provided in the clusters for organic farmers and other actors of the organic supply chain (RO)	• Improve practical and technological know-how relating to organic farming (esp. in the network of Agricultural Chamber) (HU) • Improve specialised support for fruit and vegetables producers (RO) • Improve support for farmers in conversion (HU)

Figure 3: Summary of the findings on the support provided by the existing advisory services and the needs from the sector from Nagy et al., 2024.

3.2.3.7 CORE Organic Projects

The last phase of CORE organic, 12 research projects have been supported across four thematic areas[9]. The projects have contributed already several 34 tools on OKF, but the majority is only available in English (Table 6). So, the knowledge out of the research projects is available and could

[9] Further information available on Core Organic Cofund Aarhus University

be further promoted in the context of the OrganicAdviceNetwork project. However, there might be a persisting knowledge gap due to a lack of dissemination activities or translations of the tools in other European languages.

Table 6: Compilation of Core Organic research projects from 2016 – 2022 and tools uploaded on OFK.

Plant Production Systems:		
BIOVINE:	Enhancing biodiversity in vineyards to reduce pesticide use and boost ecosystem services.	3 tools (EN)
GREENRESILIENT:	Developing sustainable organic vegetable production in low-energy greenhouses.	10 tools (EN, FR, DE, NL, IS, SV)
DOMINO	Improving resilience and sustainability in organic fruit orchards and vineyards.	3 tools (EN)
SUREVEG:	Exploring strip-cropping and waste recycling for biodiverse, resource-efficient vegetable production.	2 tools (EN)
Animal Feed:		
ProRefine:	Investigating refined forage legumes as local protein sources for monogastrics and high-quality fibre for ruminants	3 tools (EN)
Livestock Systems:		
FreeBirds:	Optimising free-range use to improve organic chicken health and address environmental challenges.	2 tools (EN)
POWER	Focusing on young pigs to enhance welfare and resilience in organic pig farming.	3 tools (EN, DE, SV, FR)
GrazyDaiSy	Developing grazing-based dairy systems that integrate cows and young stock.	5 tools (EN, DE)
MIX-ENABLE:	Advancing sustainability and robustness in organic mixed livestock farms.	2 tools (EN, FR)
Organic Food Processing:		
ProOrg:	Providing strategies and tools for organic food processors to improve quality and transparency	2 tools uploaded (EN)

3.2.3.8 BIOFRUITNET -Knowledge gaps and research needs in organic fruit production

The BIOFRUITNET project funded by European Union's Horizon 2020[10] program made locally developed solutions available to other organic fruit growers across Europe. The partners gathered existing scientific and practical knowledge on organic fruit production that can be applied on a large scale in farming practice. The project started in 2019 ended in 2023, and the partners produced an impressive list of tools for organic fruit production. 134 tools are already available on Organic Farm Knowledge (31 videos, 99 practice abstracts) and a relevant share is translated in many different European languages.

The BIOFRUITNET project has identified several knowledge gaps in organic fruit production, specifically concerning pome, stone, and citrus fruits. Through surveys and assessments, the project pinpointed key areas where further research and knowledge dissemination are needed:

[10] **BIOFRUITNET** was funded in the Horizon Europe "Rural renaissance" call. This proposal is aimed at the specific topic RUR-15-2019: Thematic networks compiling knowledge ready for practice.

- **Pest and Disease Management:** Organic fruit growers face challenges in effectively managing pests and diseases without relying on synthetic chemicals. There's a need for innovative, sustainable strategies tailored to organic systems.
- **Functional Biodiversity**: Understanding how to enhance biodiversity within orchards to naturally suppress pests and improve ecosystem services is limited. Research into practical applications of biodiversity in organic orchards is required.
- **Rootstock and Variety Selection:** There's insufficient knowledge about rootstocks and fruit varieties that are best suited for organic cultivation, particularly those resistant to common diseases and adaptable to local conditions.

To address these gaps, BIOFRUITNET has been collecting and evaluating best practices from various regions. The goal was to make this information easily accessible to farmers across Europe through formats like practice abstracts, videos, podcasts, and e-learning courses. This makes the project an excellent source of information on knowledge gaps and but also research needs for organic fruit production (e.g., diseases and pests, plant nutrition or variety suitability).

Regarding research needs, the topics of pest control (throughout Europe, more pests than diseases were indicated as relevant agents threatening organic apple production), disease control, functional diversity and varieties/rootstock were identified. A detailed list is given in Table 7. This example illustrates the relevance of projects in knowledge sharing, guidance materials, training, and education.

Table 7: Identified research needs within the field of organic fruit production identified by the project BIOFRUITNET

Pest control
Codling moth *(Cydia pomonella)*: replace Spinosad where it's used and reduce pressure from resistance building on CpGV, disinfection method for storage boxes, further investigation of physical barrier methods and improved use of biodiversity methods like flower strips and mixed plantations as well as mass trapping
Rosy apple aphid *(Dysaphis plantaginea):* development to additional tools besides only known effective direct control with extract of *Azadirachta indica* (Neem), a better understanding of biodiversity measures to enhance predation in late spring/early summer (used in addition to direct control) as well as autumn (reduces infestation pressure for the next year)
Apple sawfly *(Hoplocampa testudinea):* development to additional tools besides only known effective direct control with extract of Quassia like entomopathogenic fungi, combination of nematodes and white plate mass trapping and further expansion of toolbox of both direct and indirect control measures
Woolly apple aphid *(Eriosoma lanigerum)*: breeding and selection of less susceptible varieties and rootstocks, strategies to enhance natural enemies and testing of sticky belts to prevent migration in the tree canopy, central Europe
Apple blossom weevil *(Anthonomus pomorum):* development to additional tools besides direct control with products based on Pyrethrum or Spinosad with fewer side effects on functional biodiversity like destroying hiding places after overwintering

Invasive species like marmorated stink bug *Halyomorpha halys*: more professional handling of alternatives to physical barriers (which enhance other pests) like the release of natural enemies is crucial as due to climate change the occurrence of invasive species is increasing, Italy and France

Native minor pests like the red-legged stinkbug *Pentatoma rufipes*: control strategies and research about reasons for the emergence of such pests causing current and possible future challenges due to climate change

Further research on the effectiveness of pheromones, possibilities of mass trapping, sanitary measures (pick infested fruit) and improvement of the application techniques for existing, little efficient direct control

Diseases

Fungal diseases: Mainly apple scab *(Venturia inaequalis)* and powdery mildew *(Podosphaera leucotricha)*, but other diseases like sooty blotch (caused by *Gloeodes pomigena* and others*)* or Bull's eye rot *(*caused by *Neofabraea spp.)* become important if the application of fungicide as copper, Sulphur and lime Sulphur is reduced. New resistant (difficult) or robust varieties will be needed, and research on copper reduction involving preventive methods like application in autumn and advanced application techniques is needed, as well as the investigation of new fungicides. As registration of new products with botanical substances like pelargonic acid is difficult, expensive and unreliable, the registration process should be adapted. Antagonistic microorganisms and *Bacillus subtilis* should be studied further, as well as affordable hot water treatments, acid clay (Myco-sin), essential oils, plant extracts and physical barriers.

Functional biodiversity

Biodiversity in the Alley: Understanding the interrelations of measures to promote functional biodiversity and the antagonists of key pests, which depend a lot on local/ regional climate and surroundings. Important factors are control of voles, nitrogen fertilisation and enhanced benefits through crop cover, identification of best locally adapted plant species and how plant protection programs containing products like Spinosad (toxic for bees) can be compatible.

Diversity of apple varieties: further research about enhancing diversity among varieties as a strategy for possible new/invasive pests (climate change) and diseases to provide genetical diversity

Soil biodiversity, a key factor for long-term fertility, should be monitored and considered when cultivation methods are improved.

Varieties and rootstock

Variety conversion: involvement of the whole production chain to realise conversion to more robust varieties with stable yields

Breeding: orientation towards tolerance/ robustness as well as easy growing rather than resistance, further taste and shelf life. Improved collaboration necessary.

Variety mix: Research on intelligent concept for a variety mixture to reduce infestation pressure of pests and diseases as well as marketing concepts.

Rootstock: Finding a rootstock less susceptible to vole attacks and woolly apple aphid and tolerant to vegetation in the row then commonly used M9. Genova 11 and other rootstocks should be tested.

3.3 Selection of tools to be uploaded on Organic Farm Knowledge

Based the desk research conducted (see Chapter 3.2) and with the help OrganicAdviceNetwork partners, we identified a total of 529 tools (Figure 4). It resulted in 166 tools about Pome fruit, 110 tools about ruminant husbandry, 97 about vegetable production, 92 about arable production, 35 about viticulture and 29 about conversion to organic farming Out of the 166 tools about fruit production, ^^ 150 were developed during the BIOFRUITNET. All were already uploaded on Organic Farm Knowledge. Many other tools were developed in the context of national or EU wide projects, including the projects described and screened for this deliverable. This illustrates the relevance of the EU research program for the development of organic farming.

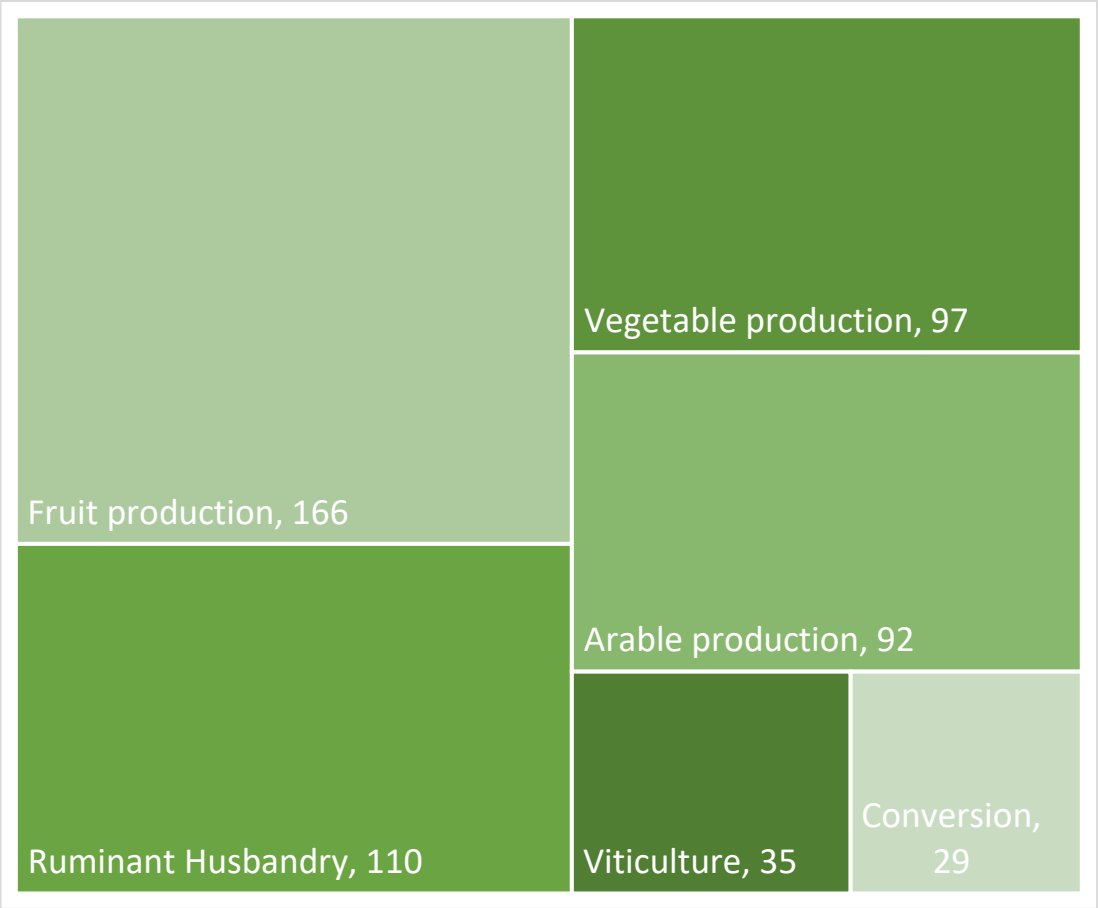

Figure 4: Total number of tools identified is 529 covering the different production systems in the projects and the topic of conversion.

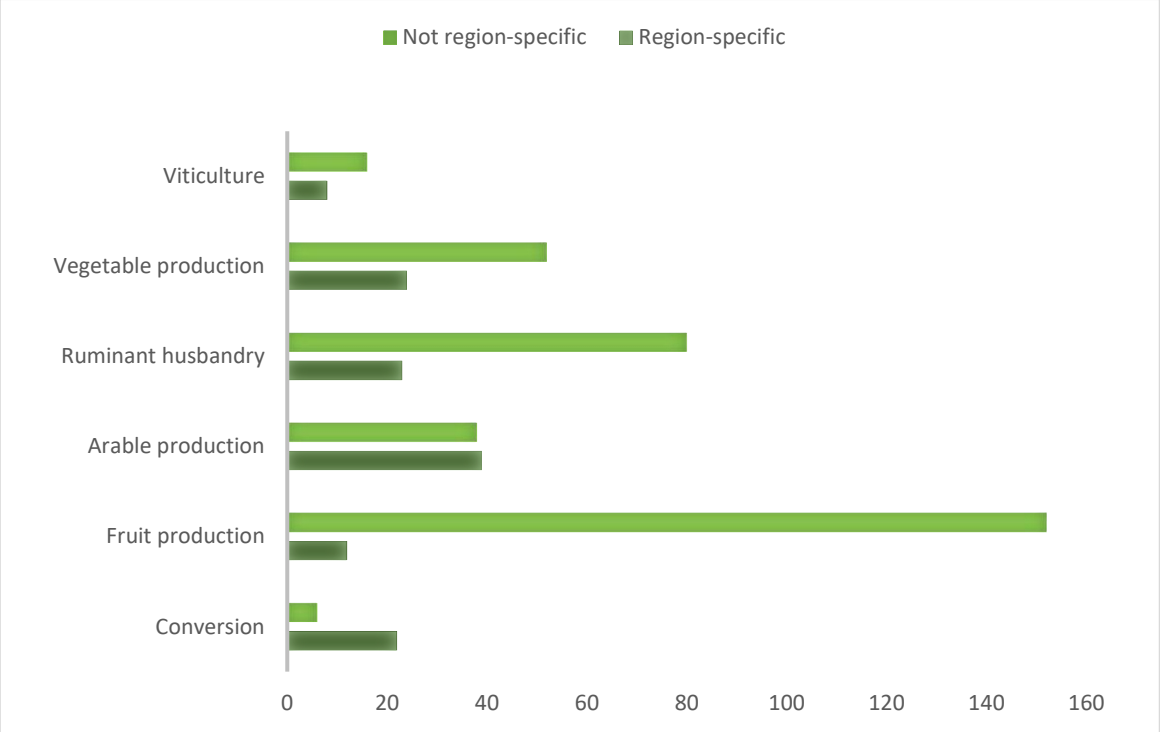

Figure 5: Assessment of the project members whether tools are specific to regions (not all tools have been rated). Surprisingly, most of them are not specific.

Based on the assessments of the partners, most of the tools collected are not specific to a region (Figure 5). Hence, the have a potential to be shared across Europe.

The tools include:

- knowledge exchange tools that facilitate the sharing of knowledge and best practices among farmers, researchers, and advisors in the thematic areas relevant to the project (arable and vegetable farming, fruit and wine production, ruminant husbandry),
- tools to guide practical application, e.g. practical, actionable information that farmers can directly apply to their operations and
- tools to promote sustainable and environmentally friendly farming practices, contributing to the overall goals of organic and sustainable agriculture.

Most of the tools can be used directly by organic farmers or advisors. In addition, the tools make knowledge and innovation accessible to a broader audience. However, experienced advisors may also be interested in the background information, e.g., reports, that are currently not available on the OFK platform. The table with a compilation of the tools can be found in Chapter 5.2 in the Appendix of this document.

From all the tools collected, 298 were not yet available on the OFK platform. All the tools were individually screened, and this process will continue until the end of this project. Until End of January 2025, 59 tools were selected to be uploaded on OFK. These related to Organic Arable Production (11 tools), Organic Vegetable Production (10 tools), Organic Fruit Production (10 tools), Organic Viticulture (11), Organic Ruminant Husbandry (17 tools). Some examples are given in Table 8. The reasons for the rejection of the many tools identified in the first phase of the project were:

- A too narrow regional reference
- Out of the definition of tool, (e.g. pure websites and not PDFs, videos...)
- No organic focus
- Free access not guaranteed
- Too scientific without practical aspects.
- Outside the 5 subtopics defined in the project.

Table 8: Selected tools identified and uploaded on OFK[11].

Pom fruit production	
Title	Plant protection in organic pome fruit cultivation
Content	Tool with relevance for organic advisors. Very well researched and easy to read, lots of detailed information about pests and diseases also in the context of adaptation to climate change. The leaflet is available in 4 languages.
Link	https://organic-farmknowledge.org/tool/53625
Arable, vegetable production	
Title	The State of Organic Seed in Europe
Content	This overview introduces the topic of seeds for organic farming across Europe. There is a section on farmers perspectives. This report is available in 3 languages.
Link	https://organic-farmknowledge.org/tool/39800
Ruminant husbandry	
Title	High-grass grazing or mob grazing: Adapting pasture management to the consequences of climate change
Content	Great video, and the topic of mob-grazing is super topical and relevant.
Link	https://organic-farmknowledge.org/tool/53743
Title	Animal welfare - Goats: Organic dairy goats on pasture
Content	Small ruminants need more attention on OFK, because they are of great importance in organic farming in certain regions.
Link	https://organic-farmknowledge.org/tool/54324
Viticulture	
Title	Comparison of different PIWI grape varieties
Content	Well produced video. And the PIWI grape varieties are also gaining attention in the organic sector.
Link	https://organic-farmknowledge.org/tool/53752

[11] See Appendix 6.2 for the full list with all tools uploaded and available on Organic Farm Knowledge

3.4 Knowledge reservoirs

We received information about 102 knowledge reservoirs from 11 different countries. The knowledge reservoirs were very diverse regarding funding sources and information they provided (general farming information, tool repository, database, etc.). Knowledge reservoirs rated as 'very helpful' by the partners is listed in Table 7. The complete list of knowledge reservoirs rated by partners as 'very helpful' and 'helpful' can be found in the Appendix 6.3 of this document. Part of the knowledge reservoirs originate from "public" sources (federal/regional government /administration). Specifically, in France, Germany and Spain, there is a dominance of "public" reservoirs.

Additional reservoirs originate stem from national "private" sources (private organisations, institutes, NGO etc.). These reservoirs are relevant in Denmark, Germany, Belgium, and Switzerland. Some regions (e.g., Bulgaria) report a lack of domestic sources of information for organic farmers.

Table 9: Selection of knowledge reservoirs rated as "helpful" or "very helpful" by the project partners. More information is given in Appendix 6.3 of this document.

Country	Issued by	Topic	Link to the reservoir
EU	FiBL, IFOAM OE, ICROFS	Collection of tools relevant to organic farming and advisors. Input from research projects (OrgPrints) and others. Translation of HTML text but not PDF.	www.organic-farmknowledge.org
Austria	FiBL	Numerous fact sheets about research results regarding organic agriculture.	www.fibl.org
Belgium	ICCBT	CCBT is the coordination body for organic farming research & advisory in Flanders (BE) and publishes a monthly newsletter with relevant practical news for organic farmers.	www.ccbt.be
Bulgaria	FOA Bioselena	Organic Agriculture Advisory Service	https://bioselena.com/
Germany	BÖL - BLE	Organic farming,	https://oekolandbau.de
Denmark	ICROFS	Research in ecology for the benefit of producers, consumers and exports - Organic E-print and: https://icrofs.dk/temasider	icrofs.dk
Switzerland	FiBL	Collection of tools and information relevant to organic farmers and advisors. Available in German, French and Italian.	www.bioaktuell.ch
France	National Observatory for Biological Production	Information is available on the production, processing, and marketing of organic products, including their consumption and various existing markets.	https://producaobiologica.pt/
Spain	ECOVALIA	Ecovalia is an umbrella organic association in Spain; it provides news about the sector -from research to markets- and counts with an e-learning platform with courses and other technical materials coming from projects (regional, national and European) and other sources, some for free, others for payment. Updated information.	www.ecovalia.org
Portugal	National Observatory for Biological Production	Information is available on the production, processing, and marketing of organic products, including their consumption and various existing markets.	https://producaobiologica.pt/

4 Outcomes for upcoming project activities

The aim of this task was to provide guidance on which topics knowledge is lacking among organic farming advisors in Europe to develop tailored concepts for personal exchange and training in the OrganicAdviceNetwork project, namely the Basic Course (MOOC), Learning Path (Self-learning pathways) and Cross Visits.

At the same time, existing tools identified as relevant by the project partners were made available to the public through the OFK platform and used for project activities (planned exchange, and training programs). Many of the identified knowledge gaps, research needs but also tools stem from projects like OK Net Arable or BiOFRUITNET. This illustrates, that the sector can benefit from targeted Research and Innovation project.

Based on the findings of this task, the concept for the Basic Course (MOOC) includes targeted sessions addressing the specific knowledge gaps among organic farming advisors (see Appendix for the content table/session plan of the Basic Course). Additionally, 15 Cross Visits in 2025 are designed to facilitate peer-to-peer learning, knowledge exchange and practical learning experiences in relevant thematic areas covering the knowledge gaps identified through this task. Within the Basic Course and the Cross Visits, innovative solutions will be presented and discussed addressing the specific knowledge gaps.

Table 10 provides an overview of the most relevant identified knowledge gaps, their sources, and how they will be addressed within the project through both the Basic Course and the planned Cross Visits in 2025. The table aligns knowledge gaps with specific learning opportunities to ensure a comprehensive and targeted approach to knowledge enhancement among organic farming advisors.

Besides the Basic Course and the Cross Visits, the identified knowledge gaps will also serve as a fundament for the future development of the Learning Paths on innovative solutions and soft skill enhancement. The results of this task provide valuable starting points for the content orientation of the Learning Paths. For that purpose, the Basic Course and the Cross Visits will serve as a starting point on which future topics of the Learning Paths can build on. The launch of the Learning Paths is expected in April 2026.

Table 10: Identified knowledge gaps, their sources, and linkage to project activities planned in 2025 (Cross Visits, Basic Course)

Knowledge gap	Source of the knowledge gap	Cross Visits in 2025 targeting knowledge gap (title of Cross Visit and country of implementation)	Session of the Basic Course targeting knowledge gap
Adaptation to climate change	– Knowledge gap survey among partners – Feedback FiBL Open Day	– Organic Viticulture Systems (Italy) – Water Management & Visit to Organic Field Days (Germany) – Soil, Nutrients & Weeds in Organic Arable Farming (Denmark) – Organic Dairy Sheep Production Challenges (Bulgaria) – Resilient Market Gardening (Austria) – Mixed Farming & Climate Change (France) – Resilience in Vegetable production & Visit to Tech&Bio (France) – Organic Milk Production in Climatically Vulnerable Area (Spain) – Improve feed supply in regions affected by climate change (Hungary)	Session 12: – Adaptation strategies to climate change in organic farming
Pest and disease control	– Knowledge gap survey among partners – Feedback FiBL Open Day – BIOFRUITNET	– Resilient Organic Arable Farming & Value Chains (Romania) – Improve feed supply in regions affected by climate change (Hungary)	Session 6: – Pest and disease management – System thinking: the role of biodiversity in pest and disease control
Variety selection	– Knowledge gap survey among partners – Feedback FiBL Open Day – BIOFRUITNET – LIVESEED	– Converting Apples & Cherries to Organic (Switzerland) – Organic Cherry & Olive Farming (Croatia)	Session 10: – Agrobiodiversity: Seeds and breeding

Improvement of fertilisation and nutrient management	– Knowledge gap survey among partners	– Soil, Nutrients & Weeds in Organic Arable Farming (Denmark)	Session 5: – Crop production : Nutrient management
System thinking	– Feedback from partners (workshop) – BIOFRUITNET	– Resilient Organic Arable Farming & Value Chains (Romania) – Advisor's Role in Organic Arable Farming (France)	Session 3: – System thinking: the example of soil fertility Session 6: – Pest and Diseases: – System thinking: the role of biodiversity in pest and disease control Session 10: – Agrobiodiversity: Seeds and breeding
Marketing/consumer behaviour	– Knowledge gap survey among partners – Organic Targets for EU	– Organic Arable Crops and Farming (Portugal) –	Session 11: – The role of marketing and producer-consumer interaction
Animal husbandry: management, feeding strategies, animal health	– Knowledge gap survey among partners	– Organic Dairy Sheep Production Challenges (Bulgaria) – Grass-fed organic cattle production (Estonia) – Organic Milk Production in Climatically Vulnerable Area (Spain) – Improve feed supply in regions affected by climate change (Hungary)	Session 8: – Animal husbandry: Feeding strategies for ruminants Session 9: – Health management: and welfare
Conversion, regulation, control and certification	– Knowledge gap survey among partners – Feedback FiBL Open Day	– Organic Arable Crops and Farming (Portugal) – Organic Cherry & Olive Farming (Croatia) – Converting Apples & Cherries to Organic (Switzerland)	Session 2: – Legal context and policy in support for organic farming Session 4: – Issues related to the conversion process

5 Conclusion

In this deliverable we identified knowledge gaps and collected existing tools (e.g. resources supporting farmers, agricultural professionals, and other stakeholders) to support advisors within the OrganicAdviceNetwork consortium.

The identified knowledge gaps are linked to the ongoing production challenges of organic farming, namely plant protection, nutrient management, variety selection for organic production systems and animal health and feeding strategies. Basic information on these topics should be addressed in the project's training programs and other activities.

However, there are no simple recipes in organic farming. That is why a lot of initiatives are needed from the farmers themselves in this sector. Specifically, this means developing strategies that are adapted to each farm. We therefore recommend that the project's training programmes also emphasise the need to integrate participatory on-farm trials into advisory and extension services. Advisors could then carry out meaningful trials together with the farmers, potentially encouraging innovation relevant to the whole sector, also in collaboration with EIP-AGRI Operational Groups, funded under the CAP[12].

It should also be kept in mind that organic farming is not only a set of specific practices, but also a way of thinking in systems and cycles. On top, there is also a legal context for organic farming, such as the EU-regulation and private standards. The latter mainly refer to the IFOAM principles of health, ecology, fairness and care. When planning education and training programs, these elements are crucial to consider as well.

Given the political push to expand organic farming, it is expected that many farms will convert to organic. These farmers need access to advice and knowledge. However, despite the many research projects and tools that have been developed, not all are easy to use for farmers and advisors. One reason for this may be that such tools are often published in only one language, mainly English.

In addition to the need to know and learn more about specific practices, information and evidence about why to convert to organic farming remains important. Here, tools, studies and reports that illustrate the benefits of the organic production systems continue to be important. This aspect was not mentioned in any of the activities conducted for this deliverable but should not be ignored[13].

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[12] see https://eu-cap-network.ec.europa.eu/support/innovation-knowledge-exchange-eip-agri_en

[13] Potential tools and source of information are

- the Dossier The DOK Trail, A 45-year comparative study of organic and conventional cropping systems. https://organic-farmknowledge.org/tool/54778,
- Sanders, Jürn, and Jürgen Heß (2019). Leistungen des ökologischen Landbaus für Umwelt und Gesellschaft. Thünen Institut
- Sanders, Jürn, et al. (2025). Benefits of organic agriculture for environment and animal welfare in temperate climates. Organic Agriculture: 1-19.;
- Sanders et al. (2023), Auf den Punkt gebracht. www.fibl.org

Moreover, besides production techniques, young advisors, in particular, need relevant knowledge about the organic sector and its organisation, as well as regulations, certification, and control procedures. These topics should also be addressed in the planned project training programmes.

New knowledge gaps and research needs emerged from this study, which addressed the need to adapt and further develop organic farming practices to meet the challenges of climate change or the loss of biodiversity. For example, in our analysis, climate change comes along with other top five topics (e.g. adaptation through new varieties, new pests and diseases arising due to climate change). There is also a need to develop ways to better integrate new production systems such as agroforestry, regenerative agriculture or mixed cropping systems into organic farming.

The next steps in the project will determine whether translations of the tools have the potential to further spread knowledge in the organic farming sector.

Our results suggest that technical issues related to organic farming can be considered as relevant knowledge gaps among organic advisors. However, these technical issues need to be complemented by innovative advisory methods to meet the increasing demands on future organic production systems and to support organic farmers on their way to resilient farm systems.

6 Appendix

6.1 Survey used to identify knowledge gaps and tools among the partners in the project

OrgAdvNet - Task 5.1 - Knowledge gaps
Instruction guideline: *–Please describe knowledge gaps as precisely as possible.* *–Please indicate each knowledge gap in a separate row (if possible)*
In which areas do you encounter major knowlege gaps among (organic) advisors in your country/region? Please indicate minimum a key- and sub-topic (e.g. "Arable cropping - Soil health indicators") and some further explanations

OrgAdvNet - Task 5.1 - Mapping of sources of information (websites, webpages, magazines, newsletters etc.) for relevant content oder methodological approaches inkl. soft skills			
Instruction guideline: Please indicate each source of information in a separate row.			
From which source of information do (organic) advisors in your country get their materials and information for their advisory activities?	***Link to the information source (if available)***	***Describe the issuing organization of the information source (funding (private or public), field of actitvity, strengths and weaknesses etc.)***	***How helpful is the source of information for (organic) advisors (please select from the dropdown menu)?***

OrgAdvNet - Task 5.1 - Mapping of tools for arable cropping							
Instruction guideline: *-Tools can be related to a specific problem or solution (e.g. Leaflet about "Controlling endoparasites in laying hens")* *-Tools can be more general (e.g. Podcast about " Sustainable soil management")* *-Please indicate each tool in a separate row.* *-Please list tools helpful to advisors.*							
What is a knowledge tool? A knowledge tool is a tool (didactic material/calculator/app etc.) that helps advisors to prepare, revise, adjust, improve etc. their advisory activities.							
Name/Title of tool (translated into English)	***Type of tool (please select from the dropdown menu)***	***Topic addressed in the tool***	***Country or region specific YES/NO? (If yes, please insert in brackets which country/region).***	***What problem does the tool address? (one sentence)***	***Link to the tool (if available)***	***Issuing organization of the tool (name and website link if available)***	***Is the tool already uploaded on Organic Farm Knowledge YES/NO?***

6.2 List of tools selected for Organic Farm Knowledge

In the following, the 59 selected tools that were uploaded to the Organic Farm Knowledge (OFK) platform are displayed in five tables corresponding to the five thematic networks: Organic Arable Production (11 tools), Organic Vegetable Production (10 tools), Organic Fruit Production (10 tools), Organic Viticulture (11), Organic Ruminant Husbandry (17 tools).

6.2.1 Organic Arable Production tools

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
2020	FiBL	https://www.fibl.org/en/	Mikrobielle Biostimulanzien	Biofertilizers	English, Czech, German, French	sarah.symanczik@fibl.org	No permission is needed for FiBL tools.	https://www.fibl.org/de/shop/1121-biofertilisers	https://organic-farmknowledge.org/tool/53627
2022	FiBL + Lfi	https://www.fibl.org/en/	Dinkel im Bio-Landbau	Spelt in organic farming	German	info.oesterreich@fibl.org	No permission is needed for FiBL tools.	https://www.fibl.org/de/shop/1566-dinkel-biolandbau	https://organic-farmknowledge.org/tool/53628
2022	FiBL	https://www.fibl.org/en/	Biozuckerrüben	Organic sugar beets	German, French	hansueli.dierauer@fibl.org	No permission is needed for FiBL tools.	https://www.fibl.org/de/shop/1172-zuckerrueben	https://organic-farmknowledge.org/tool/53631
2022	FiBL + Lfi	https://www.fibl.org/en/	Special cereals	Special cereal species	German	info.oesterreich@fibl.org	No permission is needed for FiBL tools.	https://www.fibl.org/de/shop/1525-besondere-getreidearten	https://organic-farmknowledge.org/tool/53632
2023	FiBL	https://www.fibl.org/en/	Organic oilseed production	Organic oilseed production	English, Romanian, Russian	thomas.bernet@fibl.org	No permission is needed for FiBL tools.	https://www.fibl.org/de/shop/1244-oilseeds	https://organic-farmknowledge.org/tool/53633
2024	FiBL	https://www.fibl.org/en/	Anbau von Biozuckerrüben - Herausforderungen und Trends	Cultivation of organic sugar beets - challenges and trends	German + German and French subtitles	adrian.krebs@fibl.org	No permission is needed for FiBL tools.	https://www.youtube.com/watch?v=C889DBuS-PY	https://organic-farmknowledge.org/tool/53634

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
2022	Bio Suisse Kartoffelkäfer	https://www.fibl.org/de/themen/projektdatenbank/projektitem/project/2079	Tipps zur Regulierung des Kartoffelkäfers	Tips for controlling the Colorado potato beetle	German + German and French subtitles	tobias.gelencser@fibl.org	No permission is needed for FiBL tools.	https://www.youtube.com/watch?v=b0bwKXyAtEU	https://organic-farmknowledge.org/tool/53742
2022	VORAN (Verbesserung Ökologischer Fruchtfolgen für ein Regeneratives, Angepasstes Nährstoffmanagement)	https://orgprints.org/id/eprint/35321/	Transfermulch im ökologischen Ackerbau	Transfer mulch in organic arable farming	German	lena.weik@smekul.sachsen.de	Permission from Lena Weik on 18.10.2024.	https://www.youtube.com/watch?v=dnTytD8TB54	https://organic-farmknowledge.org/tool/54249
2023	NutriNet	https://www.nutrinet.agrarpraxisforschung.de/	Stickstoffversorgung im ökologischen Landbau	Nitrogen supply in organic agriculture	German	elisa.mutz@fibl.org	Permission from Alexander Watzka through Elisa Mutz on 25.07.2024.	https://www.nutrinet.agrarpraxisforschung.de/fileadmin/daten/pdf/Publikationen/Merkblatt_N-Versorgung_im_oekologischen_Landbau.pdf	https://organic-farmknowledge.org/tool/53654
2023	NutriNet	https://www.nutrinet.agrarpraxisforschung.de/	Phosphorversorgung im ökologischen Landbau	Phosphorus supply in organic agriculture	German	elisa.mutz@fibl.org	Permission from Alexander Watzka through Elisa Mutz on 25.07.2024.	https://www.nutrinet.agrarpraxisforschung.de/fileadmin/daten/pdf/Publikationen/Merkblatt_P-Versorgung_im_oekologischen_Landbau.pdf	https://organic-farmknowledge.org/tool/53655

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
2023	NutriNet	https://www.nutrinet.agrarpraxisforschung.de/	Kaliumversorgung im ökologischen Landbau	Potassium supply in organic agriculture	German	elisa.mutz@fibl.org	Permission from Alexander Watzka through Elisa Mutz on 25.07.2024.	https://www.nutrinet.agrarpraxisforschung.de/fileadmin/daten/pdf/Publikationen/Merkblatt_K-Versorgung_im_oekologischen_Landbau.pdf	https://organic-farmknowledge.org/tool/53656

6.2.2 Organic Vegetable Production tools

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
2023	FiBL	https://www.fibl.org/en/	Pflanzenschutz im Biogemüsebau	Plant protection in organic vegetable production	English, Romanian, Russian, French	anja.vieweger@fibl.org	No permission needed for FiBL tools.	https://www.fibl.org/de/shop/1085-maraichage-maladies	https://organic-farmknowledge.org/tool/53626
2023	FiBL	https://www.fibl.org/en/	Pflanzenschutz-empfehlungen für den Biogemüsebau	Plant protection recommendations for organic vegetable production	German	tino.hedrich@fibl.org	No permission needed for FiBL tools.	https://www.fibl.org/de/shop/1284-pflanzenschutzempfehlung	https://organic-farmknowledge.org/tool/53653
2022	LTZ - Landwirtschaftliches Technologiezentrum Augustenberg	https://ltz.landwirtschaft-bw.de/,Lde/Startseite	Marmorierte Baumwanze - Hinweise zur Pflanzengesundheit	The brown marmorated stink bug (Halyomorpha halys)	German	poststelle@ltz.bwl.de	Permission from Olaf Zimmermann on 23.08.2024.	https://orgprints.org/id/eprint/54007/2/Pflanzengesundheit_Marmorierte_Baumwanze.pdf	https://organic-farmknowledge.org/tool/54007
2022	LTZ - Landwirtschaftliches Technologieze	https://ltz.landwirtschaft-bw.de/,Lde/Startseite	Grüne Reiswanze - Hinweise zur Pflanzengesundheit	The southern green shield bug (Nezara viridula)	German	poststelle@ltz.bwl.de	Permission from Olaf Zimmermann on 23.08.2024.	https://orgprints.org/id/eprint/54008/1/Pflanzengesundheit_Gr%C3%BCne_Reiswanze.pdf	https://organic-farmknowledge.org/tool/54008

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
	ntrum Augustenberg								
2020	FiBL	https://www.fibl.org/en/	Nährstoffeffizienz im Gartenbau	Nutrient efficiency in vegetable growing - tips for small vegetable far	German + English subtitles	f.weissoertel@naturland.de	No permission needed for FiBL tools.	https://www.youtube.com/watch?v=MeGgRrKMfpU	https://organic-farmknowledge.org/tool/53661
2021	SZG CCM CSO - Schweizerische Zentralstelle für Gemüsebau und Spezialkulturen	https://www.szg.ch/	ProfiCost - Software zur Vollkosten und Deckungsbeitragsberechnung mit aktualisierten Standardwerten für mehr als 90 Kulturen	ProfiCost - Software for calculating full costs and contribution margins	German	info@szg.ch	Permission from Michael Jenni on 13.11.2024.	https://www.szg.ch/proficost/proficost-gemuese/	https://organic-farmknowledge.org/tool/54328
2024	Bio Austria	https://www.bio-austria.at/bio-bauern/	Biodiversität im Gemüsebau fördern	Promoting biodiversity in vegetable growing	German	eva.marthe@bio-austria.at	Permission from Eva Marthe on 12.11.2024.	https://cdn.bio-austria.at/app/uploads/2024/08/biodiversitat-broschure-2022-2024gemuse-web.pdf	https://organic-farmknowledge.org/tool/54366
2021	FiBL - LIVESEED	https://liveseed.eu/	The state of organic seed in Europe	The state of organic seed in Europe	English, French, Spanish	freya.schaefer@fibl.org	Permission from Freya Schäfer on 09.12.2024.	https://www.liveseed.eu/wp-content/uploads/2021/03/Booklet2-LIVESEED_2021_web.pdf	https://organic-farmknowledge.org/tool/39800
2024	ITAB	https://itab.bio/	Réussir en Micro Maraîchage Biologique : ce qu'il faut savoir	Successful organic micro-market gardening: what you need to know	French	natacha.sautereau@itab.asso.fr	Permission from Simon Riviere on 06.01.2025.	https://www.youtube.com/watch?v=H3zfEHlmZWE&t=1s	https://organic-farmknowledge.org/tool/54544
2024	FiBL	https://www.fibl.org/en/	Zwischenfrüchte im biologischen Acker- und Gemüsebau	Catch crops in organic arable and	German, French	tino.hedrich@fibl.org	No permission	https://www.fibl.org/de/shop/1168-zwischenfruechte	https://organic-farmknowledge.org/tool/54380

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
				vegetable farming (FiBL Factsheet)			needed for FiBL tools.		

6.2.3 Organic Fruit Production tools

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
2022	FiBL	https://www.fibl.org/en/	Mauerbienen züchten - Bestäubung in Obstkulturen stärken	Breeding mason bees - strengthening pollination in fruit crops	German, French	andi.haeseli@fibl.org	No permission needed for FiBL tools.	https://www.fibl.org/de/shop/2518-mauerbienen	https://organic-farmknowledge.org/tool/40184
2024	FiBL	https://www.fibl.org/en/	Pflanzenschutz im Biokernobstanbau	Plant protection in organic pome fruit cultivation	German, French	andi.haeseli@fibl.org	No permission needed for FiBL tools.	https://www.fibl.org/de/shop/1016-pflanzenschutz-kernobst	https://organic-farmknowledge.org/tool/53625
2019	EcoOrchard	https://www.fibl.org/de/standorte/schweiz/departemente/nutzpflanzenwissenschaften/pb-projekte/eco-orchard	Presentation booklet of simplified methods for the monitoring of functional biodiversity in organic orchards	Presentation booklet of simplified methods for the monitoring of functional biodiversity in organic orchards	German, French	francois.warlop@grab.fr	Permission from Francois Warlop on 15.10.2024.	https://orgprints.org/id/eprint/35249/	https://organic-farmknowledge.org/tool/54246
2019	EcoOrchard (BEL und Böln)	https://www.fibl.org/de/standorte/schweiz/departemente/nutzpflanzenwissenschaften/pb-projekte/eco-orchard	Förderung der Biodiversität in Obstanlagen	Promotion of biodiversity in orchards	German	annette.herz@julius-kuehn.de	Permission from Annette Herz on 17.10.2024.	https://orgprints.org/id/eprint/35423/3/14OE005_Pflanzenbau_Biodiversit%C3%A4t_Obstanlagen.pdf	https://organic-farmknowledge.org/tool/54247

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
2019	Hal-Inrae	https://hal.inrae.fr/hal-02881832	Monitoring functional agrobiodiversity: Going to Assessment!	Monitoring functional agrobiodiversity: Going to Assessment!	French	servane.penvern@avignon.inra.fr	Permission from Servane Penvern on 30.08.2024.	https://hal.inrae.fr/hal-02881832	https://organic-farmknowledge.org/tool/54248
2021	BIOFA	https://biofa-profi.de/de/	Biologischer Pflanzenschutz in Obst- und Hopfenkulturen	Biological plant protection in fruit and hop crops	German	bayer@biofa-profi.de	Permission from Jochen Bayer on 04.11.2024.	https://biofa-profi.de/files/downloads/Biofa_Katalog_2022_A4_Kultur_Obstbau_220201_web.pdf	https://organic-farmknowledge.org/tool/54296
2023	Bio Austria	https://www.bio-austria.at/bio-bauern/	Biodiversitätsmaßnahmen im Obstbau - Fachfilm	Biodiversity measures in fruit growing	German	eva.marthe@bio-austria.at	Permission from Eva Marthe on 12.11.2024.	https://www.bio-austria.at/d/bauern/biodiversitaetsmassnahmen-im-obstbau/	https://organic-farmknowledge.org/tool/54330
2019	LTZ - Landwirtschaftliches Technologiezentrum Augustenberg	https://ltz.landwirtschaft-bw.de/,Lde/Startseite	Plan d'actions contre la drosophila suzukii : fruits à noyaux	Action plan against drosophila suzukii: Stone fruits	French	nicolai.haag@ltz.bwl.de	Permission from Nicolai Haag on 11.11.2024.	https://orgprints.org/id/eprint/36466/1/Plan%20d%E2%80%99actions_drosophila%20suzukii-fruits%20%C3%A0%20noyaux.pdf	https://organic-farmknowledge.org/tool/54370
2019	Julius Kühn-Institut und EcoOrchards	https://ebionetwork.julius-kuehn.de/index.php?menuid=6	How to assess biodiversity in an apple orchard	How to assess biodiversity in an apple orchard	English	servane.penvern@avignon.inra.fr	Permission from Servane Penvern on 04.12.2024.	https://www.youtube.com/watch?v=Jo3XnBTLSLo&list=PL1s9INnnONtupC-lbP5ZPC04wjoPfKvkc&index=2	https://organic-farmknowledge.org/tool/54418
2023	NCAT	https://attra.ncat.org/publication/tree-fruits-organic-production-overview/	Tree Fruits: Organic Production Overview	Tree Fruits: Organic Production Overview	English	cathys@ncat.org	Permission from Cathy on 27.11.2024.	https://attra.ncat.org/publication/tree-fruits-organic-production-overview/	https://organic-farmknowledge.org/tool/54382

6.2.4 Organic Viticulture tools

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
2022	Delinat	https://www.delinat.com/	Vergleich von verschiedenen PIWI-Sorten: Welche sind besonders resistent gegen Pilzkrankheiten?	Comparison of different PIWI grape varieties	German	olivier.geissbuehler@delinat.com	Permission from Olivier Geissbühler on 22.07.2024.	https://www.youtube.com/watch?v=zTvug4yVyFA	https://organic-farmknowledge.org/tool/53752
2022	Delinat	https://www.delinat.com/	Der Kampf gegen die Mehltau-Pilze: Neugezüchtete PIWI-Reben im ersten Jahr	The fight against mildew fungi: Newly grown PIWI vines in the first year	German	olivier.geissbuehler@delinat.com	Permission from Olivier Geissbühler on 22.07.2024.	https://www.youtube.com/watch?v=7sE27n-eyco	https://organic-farmknowledge.org/tool/53761
2023	Delinat	https://www.delinat.com/	The New Generation Of Cabernet: How To Cross-Pollinate A Resistant Grape Vine	The New Generation Of Cabernet: How To Cross-Pollinate A Resistant Grape Vine	German	olivier.geissbuehler@delinat.com	Permission from Olivier Geissbühler on 22.07.2024.	https://www.youtube.com/watch?v=cTDShtIpRig	https://organic-farmknowledge.org/tool/53762
2022	Delinat	https://www.delinat.com/	Pedra Seca: Trockensteinmauern voller Biodiversität bei Albet in Noya im Penedès	"Pedra Seca": Dry stone walls full of biodiversity near Albet in Noya in Penedès	Spanish, German	olivier.geissbuehler@delinat.com	Permission from Olivier Geissbühler on 22.07.2024.	https://www.youtube.com/watch?v=WYvWbFqf1rM	https://organic-farmknowledge.org/tool/53764
2022	Delinat	https://www.delinat.com/	Ökosystem Weinbau: Die Delinat-Methode auf Château Duvivier	Viticulture ecosystem: The Delinat method at Château Duvivier	German	olivier.geissbuehler@delinat.com	Permission from Olivier Geissbühler on 22.07.2024.	https://www.youtube.com/watch?v=Zmqy2NjzwTU	https://organic-farmknowledge.org/tool/54003
2018	Rete Rurale Nazionale	https://www.reterurale.it/en	VITE gestione della peronospora in viticoltura	Downy mildew management in organic viticulture	Italian	reterurale@politicheagricole.gov.it	Permission from Oliviero Visitntini on 30.08.2024.	https://www.youtube.com/watch?v=ENfb6qbHe1M	https://organic-farmknowledge.org/tool/54041

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
2018	FiBL	https://www.fibl.org/en/	Mit Kaolin gegen die Kirschessigfliege im Weinbau	Using kaolin against the Spotted Wing Drosophila (Drosophila suzukii) in viticulture	German, French	fabian.cahenzli@fibl.org	No permission needed for FiBL tools.	https://www.fibl.org/de/shop/1073-kaolin	https://organic-farmknowledge.org/tool/54269
2020	FiBL	https://www.fibl.org/en/	Neue Mittel gegen Mehltau im Bio-Rebbau	New plant protection products against mildew in organic winegrowing (FiBLFilm)	German + Subtitles in German, English, French and Spanish	thomas.alfoeldi@fibl.org	No permission needed for FiBL tools.	https://www.youtube.com/watch?v=sxV9VRqqSgE	https://organic-farmknowledge.org/tool/54270
2019	LTZ - Landwirtschaftliches Technologiezentrum Augustenberg	https://ltz.landwirtschaft-bw.de/,Lde/Startseite	Plan d'actions contre la Drosophila suzukii : vignoble	Action plan against Drosophila suzukii in vineyards	French	nicolai.haag@ltz.bwl.de	Permission from Nicolai Haag on 11.11.2024.	https://orgprints.org/id/eprint/36464/1/Plan%20d%E2%80%99actions_drosophila%20suzukii-vignoble.pdf	https://organic-farmknowledge.org/tool/54323
2024	Delinat	https://www.delinat.com/	Biologisches Wundermittel: Nicola Fagotto erklärt, wie man den besten Komposttee herstellt	Organic miracle cure: Nicola Fagotto explains how to make the best compost tea	French + Subtitles in German and English	olivier.geissbuehler@delinat.com	Permission from Olivier Geissbühler on 22.07.2024.	https://www.youtube.com/watch?v=Sva1f6oTM1k&t=6s	https://organic-farmknowledge.org/tool/54283
2022	Bio Austria	https://www.bio-austria.at/bio-bauern/	Biodiversität im Weinbau fördern	Promoting biodiversity in viticulture	German	eva.marthe@bio-austria.at	Permission from Eva Marthe on 12.11.2024.	https://cdn.bio-austria.at/app/uploads/2021/12/biodiversitat-broschure-2022-wein-klein.pdf	https://organic-farmknowledge.org/tool/54364

6.2.5 Organic Ruminant Husbandry tools

Year	Organization/ Project	Organization/ Project Link	Original Tool Title	English Tool Title	Language Versions	Contact E-Mail	Permission	Tool Link	OFK Tool Link
2019	FiBL	https://www.fibl.org/en/	Weideparasiten bei Schafen und Ziegen nachhaltig kontrollieren	Sustainably controlling pasture parasites in sheep and goats	German, French	steffen.werne@fibl.org	No permission needed for FiBL tools.	https://www.fibl.org/de/shop/2515-parasiten-kleinwiederkaeuer	https://organic-farmknowledge.org/tool/53635
2022	FiBL	https://www.fibl.org/en/	Milchleistungsprüfung in Herden mit kuhgebundener Kälberaufzucht	Milk production testing in herds with cow-based calf rearing	Swiss German	claudia.schneider@fibl.org	No permission needed for FiBL tools.	https://www.fibl.org/de/shop/1409-milchwaegen	https://organic-farmknowledge.org/tool/53644
2023	FiBL	https://www.fibl.org/en/	Mother-bonded and Fostered Calf Rearing in Dairy Farming	Mother-bonded and fostered calf rearing in dairy farming	German, English, French, Italian, Polish	claudia.schneider@fibl.org	No permission needed for FiBL tools.	https://www.fibl.org/de/shop/1660-mother-bonded-calf-rearing	https://organic-farmknowledge.org/tool/53645
2023	FiBL	https://www.fibl.org/en/	Kälber und Ferkel mit Arzneipflanzen stärken	Strengthening calves and piglets with medicinal plants	German, French, English	michael.walkenhorst@fibl.org	No permission needed for FiBL tools.	https://www.fibl.org/de/shop/1596-phytotherapy	https://organic-farmknowledge.org/tool/53646
2023	Thünen Institut	https://www.thuenen.de/de/	Viertelselektives Trockenstellen Antibiotikaeinsatz nachhaltig reduzieren	Quarter selective dry off in dairy cows	German	alexandra.beckmann@thuenen.de	Permission from Alexandra Beckmann on 22.07.2024.	https://www.thuenen.de/media/institute/ol/Arbeitsgebiete/Rinderhaltung_mehr_SM/Downloads/ThuenenRatgeber8_Viertelselektives_Trockenstellen.pdf	https://organic-farmknowledge.org/tool/53647
2024	Farm Demo	https://climatefarmdemo.eu/	Mob-Grazing: Das Weidemanagement an die zunehmende Trockenheit anpassen (Climate-Smart Agriculture)	High-grass grazing or mob grazing: Adapting pasture management to the consequences of climate change	German, English + Subtitles in German, English, French and Italian	thomas.alfoeldi@fibl.org	Permission from Christina Berger on 22.07.2024.	https://www.youtube.com/watch?v=Cl5bf05WmRY	https://organic-farmknowledge.org/tool/53743

2021	Core Organic	https://projects.au.dk/coreorganicpleiades	Nurse cow dairy system to promote calf health and welfare	Nurse cow dairy system to promote calf health and welfare (CORE Organic Practice Abstract)	English	nathalie.bareille@oniris-nantes.fr	Permission from Nathalie Bareille on 31.07.2024	https://orgprints.org/id/eprint/42832/1/CORE_Organic_practice_abstract_GrazyDaiSy_Nurse%20cows.pdf	https://organic-farmknowledge.org/tool/42832
2024	Louis Bolk Instituut	https://louisbolk.nl/en	De effecten van het gebruik van draadloze afrastering op gedrag en welzijn van melkkoeien en andere runderen	The effects of using wireless fencing on behaviour and well-being of dairy cows and other cattle	Dutch	m.bestman@louisbolk.nl	Permission from Monique Bestman on 28.11.2024.	https://louisbolk.nl/sites/default/files/publication/pdf/de-effecten-van-het-gebruik-van-draadloze-afrastering-op-gedrag-en-welzijn-van-melkkoeien-en-andere.pdf	https://organic-farmknowledge.org/tool/54428
2024	Innovationscenter for Økologisk Landbrug	https://icoel.dk/en/	Parasitter hos kalve og ungdyr på græs - mød en af vores inspirationsbedrifter	Parasites at calves and juveniles on grass - meet one of our inspirational farms	Danish + Subtitles in Danish	info@icoel.dk	Permission from Linda Michelle Handrup on 28.11.2024.	https://www.youtube.com/watch?v=UuKMvKNfAls	https://organic-farmknowledge.org/tool/54440
2020	FAO (e-learning academy)	https://www.fao.org/home/en/	Rinderpest Disease Recognition (FAO e-Learning Academy Course)	Rinderpest Disease Recognition (FAO e-Learning Academy Course)	English	Cristina.Petracchi@fao.org	Permission from Christina Petracchi on 18.07.2024.	https://elearning.fao.org/course/view.php?id=528	https://organic-farmknowledge.org/tool/54307
2018	FAO (e-learning academy)	https://www.fao.org/home/en/	Climate-smart livestock production (FAO e-Learning Academy Course)	Climate-smart livestock production (FAO e-Learning Academy Course)	English, Arabic, French, Spanish	Cristina.Petracchi@fao.org	Permission from Christina Petracchi on 18.07.2024.	https://elearning.fao.org/course/view.php?id=437	https://organic-farmknowledge.org/tool/54308

2018	Thünen Institut	https://www.thuenen.de/de/	Weideparasiten-Management - Entscheidungsbäume für Wiederkäuer	Pasture parasite management - Decision trees for ruminants	German	jan.brinkmann@thuenen.de	Permission from Jan Brinkmann on 05.11.2024	https://www.mud-tierschutz.de/fileadmin/SITE_MASTER/content/Dokumente/Beratungsinitiativen/13MDT020-Weideparasitenmanagement-Leitfaden_Thuenen-Ratgeber_003_digital.pdf	https://organic-farmknowledge.org/tool/54306
2020	Bio Austria	https://www.bio-austria.at/bio-bauern/	Tierwohl Rind – Der Weg zur Weide	Cattle welfare - The path to the pasture	German	ruth.bartel-kratochvil@bio-austria.at	Permission from Ruth Bartel Kratochvil on 07.11.2024.	https://www.bio-austria.at/d/bauern/tierwohl-rind-der-weg-zur-weide/	https://organic-farmknowledge.org/tool/54321
2019	Bio Austria	https://www.bio-austria.at/bio-bauern/	Tierwohl Ziege Bio-Milchziegen auf der Weide	Animal welfare - Goats: Organic dairy goats on pasture	German	ruth.bartel-kratochvil@bio-austria.at	Permission from Ruth Bartel Kratochvil on 07.11.2024	https://www.bio-austria.at/d/bauern/tierwohl-ziege-bio-milchziegen-auf-der-weide/	https://organic-farmknowledge.org/tool/54324
2020	Bio Austria	https://www.bio-austria.at/bio-bauern/	Weide – Erstaustrieb, Familie Heiden	Pasture – First grazing of cattle on the pasture	German	ruth.bartel-kratochvil@bio-austria.at	Permission from Ruth Bartel Kratochvil on 07.11.2024	https://www.bio-austria.at/d/bauern/weide-erstaustrieb/	https://organic-farmknowledge.org/tool/54326
2019	Bio Austria	https://www.bio-austria.at/bio-bauern/	Tierwohl Rind – Auf der Weide geboren	Animal welfare cattle - Born on the pasture	German	ruth.bartel-kratochvil@bio-austria.at	Permission from Ruth Bartel Kratochvil on 07.11.2024	https://www.bio-austria.at/d/bauern/tierwohl-rind-auf-der-weide-geboren/	https://organic-farmknowledge.org/tool/54327
2024	FiBL	https://www.fibl.org/en/	Parasitenkontrolle mit Tannin haltigen Futtermitteln	Parasite control in sheep and goats with tannins: insight into research and practice	German, English + Subtitles in German, English, French and Italian	steffen.werne@fibl.org	No permission needed for FiBL tools.	https://www.youtube.com/watch?v=VGXRboBvLdg	https://organic-farmknowledge.org/tool/54271

6.3 More information on the collection of “helpful” and “very helpful” knowledge reservoirs

Country	From which source of information do (organic) advisors in your country get their materials and information for their advisory activities?	Link to the information source (if available)	Describe the issuing organization of the information source (funding (private or public), field of actitvity, strengths and weaknesses etc.)
Spain	ECOVALIA	www.ecovalia.org	Ecovalia is an umbrella organic association in Spain; it provides news about the sector -from research to markets- and counts with an e-learning platform with courses and other technical materials coming from projects (regional, national and European) and other sources, some for free, others for pay. Updated information.
Spain	Consejería de Agricultura, Pesca, Agua y Desarrollo Rural. Andalucía	Producción Ecológica - Agricultura, Pesca, Agua y Desarrollo Rural - Junta de Andalucía (juntadeandalucia.es)	Regional Agriculture Ministry of Andalusia has a dedicated site for organic agriculture where some courses are available together with some information, mainly regarding regulation but some technical information on crops or studies by themes, too. Wide range of topics and resources: materials, training and reports. Some of them are only accessible to regional advisors.
Denmark	Innovation Centre for organic farming website	https://icoel.dk/en/	The Danish centre for developing sustainable, organic agriculture. Agricultural knowledge: Plant production, Livestock, Climate, Nature, Farm managemen, and Regulations in organic farming. On the Danish side, the material is aimed at organic farmers and advisors. Subjects can be searched and there are cultivation instructions for a very large number of crops. It is the site's ambition to always be the entry site for Danish organic farmers. The knowledge platform contains updated and applicable materials. Furthermore, you can find descriptions and results from all projects that ICOEL does or is part of. Financed by projectfunds.
Denmark	Landbrugsinfo website	LandbrugsInfo - find den nyeste landbrugsfaglige viden	Relevant for farming and ther advicers - but not specifik organic. The central page for danish agriculture. Financed by projectfunds and subscriptions.
Denmark	Danish Agriculture & Food Council	https://agricultureandfood.dk/ https://lf.dk/viden-om/oekologi/	The organic sector within the Danish Agriculture and Food Council is ready with a new three-year strategy defining how to advance organic production. A series of specific strategic objectives are setting the course for Denmark to become a world leader in the development of sustainable, organic production and sale. is the ultimate largest political and industry organization on the agricultural side

Denmark	The Danish Agricultural Agency is an agency under the Ministry of Food, Agriculture and Fisheries of Denmark.	Økologi (lbst.dk) https://en.lbst.dk/agriculture/organic-farming	Certification and inspection of organic farming in Denmark are administered by state institutions, which authorize the use of eco-labels. A large number of forms or tools for reporting on ecology to the control authority. State agency financed by the state
Country	**From which source of information do (organic) advisors in your country get their materials and information for their advisory activities?**	**Link to the information source (if available)**	**Describe the issuing organization of the information source (funding (private or public), field of actitvity, strengths and weaknesses etc.)**
Denmark	Danish Veterinary and Food Administration (DVFA) is part of the Ministry of Food, Agriculture and Fisheries. DVFA is responsible for food safety and health from farm to fork.	https://foedevarestyrelsen.dk/kost-og-foedevarer/alt-om-mad/gaa-efter-maerkningen/oekologi	Labelling, DK organic label, EU organic logo, food label, control of food companies, guidelines on organic food, General rules and control of Animal health and welfare
Denmark	The Danish Environmental Protection Agency	Landbrug og husdyrbrug - Miljøstyrelsen (mst.dk)	Specific rules in relation to livestock keeping. Danish state regulations
Denmark	ICROFS	icrofs.dk	Research in ecology for the benefit of producers, consumers and exports - Organic E-print and: https://icrofs.dk/temasider
Denmark	Fagmagasinet Økologi – Inspiration for agriculture	https://icoel.dk/vi-tilbyder/fagmagasin/	ECOLOGY – Inspiration for Farming is published 10 times a year, and in each issue, we offer current news for the organic farmer to use in daily operations: the latest updates and the latest knowledge about plant breeding, livestock, technology and economics. Themes on selected subjects, which we treat in a nuanced and in-depth manner, are presented four times a year. Authors of articles are from ICOEL, advisors around the country and researchers. This is funded by subscriptions, advertising sales, and project funds.
Denmark	Films and webinars about organic farming	Økologi - SEGES TV	Webinars and filmed presentations - focus on ecology - the last things are from 2022, so it went instead to described in the next line. Financed by projectfunds.
Denmark	YouTube about organic farming	Innovationscenter for Økologisk Landbrug - YouTube	Videos, webinars, etc., targeted organic and organic topics - start 2022. Financed by projectfunds.
Denmark	DLBR-system		Help for counselors made for and by the counseling system. Everything is behind log-in and requires payment. DLBR danish organic: The advisory companies are organized in the industry cooperation

			Danish Landbrugsrådgivning (DLBR) and are owned by the Danish farmers through the rural associations.
Denmark	Organic Congress - every two years (2023, 2025 …)	https://www.tilmeld.dk/oekologi-kongres2023	It is funded by project funds, user payments, and sponsors.
Denmark	Øko-markdag - Organic Field-day ...every two years (2022, 2024…)	https://okomarkdag.dk/en/	Financed by project funds.
Country	**From which source of information do (organic) advisors in your country get their materials and information for their advisory activities?**	**Link to the information source (if available)**	**Describe the issuing organization of the information source (funding (private or public), field of actitvity, strengths and weaknesses etc.)**
Belgium	CCBT	www.ccbt.be	CCBT is the coordination body for organic farming research & advisory in Flanders (BE). CCBT publishes a monthly newsletter with relevant practical news for organic farmers. All information is saved in the web database.
Belgium	Inagro	https://inagro.be/	Inagro is a research organization that has an organic demonstration farm.
Belgium	Bioforum	https://www.bioforum.be/	Organic farming sector organization with 2-weekly newsletter for farmers
Belgium	Agentschap Landbouw & Zeevisserij	https://lv.vlaanderen.be/bedrijfsvoering/biologische-landbouw	Flemish Government, info on legislation & and support
Belgium	Living Lab Agroecologie & Biologische landbouw (ILVO)	https://www.llaebio.be/	Living Lab for Agroecology & Organic Farming (managed by ILVO, research institute)
Belgium	Landwijzer	https://www.landwijzer.be/	3-year training program for organic farming (not directed towards advisors)
Belgium	agronomic magazines on organic farming		Bioland (Germany), Biofil (France), Ekoland (Nl)… ; gives insights into organic farming in neighbouring countries
Belgium	FIBL	www.fibl.org	reference on specific items
Belgium	Agro transfert	https://www.agro-transfert-rt.org/ressources/odera-vivaces/	management of perennial weeds

France	RD Agri	Plateforme R&D (rd-agri.fr)	RD Agri is a french plateform that centralizes and enhances the results of agricultural R&D projects. It offers direct access to deliverables form the National Programme for Agriculture and Rural Development and programmes supported by the government.
France	Newsletters		Each Chamber of agriculture on a regional level has its own newsletter, with specific OF informations and local news about crops, livestock etc. Newsletter written by advisors can be specific of one sector (ex : arable crops) or general.
France	Collaborative space		Each "Chamber of agriculture" advisor has acess to an collaborative space where they can interact with others advisors (on a national scale) and share documents, experiments, books etc to get information for the advisory activities.
Country	**From which source of information do (organic) advisors in your country get their materials and information for their advisory activities?**	**Link to the information source (if available)**	**Describe the issuing organization of the information source (funding (private or public), field of actitvity, strengths and weaknesses etc.)**
France	Organic advisor groups of the Chamber of Agriculture (arable, ruminants, fruits, vegetables, viticulture and regional advisors)		Importance of the network at regional and national scales for circulation of information/interknowledge among advisors
France	Agence Bio	https://www.agencebio.org/	Directory of AB operators, statistics and key figures, economic report on organic French market (4/year)
France	INAO	https://www.inao.gouv.fr/Les-signes-officiels-de-la-qualite-et-de-l-origine-SIQO/Agriculture-biologique	guide to reading the organic specifications + notices, and decisions of the CNAB (National Commission for Organic Agriculture)
France	France Agrimer	https://www.franceagrimer.fr/	Statistic informations on the organic arable crop sector (production, crop yield, balance sheet for numerous crops)
France	Interprofessions (CNIEL, Interfel, intercéréales, Interbev, ITAVI,	Cniel Infos : - Conjoncture laitière biologique (cniel-infos.com)	statistic informations on the organic market, production and consumption, with volumes and prices
France	Site Tech&Bio	**www.tech-n-bio.com**	Support for posters, interventions, workshops and conferences for regional meetings and the International Exhibition

France	INFO BIO BFC	https://bio.bfc.chambagri.fr/	This site offers articles, videos and technical documents to support farmers in organic farming in Burgundy-Franche-Comte.
France	Echo des champs bio		6 issues per year for organic farmers, produced by BFC chamber advisors and Bio Bourgogne FC advisors. It contains in-depth technical articles, experimental results, and technical sheets on running a cereal workshop in organic farming. The publication of these articles involves face-to-face meetings between the different advisors: these exchanges between advisors are important, especially for new (young) advisors to better understand the technique and their mission.
France	Guide en Bourgogne Franche comté	https://bio.bfc.chambagri.fr/documentation/	arable crops guide in Burgundy Franche Comté (created by the Bio Bourgogne FC Chamber of Agriculture), breeding guide, PPAM guide
Portugal	National Observatory for Biological Production	https://producaobiologica.pt/	Information on the production, processing, and marketing of organic products, including their consumption and various existing markets, is available.
Country	**From which source of information do (organic) advisors in your country get their materials and information for their advisory activities?**	**Link to the information source (if available)**	**Describe the issuing organization of the information source (funding (private or public), field of actitvity, strengths and weaknesses etc.)**
Switzerland	AGRIDEA website	https://www.agridea.ch/de/	Agridea is a Swiss consulting organization supported by the government and the regions. They provide advisory services to agricultural businesses, authorities, and organizations in various areas such as production techniques, farm management, environmental issues, and innovations. Limited information about organic farming in general.
Switzerland	Agricultural Schools	www.strickhof.ch	Strickhof is an agricultural education center located in the region of Zurich. Strickhof plays a significant role for the regional farmers. They provide extension services about organic/sustainable agricultural practices and training to farmers.
Italy	Stazione Sperimentale per la Viticoltura Sostenibile	www.spevis.it	It is a private advisory and applied research body, fully dedicated to organic viticulture. It works in Tuscany but provides information and advisory also in other Italina Regions.
Italy	AIAB is the Italian Association of Organic Agriculture in the Friuli Venezia Giulia Region	https://www.aiab.fvg.it/fare/	AIAB FVG provides advice to farmers on organic viticulture, apple production, vegetable production and arable crops. Besides a regular bulletin during the season, the web page provides problem-specific guidelines, videos, etc. It refers to Friuli Venezia Giulia conditions
Italy	Regione Toscana	http://agroambiente.info.regione.toscana.it/agro18/	it is the web page with plant protection bulletins for organic management of several crops (vineyard and olive the most relevant)

Austria	FiBL Website	FiBL - fibl.org	FiBL provides numerous fact sheets about research results regarding organic agriculture. Especially for austria, surrounded bei fibl germany and fibl switzerland we benefit a lot from those research questions and results, as we face similar climate etc.
Austria	advisor meetings, local and national		Local advisor meetings every 2-6 weeks and once or twice a year, a national advisor meeting for each sector (arable, vegetable, ruminants, grassland, fruits, viticulture)
Austria	New advisors follow experienced advisors during field visits, etc.		There are quite some advisors doing their jobs for 20+ years, having gained so much experience, which should be transferred to the "new generation of advisors", so we basically follow them around while they go on advisory service
Austria	apprenticeships	Gärtnerische Berufsschule Großwilfersdorf - Fachschulen Land Steiermark	Styria (an area of Austria) offers part-time apprenticeships. It takes place once a month, on Friday and Saturday, so you can participate, even when working. It is two years long, and you can finish with a proficiency examination. You learn a lot about vegetable growing, but also about the financial and marketing aspects of farming. Also, many farmers themselves to this training, which connects you, gives you more insights into the reality of farming, etc. It is co-financed by the Chamber of agriculture Styria and the local horticultural school. More for new/young advisors with no or little experience.
Country	**From which source of information do (organic) advisors in your country get their materials and information for their advisory activities?**	**Link to the information source (if available)**	**Describe the issuing organization of the information source (funding (private or public), field of actitvity, strengths and weaknesses etc.)**
Germany	Bioland	https://www.bioland-fachmagazin.de/	Trade journal of the Bioland farmers association, all topics
Germany	Ökologie und Landbau	https://www.soel.de/publikationen/oekologie-landbau	Journal of the Foundation for Ecology and Agriculture, all topics
Germany	NutriNet Website	https://www.nutrinet.agrarpraxisforschung.de/	Project webpage of NutriNet, Informations of Nutrition Management
Germany	First figures for organic farming	https://www.ktbl.de/shop/produktkatalog/19517	Data on all topics
Germany	Organic Eprints	https://orgprints.org/	Scientific publications in organic farming

Germany	FibL	https://www.fibl.org/de/infothek#c73696	Publications, fact sheets and other media
Germany	FibL Betriebsmittelliste	https://www.betriebsmittelliste.de/index.html	List of authorized resources (in accordance with EU organic regulations and farmers associations)
Germany	Organic Farm Knowledge	https://organic-farmknowledge.org/	
Germany	Bundesministerium für Ernährung und Landwirtschaft, Bundesprogramm Ökologischer Landbau	https://oekolandbau.de	The webpage provides many information and links.
Germany	Naturland Nachrichten	https://www.naturland.de/de/erzeuger/erzeuger-service/naturland-nachrichten.html?highlight=WyJuYXR1cmxhbmQiLCJuYWNocmljaHRlbiIsIm5hY2hyaWNodCJd	Magazine of farmers association Naturland, for members only
Germany	BioC	https://www.bioc.info/search/producersearch	Tool to find organic producers and view their certificate, list of inspection bodies in germany
Country	**From which source of information do (organic) advisors in your country get their materials and information for their advisory activities?**	**Link to the information source (if available)**	**Describe the issuing organization of the information source (funding (private or public), field of actitvity, strengths and weaknesses etc.)**
Germany	Legunet Website	https://www.legunet.de/	Project webpage of Legunet, information on Legume cultivation
Germany	KleeLuzPlus Website	https://www.demonet-kleeluzplus.de/	Project webpage of KleeLuzPlus, Information on Clover grass and Lucerne
Germany	Naturland Academy	https://academy.naturland.org/index.php?	Further training programme for natural farms abroad, for members only
Germany	OrgancXseeds	https://www.organicxseeds.de/	Database on the availability of organic seeds and seedlings

Bulgaria	FiBL	https://www.fibl.org/	FiBL - Research Institute of Organic Agriculture 5070 Frick Switzerland
Bulgaria	AGRIDEA website and printed material folder - Organic farming - technical leaflets (Agriculture Biologique - fiches techniques)	https://www.agridea.ch/de/	Agridea is a Swiss consulting organization supported by the government and the regions. They provide advisory services to agricultural businesses, authorities, and organizations in various areas such as production techniques, farm management, environmental issues, and innovations. Limited information about organic farming in general.
Bulgaria	Best4soil website	https://www.best4soil.eu/	A network of practitioners for sharing knowledge on the prevention and reduction of soil-borne diseases
Bulgaria	Organic-farmknowledge	https://organic-farmknowledge.org/	Database for exchange of knowledge, enhancing organic farming
Bulgaria	FOA Bioselena	https://bioselena.com/	Organic Agriculture Advisory Service
Bulgaria	Official website of the European Union	https://agriculture.ec.europa.eu/farming/organic-farming/organic-production-and-products_bg	Official website of the European Union
Bulgaria	The Bulgarian Food Safety Agency	https://bfsa.egov.bg/wps/portal/bfsa-web/registers/Parallel_trade_PPP_table_10	BFSA - Official website of plant protection products in Bulgaria
Bulgaria	The Ministry of Agriculture and Food	http://bioseeds.mzh.government.bg/	MAF-Official database of seed, planting material and seed potato varieties produced under organic production rules

6.4 Draft curriculum for the Basis Course (MOOC)

Based on the conducted knowledge gap survey, further research and additional feedbacks from the partners, following content table for the Basic Course was defined together with the partners involved in Task 5.2. The ExCom and the Thematic Network Leaders still have to agree upon this content. The Basic Course will be designed as a live webinar with 12 weekly sessions.

Session	**Content**	**Input/source**
Session 1	• 4 principles of organic agriculture • The role of knowledge in organic farming • The role of advisors and research in organic farming	Grant Agreement Feedback from partners
Session 2	• Legal context and policy support for organic farming	Feedback from partners
Session 3	• System thinking: the example of soil fertility	Feedback from partners
Session 4	• Issues related to the conversion process	Grant Agreement
Session 5	• Crop production : Nutrient management	Outcome of D5.1
Session 6	• Pest and disease management • System thinking: the role of biodiversity in pest and disease control	Outcome of D5.1 Feedback from partners
Session 7	• Vegetable and arable production: Weed management	Outcome of D5.1
Session 8	• Animal husbandry: Feeding strategies	Outcome of D5.1
Session 9	• Cattle management: Animal health and welfare	Outcome of D5.1
Session 10	• Agrobiodiversity: seeds and breeding	Outcome of D5.1
Session 11	• The role of marketing and producer-consumer interaction	Outcome of D5.1 Feedback from partners
Session 12	• Adaptation strategies to climate change in organic farming	Outcome of D5.1

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