

Online Webinar

Developing roadmaps to improve the supply of organically produced seed and planting material until 2036 in Germany

5th June 2025 - 9.00-11.30 CET

Freya Schäfer, Jan Albus, Leonie Weckmann, Caroline Grau, Wolfgang Patzwahl, Annegret Pflugfelder, Andrea Frankenberg

With support from



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und Heimat

Projektträger



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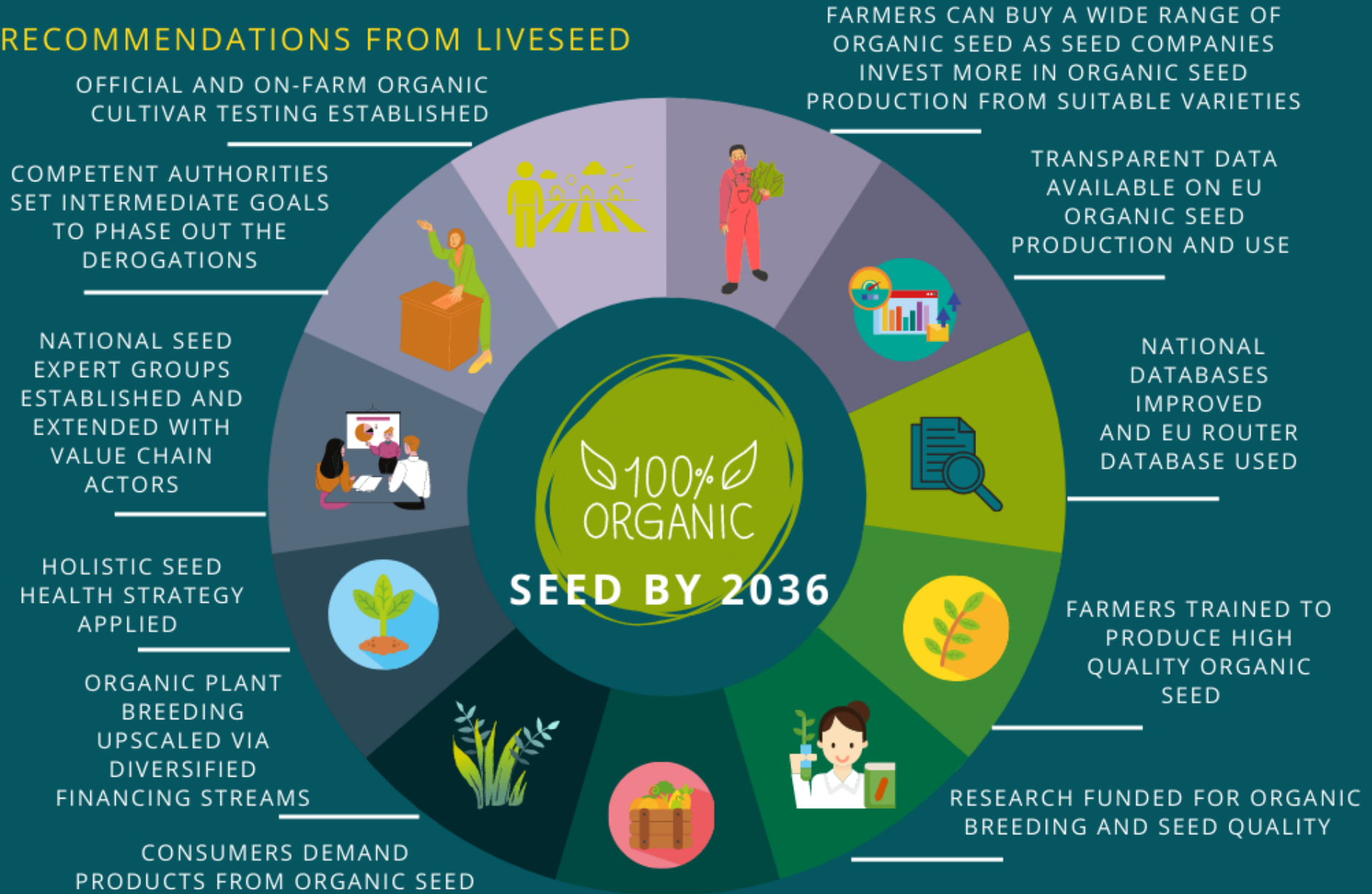
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des Deutschen Bundestages

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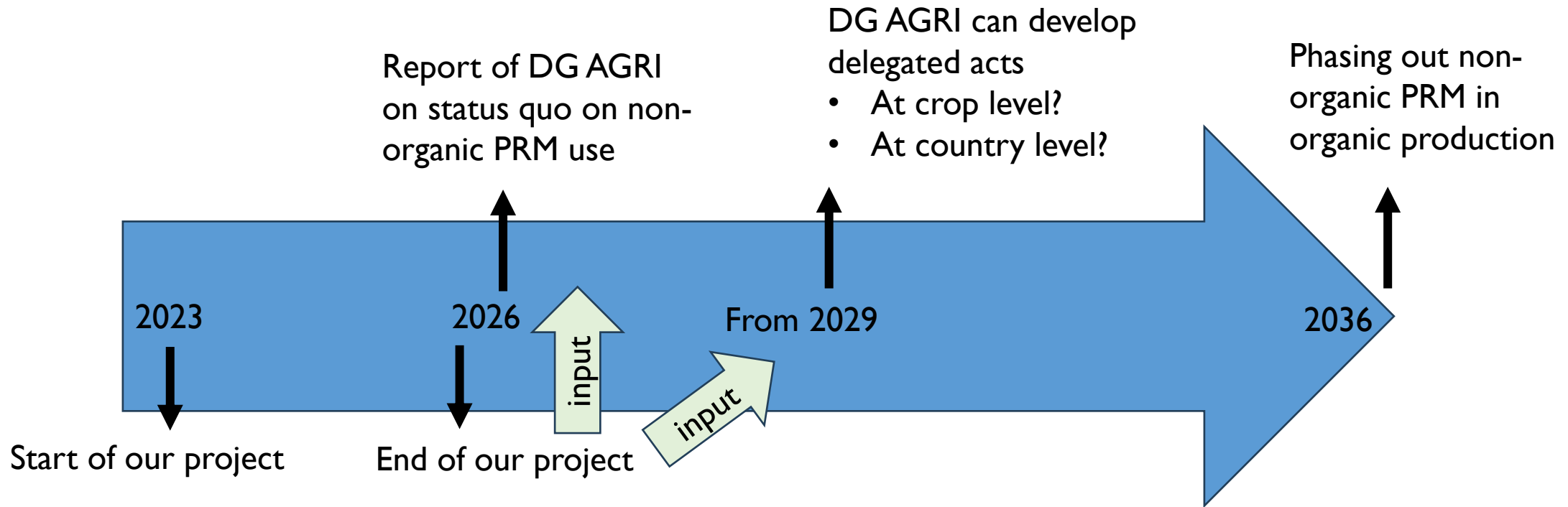


A VISION TOWARDS 100% ORGANIC SEED IN THE EU

RECOMMENDATIONS FROM LIVESEED



Phasing out non-organic PRM use by end of 2036?

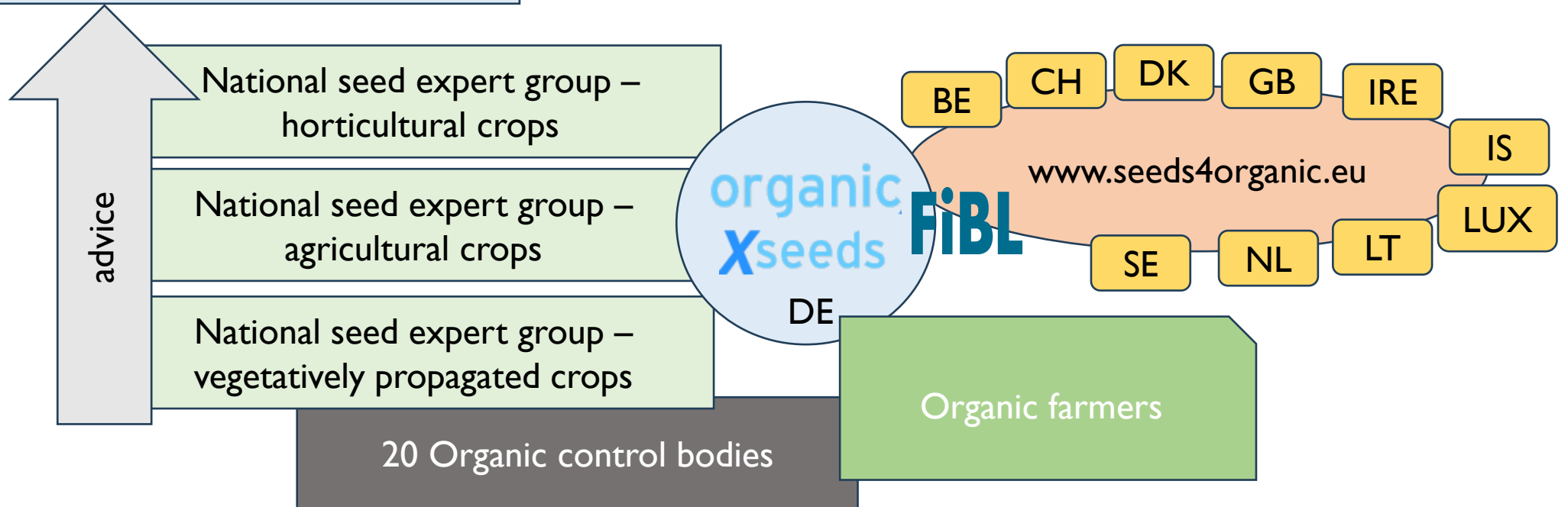


Objective of this webinar: inspire and encourage other actors to start national projects too

BMELH – Federal Ministry of Agriculture, Food and Regional Identity in Germany

16 Regional authorities

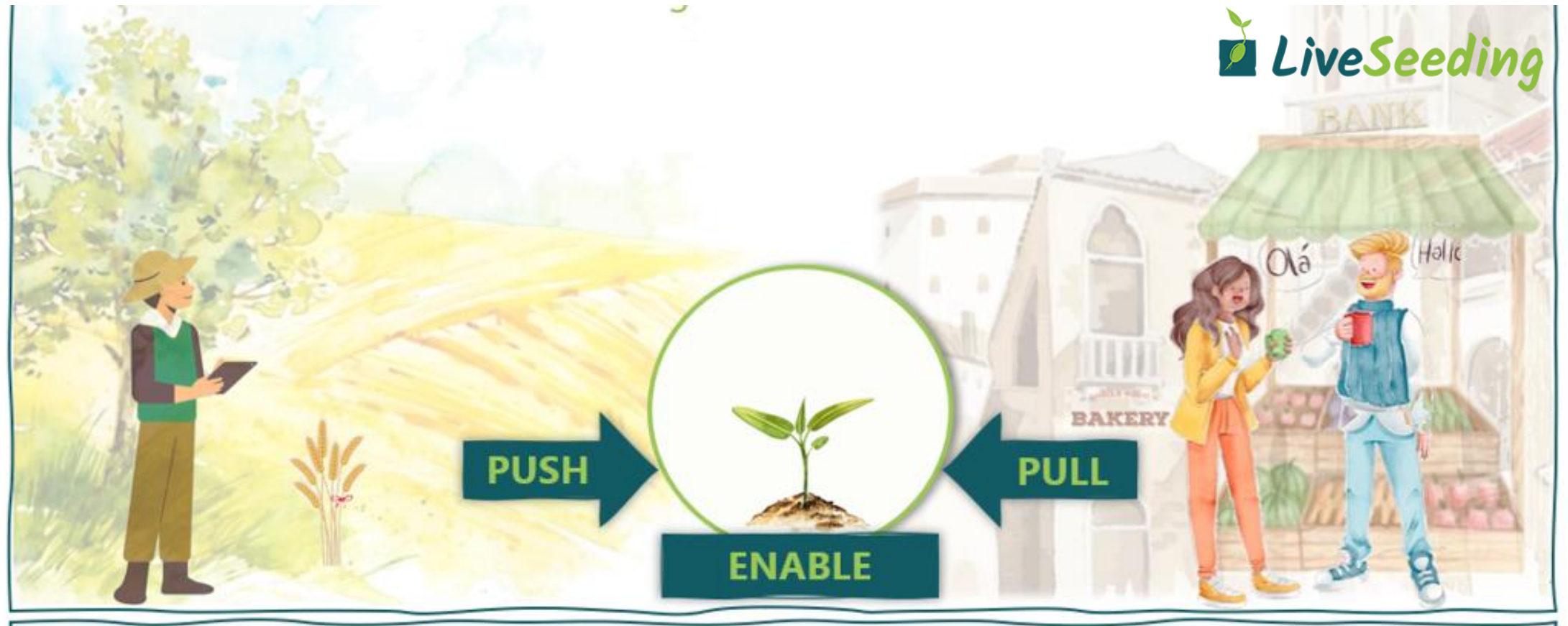
Working group on organic production



EU-Regulation 2018/848

Categories (EU) 2018/848	Availability	Authorisations
Category I <i>1.8.5.6.</i>		No derogation
Category II <i>1.8.5.1.</i>		Single derogation
Category III <i>1.8.5.7.</i>		General derogation

Pathway to impact



Time	Topic	Speaker & Organisation
9.00-9.15	Welcome and introduction Phasing out the use of non-organic PRM by 2036?	Freya Schäfer, FiBL Germany e.V.
9.15-9.45	Arable crops – first findings incl. Q & A	Jan Albus, FiBL Germany e.V.
9.45-10.15	Vegetable crops – first findings incl. Q & A	Leonie Weckmann, FiBL Germany e.V.
10.15-10.45	Vegetative planting material – first findings with focus on apple and vine PRM incl. Q & A	Annegret Pflugfelder, Bioland Beratung GmbH Carolin Grau, Bioland Beratung GmbH Wolfgang Patzwahl, Öko-Beratungs Gesellschaft mbH
10.45-11.05	Ornamental crops – results from the sister project “Analysing, establishing and promoting the availability of organic plant propagation material (PVM) for ornamental plant farms” incl. Q & A	Andrea Frankenberg, Bioland Beratung GmbH
11.05-11.20	Role of the supply chain to increase demand of organic seeds and planting material incl. Q & A	Sabine Ersing, FiBL Germany e.V.
11.20-11.30	Wrap-up and closing remarks	Freya Schäfer, FiBL Deutschland e.V.

Organic seed use in arable crops in Germany

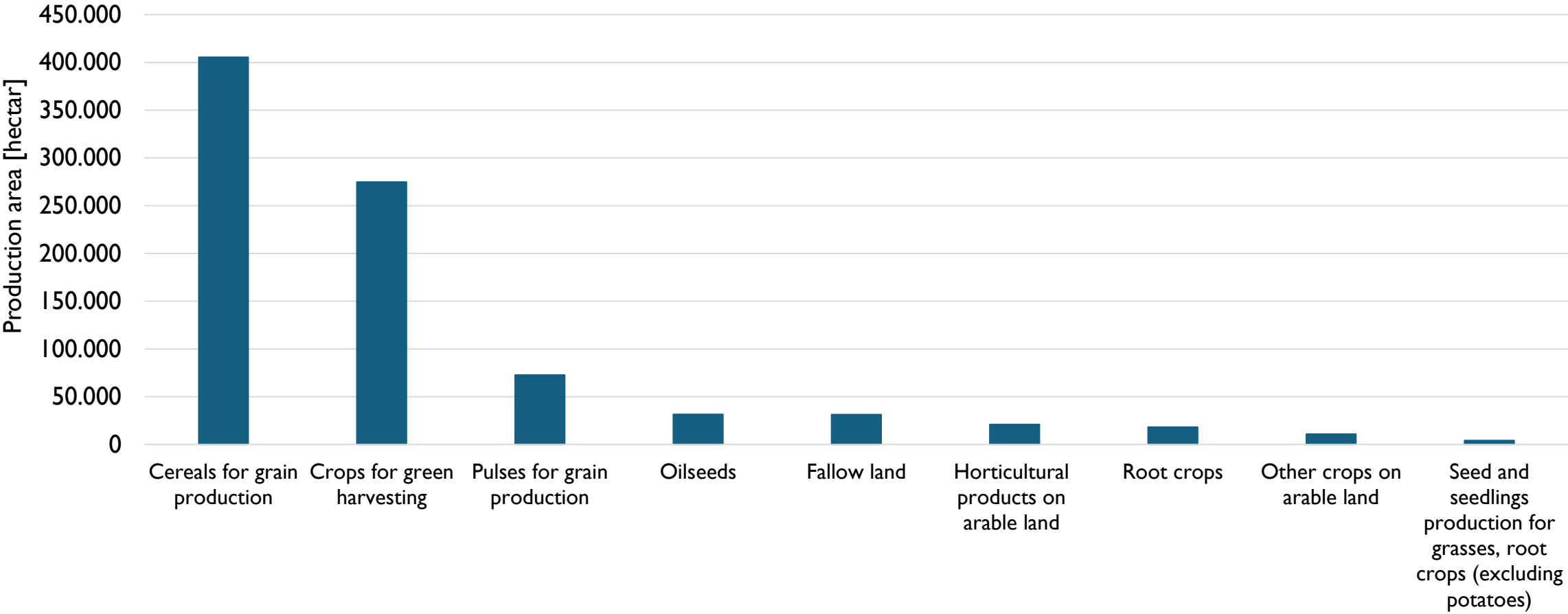
Data analyses

- Organic and conventional farmland
 - Representative farm structure survey 2023 (official statistics)
- Seed production areas in Germany (2021-2023)
 - Statistics on seed production areas applied for and successfully field inspected
 - *Note: Indication 'organic' not mandatory, but quite reliable according to seed certification bodies (Wiemers 2024)*
- Number of successful derogations for conventional material
 - Application statistics of the OrganicXSeeds database (OXS)

Workshops with experts in breeding, seed production, seed distribution, inspection bodies

Crops cultivated on organically managed arable land in Germany

- ~ 7 % of the total arable land in Germany is managed organically



Crops cultivated on organically managed grassland in Germany

- ~ 20 % of the total grassland is managed organically
- Analysed crops:
 - Kentucky Bluegrass (*Poa pratensis* L.)
 - White clover (*Trifolium repens* L.)
 - Red clover (*Trifolium pratense* L.)



Available offers per crop/culture group in the organicxseeds database (as of 03/06/2025)

Species	Botanical Name	Available offers
Field bean	Vicia faba L. (partim)	45
Pea	Pisum sativum L.	31
Chickpea	Cicer arietinum	3
Red clover	Trifolium pratense L.	25
White clover	Trifolium repens L.	13
Alfalfa	Medicago sativa L.	15
Kentucky Bluegrass	Poa pratensis L.	0
White lupin	Lupinus albus L.	1
Blue lupin	Lupinus angustifolius L.	17
Soya	Glycine max (L.) Merr.	13
Sunflower	Helianthus annuus L.	35
Millet	Panicum miliaceum	7
Sorghum millet	Sorghum bicolor	0
Hemp	Cannabis sativa L.	3
Rapeseed	Brassica napus L.	9
Potato	Solanum tuberosum L.	8
Linseed	Linum usitatissimum L.	7
Oil radish	Raphanus sativus subsp. oleiferus (DC.) Metzg.	18
Spelt	Triticum spelta L.	9

- Total number of agricultural suppliers offering organic seed in Germany: 52

Arable crops analysed in the project

Categories	Species
Category 1 (1.8.5.6)	Potatoe (<i>Solanum tuberosum</i> L.) Blue lupin (<i>Lupinus angustifolius</i> L.) > Low in bitter substances, branching type Field bean (<i>Vicia faba</i> L.) > Population (OHM)
Category 2 (1.8.5.1)	Field bean (<i>Vicia faba</i> L.) > Intended for spring sowing - tannin-free and low in vicin/convicin > Intended for spring sowing - tannin-free and vicin/convicin - containing > Intended for spring sowing - high tannin and low vicin/convicin > Intended for spring sowing - high tannin and vicin/convicin - containing Pea (<i>Pisum sativum</i> L.) Red clover (<i>Trifolium pratense</i> L.) Alfalfa (<i>Medicago sativa</i> L.) White Lupin (<i>Lupinus albus</i> L.) Blue Lupin (<i>Lupinus angustifolius</i> L.) > bitter lupin > Low in bitter substances, terminal type Soya bean (<i>Glycine max</i> (L.) Merr.) Sunflower (<i>Helianthus annus</i> L.) (excl. species group: ornamental plant) Linseed (<i>Linum usitatissimum</i> L.) Oil radish (<i>Raphanus sativus</i> subsp. <i>oleiferus</i> (DC.) Metzg.) Spelt (<i>Triticum spelta</i> L.)

Arable crops analysed in the project

Categories	Species
Category 3 (1.8.5.7)	Field bean (<i>Vicia faba</i> L.) > Intended for autumn sowing - tannin-free > Intended for autumn sowing - tannin-containing White clover (<i>Trifolium repens</i> L.) Poa pratensis L. Sorghum millet (<i>Sorghum bicolor</i>) Hemp (<i>Cannabis sativa</i> L.) Rapeseed (<i>Brassica napus</i> L.)

Spelt (*Triticum spelta* L.)

- GER 2023: Spelt organically cultivated on 36.700 hectar (39% of total Spelt cultivation area)
- Expert estimate: around 90% of demand covered by organic seed

Derogations in 2023

Species group	2021	2022	2023
Summer spelt	38	2	0
Winter spelt	148	38	18
total	186	40	18

Challenges and expectations for 2037

- no particular challenges, the market is developing
- Expert estimate: in average years around 100% of demand could be covered by organic seed

Rapeseed (*Brassica napus* L.)

- GER 2023: Winter rapeseed organically cultivated on 5.300 hectar (0,5% of total Rapeseed cultivation area) (Summer rapeseed < 100 hectar)
- Expert estimate: marginally over 0% of demand covered by organic seed

Derogations in 2023

Species group	2021	2022	2023
Winter rapeseed forage	97	59	61
Winter rapeseed oilseed	276	241	223
total	373	300	284

Species group	2021	2022	2023
Summer rapeseed forage	106	195	198
Summer rapeseed oilseed	20	33	19
total	126	228	217

Rapeseed (*Brassica napus* L.)

Challenges and expectations for 2037

- meeting nutrient requirements in spring and vulnerability to animal pests is problematic in organic farming and leads to yield losses
- almost exclusively hybrid varieties are used - hybrid seed production is not feasible under organic conditions
- Expert estimate: <10% of demand could be covered by organic seed

Alfalfa (*Medicago sativa*)

- GER 2023: legumes for whole crop harvesting cultivated organically on 354.300 hectar (50% of total acreage for legumes for whole crop harvesting)
- Expert estimate: around 60-90% of demand covered by organic seed

Derogations in 2023

Variety group	2021	2022	2023
General	262	228	279

Challenges and expectations for 2037

- weather conditions at harvest time hamper seed production in Germany
- Seed production mainly takes place in France, Italy, Hungary and Romania - less influence on choice of site-adapted varieties than in German seed production
- Expert estimate: in average years around 100% of demand could be covered by organic seed

Discussion

- ✓ Major arable crops: phasing out non-organic PRM seems possible
 - ✓ Derogations are decreasing for many crops
 - ✓ Farmers respond to increasing supply of organic seed
 - ✓ High commitment of actors to multiply under organic conditions
 - ✓ In arable crops: most of the seed multiplication is organised at national level
-
- Crops where seed multiplication takes part outside of DE – more difficult to project to progress – higher dependency on other actors
 - Organic seed supply is not sufficient for all crops and varieties
 - Crop specific difficulties to multiply under organic conditions: seed health, seed cleaning, higher costs, lack of breeding activities
 - How to deal with cross contaminations? decertification of seed lot?

Organic seed use in horticultural crops in Germany

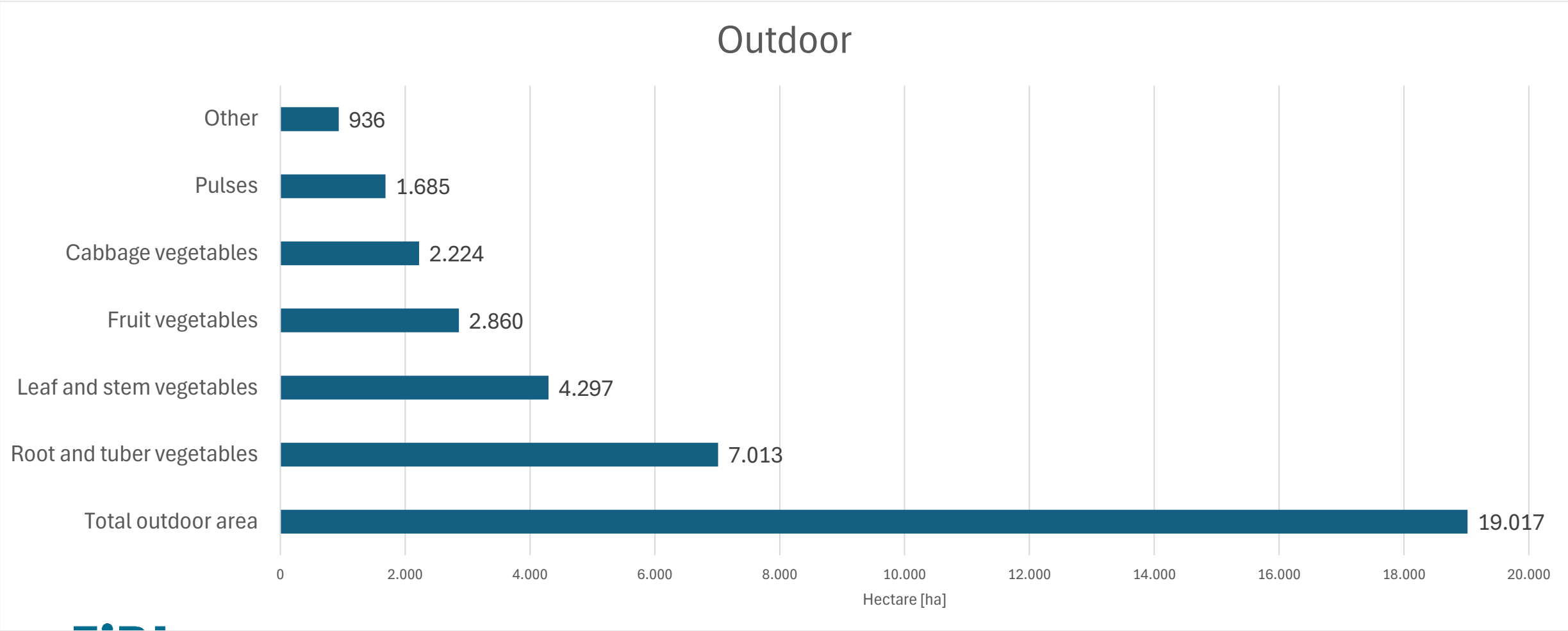
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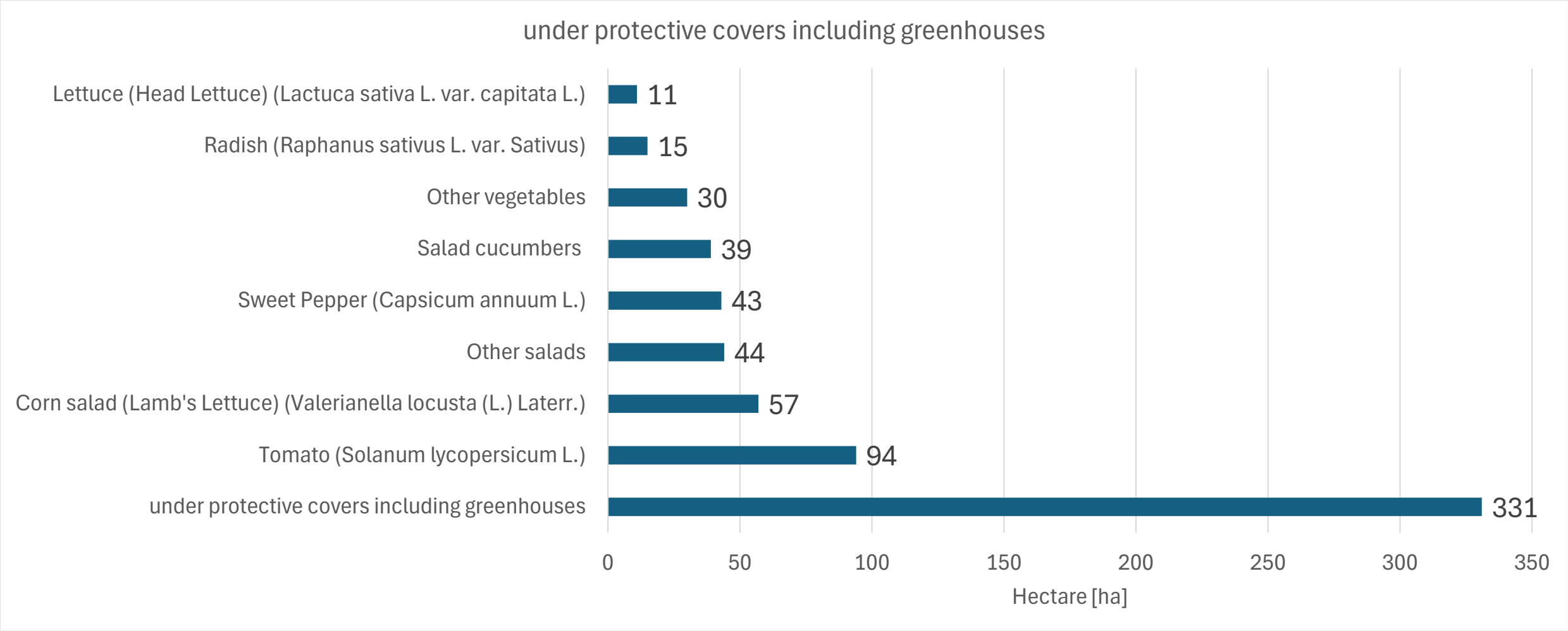
Workshops with experts in breeding, seed production, seed distribution, inspection bodies

Vegetable cultivation area in Germany in 2024

14 % of the total vegetable area is organic



Vegetable cultivation area in Germany in 2024



Available offers per crop/culture group in the organicxseeds database (as of 02/06/2025)

Cultural groups (Outdoor)	available offers
Pulses	55
Cabbage vegetables	251
Fruit vegetables	150
Leaf and stem vegetables	385
Root and tuber vegetables	172

Total number
of vegetable
suppliers
offering
organic seed in
Germany: 94

Species (Under protective covers)	Botanical name	available offers
Lambs Lettuce	Valerianella locusta (L.) Laterr.	13
Lettuce (Head Lettuce)	Lactuca sativa L. var. capitata L.	104
Peppers	Capsicum annuum L.	64
Radish	Raphanus sativus L. var. sativus	28
Cucumber	Cucumis sativus L.	42
Tomato	Solanum lycopersicum L.	169

Crops analysed in the project

Categories	Species
Category 1 (1.8.5.6)	Sweet pepper (<i>Capsicum annuum</i> L.) > green-red, blocky Runner bean (<i>Phaseolus vulgaris</i> var. <i>Vulgaris</i>) > green Onion (<i>Allium cepa</i> L.) > onions, yellow, Rijnsburger type Endive (<i>Cichorium endivia</i> L.) > Smooth/autumn
Category 2 (1.8.5.1)	Sweet pepper (<i>Capsicum annuum</i> L.) Runner bean (<i>Phaseolus vulgaris</i> var. <i>Vulgaris</i>) Onion (<i>Allium cepa</i> L.) Endive (<i>Cichorium endivia</i> L.) Red cabbage (<i>Brassica oleracea</i> L. (Red Cabbage Group)) White cabbage (<i>Brassica oleracea</i> L. (White Cabbage Group)) Savoy cabbage (<i>Brassica oleracea</i> L. (Savoy Cabbage Group)) Leek (<i>Allium porrum</i> L.) Celeriac (<i>Apium graveolens</i> L. var. <i>rapaceum</i> (Mill.) Gaud.) Carrot (<i>Daucus carota</i> L.) Onion (<i>Allium cepa</i> L.) Cauliflower (<i>Brassica oleracea</i> L. (Collard Group)) Broccoli (<i>Brassica oleracea</i> L. (Broccoli) Group) Tomato (<i>Solanum lycopersicum</i> L.) Courgette (<i>Cucurbita pepo</i> L.) Sweet pea (<i>Pisum sativum</i> L.) Bush bean (<i>Phaseolus vulgaris</i> var. <i>Nanus</i>) Chicory (Sugar Cone Witloof) (<i>Cichorium intybus</i> L. (Leaf Chicory Group))

Crops analysed in the project

Categories	Species
Category 3 (1.8.5.7)	Sweet pepper (<i>Capsicum annuum</i> L.) Runner bean (<i>Phaseolus vulgaris</i> var. <i>Vulgaris</i>) onion (<i>Allium cepa</i> L.) Carrot (<i>Daucus carota</i> L.) Onion (<i>Allium cepa</i> L.) Cauliflower (<i>Brassica oleracea</i> L. (Collard Group)) Broccoli (<i>Brassica oleracea</i> L. (Broccoli) Group) Tomato (<i>Solanum lycopersicum</i> L.) Courgette (<i>Cucurbita pepo</i> L.) Sweet pea (<i>Pisum sativum</i> L.) Bush bean (<i>Phaseolus vulgaris</i> var. <i>Nanus</i>) Chicory (Sugar Cone Witloof) (<i>Cichorium intybus</i> L. (Leaf Chicory Group)) Pointed cabbage (<i>Brassica oleracea</i> L. (White Cabbage Group)) Marrowfat pea (<i>Pisum sativum</i> L.) Radish (<i>Raphanus sativus</i> L. var. <i>Sativus</i>) Lamb's lettuce (<i>Valerianella locusta</i> (L.) Laterr.) Rocket (<i>Diplotaxis tenuifolia</i> (L.) DC.) Radicchio (<i>Cichorium intybus</i> L. (Leaf Chicory Group)) Chicory (<i>Cichorium intybus</i> L. (Witloof Chicory Group))
	Various herbs

Carrot (*Daucus carota* L.)

- Organic cultivation area in Germany
 - 2023: 3.023 ha
 - 2024: 3.352 ha
- Expert estimate: under 5 % of demand covered by organic seed
- Derogations in 2023

Species group	Categories	Number of derogations in 2023
Early	Category 2	112
Industry	Category 3	130
Summer	Category 3	140
Washing/storage	Category 3	683
Total		1065

- Challenges and expectations for 2037
 - Organic propagation methods for the Nerak variety have been exhausted; further trials are not considered promising
 - Bolero variety (minimum germination capacity 70 %) difficult to offer from organic propagation as the requirements cannot be met
- Difficult crop for which category I classification is very unlikely to be met

Leek (*Allium porrum* L.)

- Organic cultivation area in Germany
 - 2023: 386 ha
 - 2024: 363 ha
- Expert estimate: around 10 % of demand covered by organic seed
- Derogations in 2023

Species group	Categories	Number of derogations in 2023
(over)Winter	Category 2	44
Spring	Category 2	45
Autumn	Category 2	62
Summer	Category 2	30
Total		181

- Challenges and expectations for 2037
 - 80% of varieties can be organically propagated, but not enough is produced
→ quantities need to be scaled up
 - Question of scaling up, less of genetics as with carrots

Courgette (*Cucurbita pepo* L.)

- Organic cultivation area in Germany
 - 2023: 457 ha
 - 2024: 462 ha
- Expert estimate: around 10 % of demand covered by organic seed
- Derogations in 2023

Species group	Categories	Number of derogations in 2023
Green courgettes	Category 2	244
Courgette yellow/special types	Category 3	94
Patisson	Category 2	7
Rondini	Category 2	9
Total		354

- Challenges and the view for 2037
 - Green courgettes represent the highest proportion of courgette cultivation overall, but the availability of organic seed is still limited.

→ availability is expected to be green by 2037

Discussion

- ✓ Major horticultural crops: phasing out non-organic PRM seems possible
- ✓ Derogations are decreasing for some crops
- ✓ Hybrids a dominant in organic production, OP varieties minor importance

General roadblocks identified:

- How to maintain flexibility if resistances break: TASK FORCE implemented
 - Administrative burden to apply for small-scale field tests: ENTRUST CONTROL BODIES
 - How to maintain cell-fusion free (CMS) varieties?
-
- Horticultural seed multiplication: at international level
 - Seed companies supply more than one country
 - High need to foster exchange between neighbouring countries
- e.g. herbs in pots: very local market, very little organic seed use

Role of the value chain in creating demand of organic seeds and planting material

- Downstream value chain actors can have an influence on demand for organic seed
- Significantly more organic seed is used in short value chains, with direct marketing to end consumer, than in retail/wholesale trade
- However, long value chains (e.g. retail) are the dominant value chains in the EU



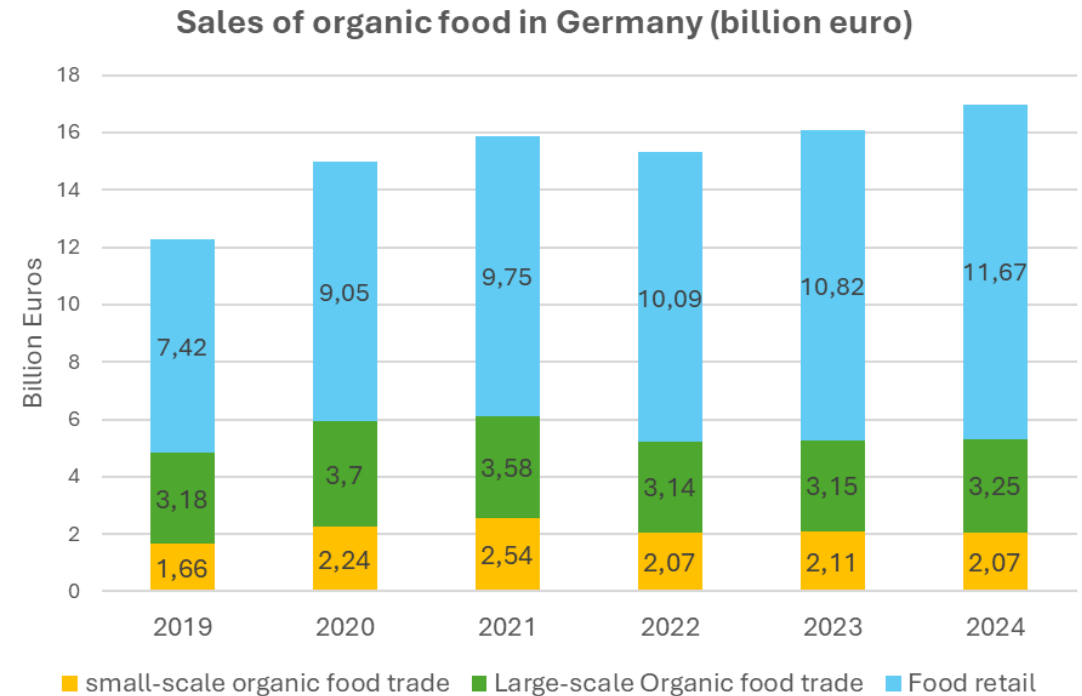
Role of the value chain in creating demand of organic seeds and planting material

- Retail asks for quality criteria, not for organic seeds
- There are retailers that specify that organic seeds should be used.
- E.g. specialised trade for plants: The demand for organic material is increasing significantly
- But this is an exception, not the rule



Role of the value chain in creating demand of organic seeds and planting material

- In 2024, app. 68 % of organic sales in Germany is in food retail (increasing)
- Retail, for the most part, is not aware of the regulation and organic seeds in general
- → Retail is an important lever, but very sensitive



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Role of the value chain in creating demand of organic seeds and planting material

Important:

- No sudden changes/demands → Otherwise transition is not feasible for farms/breeding organisation
- → Gradual transition with timely notice
- Financing: Compensation payments for additional costs, without placing the entire burden on agricultural sector

But:

- If we get food retailers on board, the 2037 target is realistic

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Role of the value chain in creating demand of organic seeds and planting material

Goal of the project

- Exploring effective approaches to increase awareness along the value chain (esp. retail)
- In cooperation with value chain actors
- BUT: Raising awareness: sensitive topic, and there should not be any sudden changes

Method

- Workshops with stakeholders, development of training/communication materials, Social media



Discussion

How to engage with the supply chain to foster demand?

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Report on four national projects aimed at increasing the production and use of organic seeds

Following countries are covered:

- Denmark
- France
- Germany
- Latvia

+ Sweden

+ Italy

LiveSeeding Project Deliverable 4.1



**D4.1 Updated and improved
roadmap/decision tree to reach 100%
organic seed**

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RoadmapsOekoPVM



Developing roadmaps to improve the supply of organically produced seed and planting material until 2036 in Germany

Vegetative crops – first findings with focus on apple

online webinar, Dr. Annegret Pflugfelder, Bioland Beratung GmbH
05.06.2025

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Challenges in Producing Organic Planting Material for Fruit Production

General situation in fruit production in Germany

- **Production area:**
 - Commercial fruit production (including strawberries): 75,000 hectare (20% organic)
 - meadow orchard and conservation: 250,000 hectare
 - Private sector: 40,000 ha (including 1,800 hectare fruit)
- **Consumption:**
 - around 8.7 million tonnes (99.8 kg/capita and year, 7.2% organic)
- Self-sufficiency rate (including citrus fruits etc.) around 14%
 - Apple ~60%
 - Pear ~15%
 - Plums, strawberries ~50%

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Challenges in Producing Organic Planting Material for Apples

General situation in apple production in Germany

- In 2024, organic apple production covered 7,950 hectares, accounting for 24% of the total area.
- Top varieties are increasingly marketed via clubs:
 - Market varieties with a production concept
 - Planting material is produced by only a few propagating companies, which control quantity, quality, and sales.
 - Leading breeders show limited interest in organic varieties due to low sales.
- Organic planting material for apple production is mostly sourced from the Netherlands, Italy and Poland.

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Challenges in Producing Organic Planting Material for Apples

Rules specific to apples for the use of plant reproductive material

„Kernobstregelung“ for apple, pear, quince (Derogation rules developed by FÖKO (a farmers organization from 180 organic fruit producers):

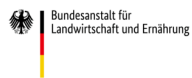
- **An exemption for the use of non-organic planting material can only be applied for and approved if all of the following three conditions are met:**
 - At least 12 months before the planned planting date, the organic farmer has placed an order for the desired variety with a fruit tree nursery or an intermediary, which are subject to the control procedure according to the Organic Regulation.
 - Despite on-schedule orders, young trees that meet the agreed minimum quality requirements cannot be delivered unexpectedly.
 - Organic young trees from the desired variety in the agreed quality are also not available at other organic nurseries on the planned delivery date. This availability can be seen in the organic seed database.

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Challenges in Producing Organic Planting Material for Apples

Availability of organic apple trees in the national organic seed database in Germany

- 287 offers
- < 10 supplier have apple trees on stock
- 2024: 553 requests for exemptions

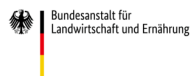
For organic production	↓ Apfel > Kulturapfel	Malus domestica (Suckow) Borkh.	Verlauf	287
For ordering in advance	Sortengruppen	Angebote	Einstufung	
Conservation varieties, small quantities and alternative qualities (high trunk, half trunk)	→ Apfelbäume für Erwerbsobstbau	133	Einzelgenehmigung	Single derogation
	→ Apfelbäume für Erwerbsobstbau für Vorbestellung (Pflanzung im Folgejahr)	54	für Vorbestellung	
	→ Erhaltungssorten, Kleinstmengen (< 20 Bäume), Sorten gemischter Qualitäten, Halbstämme, Hochstämme	77	Einzelgenehmigung	
scions	→ Pflanzgut Edelreiser	0	Allgemeine Genehmigung	General derogation
rootstocks	→ Pflanzgut Unterlage	23	Einzelgenehmigung	

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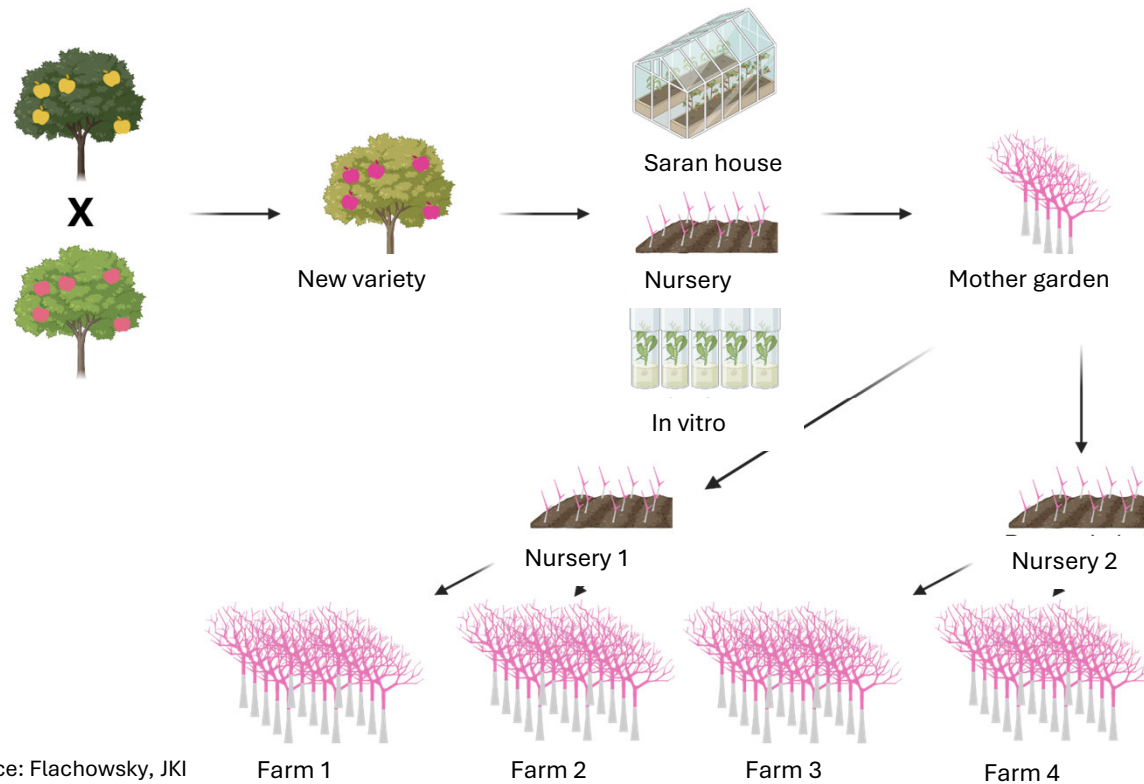
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Challenges in Producing Organic Planting Material for Apples – Process steps

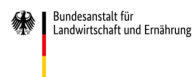


Along the various processes in the production of an apple tree, we have various challenges in organic production

Gefördert durch:



Projektträger

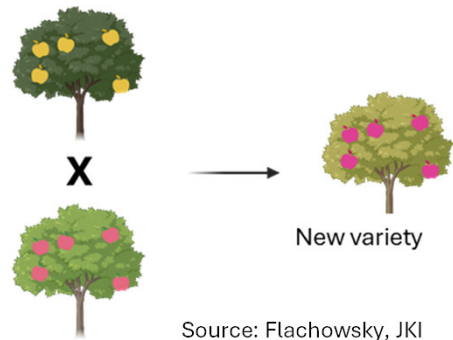


aufgrund eines Beschlusses
des Deutschen Bundestages

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Challenges in Producing Organic Planting Material for Apples – breeding



- No planting material from organic breeding available
- Source material from small breeders is often problematic (quality)
- Smaller propagating companies often have access only to free varieties.



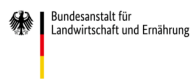
<https://www.apfel-gut.org/images/impressionen/2016/Apfelzuechtung-2-bestaeben-per-Hand-mit-Pollen-vom-Kreuzungspartner-large.jpg>

Gefördert durch:



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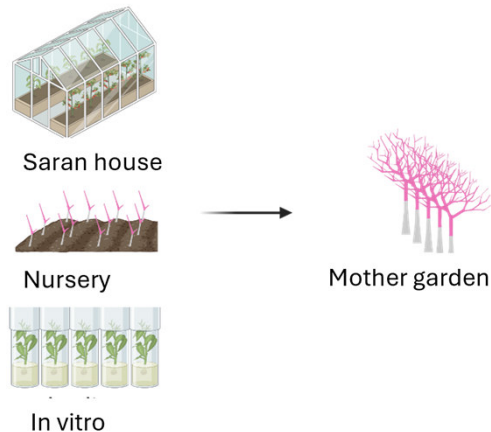
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Challenges in Producing Organic Planting Material for Apples – mother plants / scions



https://www.lwg.bayern.de/mam/cms06/gartenakademie/bilder/fittosize__600_0_890e08adc3fc57e9a36ec6bcfdd745ac_edelreiser_gebuendelt.jpg

- Maintaining plant health under organic conditions is very difficult.
- Liability in case of infection with quarantine pests is not clarified.
- Reconciling the requirements of the German planting material regulation (AGOZ) with those of EU organic regulation is difficult.
- Mother gardens would need to provide organic pre-stage material (mother plants could only be produced virus-free in insect-proof houses, which is very costly).
- Propagating methods are not always accepted in organic farming, such as in-vitro, which allows rapid propagation of virus-free, healthy material.

Gefördert durch:

Projekträger



Bundesministerium
für Landwirtschaft, Ernährung
und Heimat



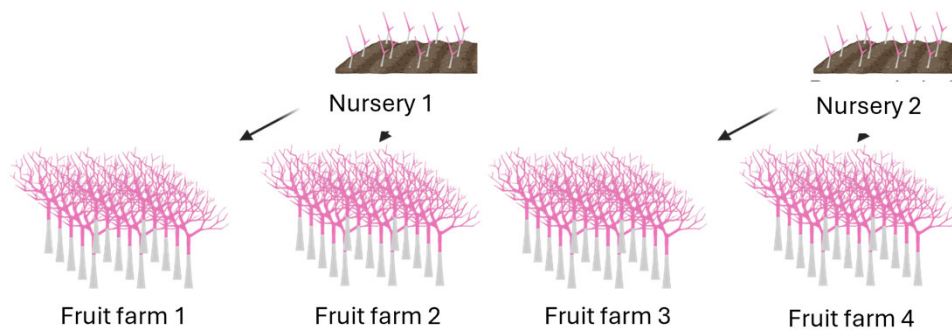
Bundesanstalt für
Landwirtschaft und Ernährung

aufgrund eines Beschlusses
des Deutschen Bundestages

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Challenges in Producing Organic Planting Material for Apples - rootstocks



Source: Flachowsky, JKI



Baumschule Eggert - Blütensträucher, Baumschulen, Heckenpflanzen - Baumschule Eggert - Blütensträucher, Baumschulen, Heckenpflanzen

Gefördert durch:

Projekträger



Bundesministerium
für Landwirtschaft, Ernährung
und Heimat



Bundesanstalt für
Landwirtschaft und Ernährung

aufgrund eines Beschlusses
des Deutschen Bundestages

- Demand for organic rootstocks has increased
- Organic production of mother plants or core plants is not possible as they are not available.
- Organic propagation from the 2nd year is possible, but 25-30% more expensive.
- A high input of biological pest control is necessary.
- Phytosanitary challenges including weed pressure
- Due to replanting problems, areas must be kept available.

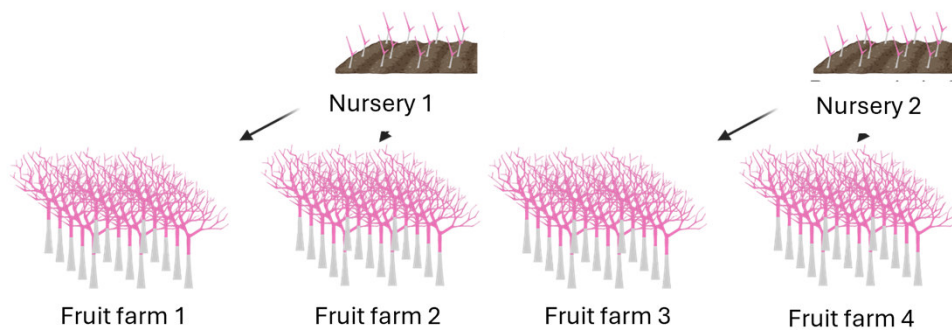


If conventional basic material is used, organic rootstocks can be offered promptly, but the customer must pay for the additional effort.

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Challenges in Producing Organic Planting Material for Apples – tree nursery



Source: Flachowsky, JKI



<https://baumschule-krause.de/wp-content/uploads/2022/08/Apfelquartier-ha.jpg>

- Plant health has the greatest importance
- The economic risk regarding pests (quarantine pests and RNQPs) is not calculable.
- Many nurseries could be completely converted in terms of expertise, but there is insufficient financial appreciation.
- The input required for biological crop protection is significantly higher.
- Ensuring healthy material from mother plants, rootstocks and scions is crucial.
- Decline in varieties

Organic propagation in tree nurseries is possible under certain conditions. However, this depends on the availability of varieties, quality of source material and the desired form of cultivation and sales.

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Summary



Being Organic in EU

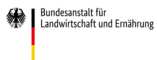
- **Current Situation:**
 - There is a lack of planting material from organic breeding for (commercial) fruit production
 - The supply of organically propagated plants / trees is too low (not all varieties and all qualities are available at the desired time)
- **Challenges:**
 - Leading breeders show limited interest in organic varieties due to low sales.
 - Maintaining healthy organic material is challenging and costly.
 - The economic viability of mother gardens is questionable under current conditions.
 - High costs and phytosanitary challenges exist in organic rootstock production and tree nurseries
 - There may be a potential decline in variety diversity if new regulations are implemented in 2037.
- **Future Outlook:**
 - Under certain conditions, a significant increase in organic planting material is possible, **BUT:**
 - **Demand must increase and customers must pay the higher price.**
 - **The production of organic mother plants / basic material is excluded until 2036.**

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Thank you for your attention!



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 Bundesministerium
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aufgrund eines Beschlusses
des Deutschen Bundestages



With support from



Federal Ministry
of Agriculture, Food
and Regional Identity



by decision of the
German Bundestag

Bioland

Ornamental crops – results from the project “Analysing, establishing and promoting the availability of organic plant reproductive material (PRM) for ornamental plant farms”





Project:

“Analysing, establishing and promoting the availability of
organic plant reproductive material (PRM)
for ornamental plant farms”

Project duration:

15.07.2023-30.06.2026 (+ 2 years)

With support from



Federal Ministry
of Agriculture, Food
and Regional Identity

by decision of the
German Bundestag



Project participants

- Bioland Beratung GmbH,
- Staatliche Lehr- und Versuchsanstalt für Gartenbau, Heidelberg
- Hochschule Geisenheim University
- Julius Kühn-Institut
- Support of the nurseries
 - NüPa GmbH, Beratung Klaus Bongartz
 - Fördergemeinschaft ökologischer Zier- und Gartenpflanzen (föga e. V.)
- 13 young plant and breeding companies

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Ornamental areas



Bed & Balcony



Perennials

Cut flowers

Tree nurseries and Christmas tree



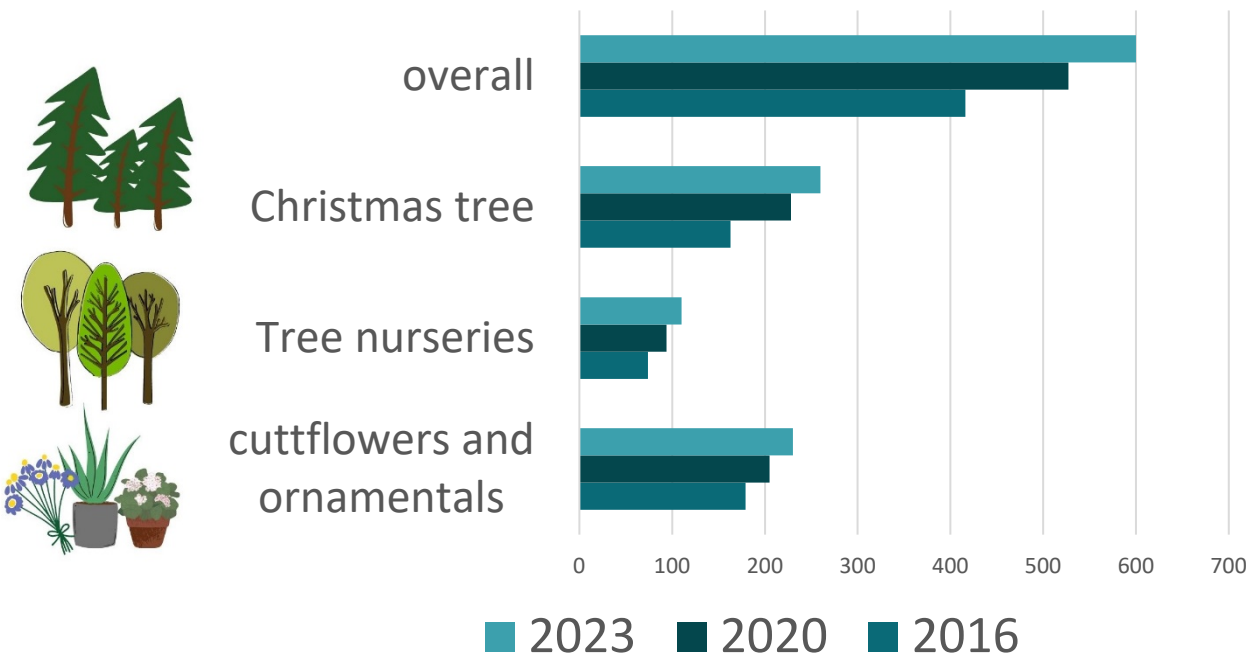
Indoor plants

Organic-Ornamental plants: Situation in Germany

Growing sector



number of farms/nurseries



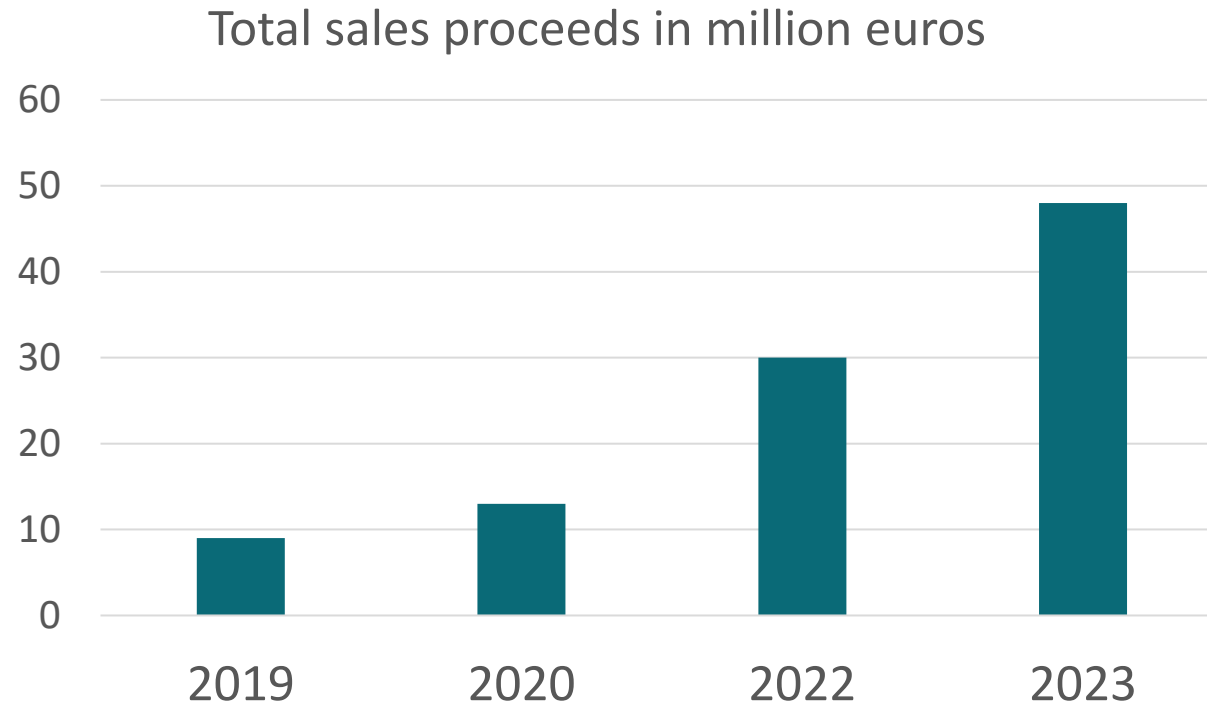
Growing area in ha

	2016	2020	2023
cutflowers and ornamentals	124	150	100
Outdoor	110	126	100
Under glass	14,1	23,8	not raised
Tree nurseries	448	386	500
Christmas tree	214	331	not raised
overall	786	867	not comparable

source: Statistisches Bundesamt, Betriebe mit ökologischem Landbau, Agrarstrukturerhebung 2016, 2020, 2023

Organic-Ornamental plants: Situation in Germany

Growing sector



- lots of nurseries with direkt marketing
- some more bigger organic-nurseries with wholesale marketing and also more nurseries on the way to organic

Quelle: Branchenreport BÖLW

Target challenge for more organic PRM ...



we need...

- lots of specialized nurseries to produce organic-PRM...(for „few” organic farms compared to conventional cultivation)
- large assortment in all areas
- research and optimization for cultivation organic

we have...

- almost no organic seeds, cuttings....
- less specializes organic young plant nurseries
- only a few providers make the offer in OXS (administrative burden)

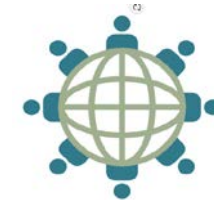
Goal and Work in the projekt



Increased availability of organic PRM

for perennials, bed & balcony and cut flowers:

- Further development of the range, quality, cultural safety and product diversity (especially young plants)
- Practicability study for Production of bed & balcony base material
- Identification of further research and action



Further development of the range of organic PRM (especially young plants)

Networking of the players

Further development of cultivation strategies:
Farm monitoring, trials

Product range recording and creation of bundling systems

Recording the need for research and action
Source material cut flowers



So far, 12 farms and breeding companies have been integrated into the project



Network development, examples



Gärtnerei Umbach
Heilbronn
Klaus und Doris Umbach



Pflanzen aus dem Cuxland
Loxstedt-Bexhoevede
Oliver und Sonia Krebs



Volmary
Nursery in Selm

**and more Breeding companies like Benary, Slecta
Klemm, Robert Mayer, Kordes Rosen...**

Presentation of the current offer: www.bio-zierpflanzen.de



Bezugsadressen für Bio-Saatgut

10

Einträge anzeigen

Suchen:

	Firma	Verband	Internetseite	Kräuter	Schnittblumen (einjährige & Stauden)	Wild- pflanzen	Bemerkung
	Arche Noah	diverse	www.arche-noah.at	X	X	X	überwiegend Raritäten
	Artha Samen	Demeter Schweiz	www.arthasamen.ch			X	überwiegend Raritäten
	Austrosaat	EU-Bio	www.austroaat.at	X	X		nur Teilsortiment Bio
föga	Bingenheimer Saatgut AG	diverse	www.bingenheimersaatgut.de	X	X	X	
	Bolster	EU-Bio	www.bolster.nl	X	X		
	Bornträger & Schlemmer	Naturland	www.blauetikett.de			X	
	Die Wildstaudengärtnerei	Bio Suisse	www.wildstauden.ch			X	
	Dreschflegel	diverse	www.dreschflegel-saatgut.de	X	X	X	
	Enza Zaden Deutschland	EU-Bio	www.enzazaden.com	X			nur Teilsortiment Bio
	Genesis seeds	EU-Bio	www.genesisseeds.com	X	X		bei ZP nur Sonnenblumen

1 bis 10 von 20 Einträgen

Zurück Weiter

Bezugsadressen für Bio-Blumenzwiebeln, Bio-Knollen und Bio-Rhizome etc.

10

Einträge anzeigen

Suchen:

	Firma	Internetseite	Sortiment
föga	Bingenheimer Saatgut AG	www.bingenheimersaatgut.de	ausschließlich Bio-Blumenzwiebeln
	Ecobulbs	www.ecobulbs.nl	Tulpen, Allium, Hyacinthen, Krokusse etc.
	EKO-Flora		Bio Tulpenzwiebeln
	Florex	www.florex.nl	Tulpen, Allium, Hyacinthen, Krokusse, Anemonen, Dahlien, Amaryllis etc.
	ForEver	www.forever-gla.nl	Teilangebot an Bio Gladiolenzwiebeln
	Huiberts Biologische Bloembollen	www.biologischebloembollen.nl	Teilangebot an Bio Blumenzwiebeln
	JUB Holland	www.jubholland.nl	Teilangebot an Bio Blumenzwiebeln
	Kapiteyn	www.kapiteyn.nl	Teilangebot an Bio Blumenzwiebeln
	Lubbe Lisse	www.lubbelisse.nl	Teilangebot an Bio Blumenzwiebeln
	Natural Bulbs	www.naturalbulbs.de	ausschließlich Bio Blumenzwiebeln: Tulpen, Allium, Hyacinthen, Krokusse etc.

1 bis 10 von 14 Einträgen

Zurück Weiter

Weitere aktuelle Angebote an Bio-Blumenzwiebeln über die Niederländische Verband der Bio-Blumenzüchter Biobol: www.biobol.nl/over-biobol/aanbod/
Bitte sehr frühzeitig (z. B. für Herbstware schon im zeitigen Frühjahr) bestellen!

Further development of the range of organic PRM (especially young plants)

Networking of the players

Further development of cultivation strategies:
Farm monitoring, trials

Product range recording and creation of bundling systems

Recording the need for research and action
Source material cut flowers



Previous trials at the LVG and practice

- organic fertilization
- growth regulation (B & B)
- peat replacement
- plant protection



- Workshop with experts, other projects and practice in June 2025



Further development of the range of organic PRM (especially young plants)

Networking of the players

Further development of cultivation strategies:
Farm monitoring, trials

Product range recording and creation of
bundling systems

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Source material cut flowers



Workshop in December 2024

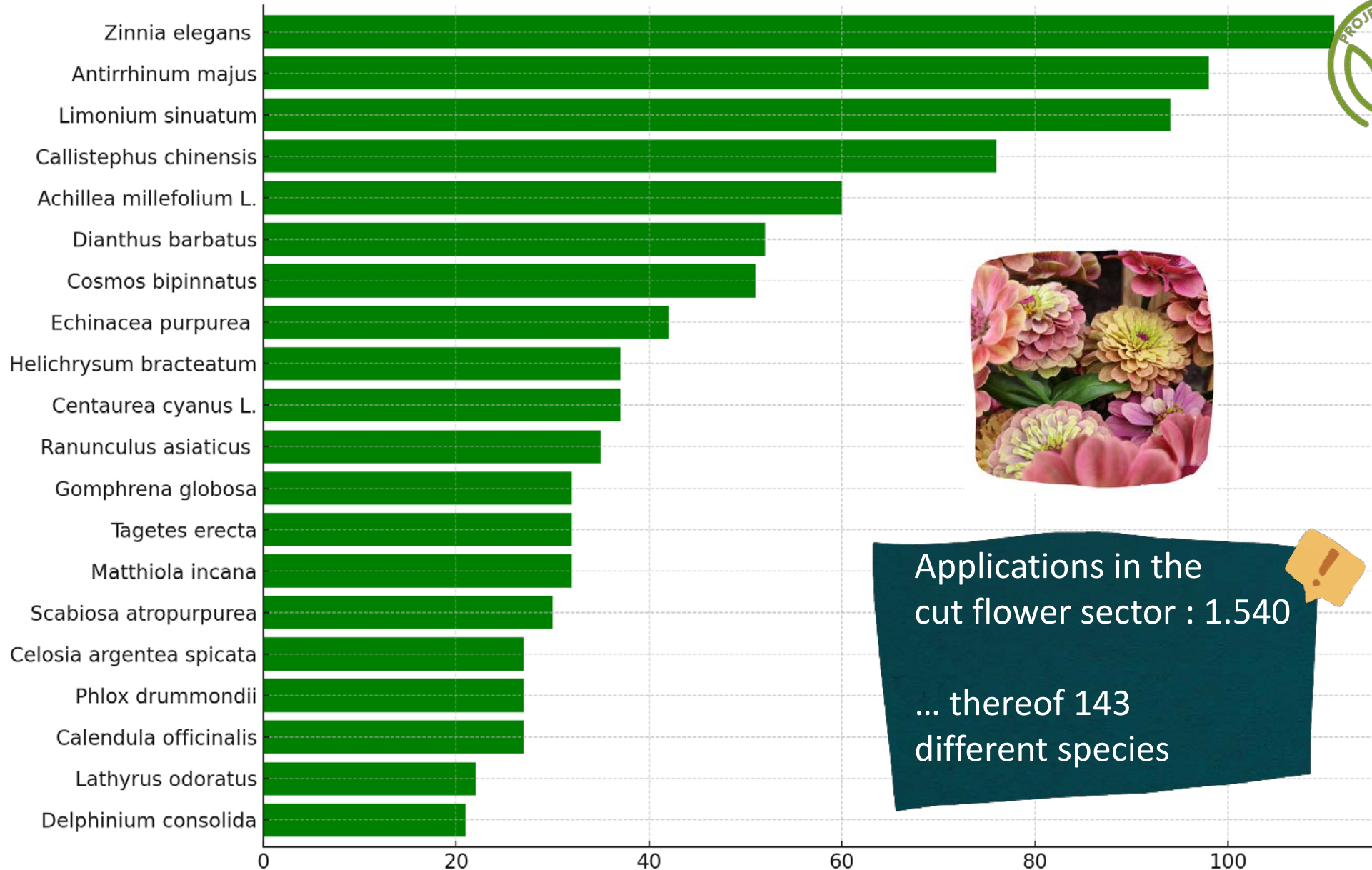
- Analysis of cut flower applications OXS 23/24 (results from BÖL-Projekt Leitfaden BioZier)
- Survey of seed companies and practice



Top 20 cut flower-species 2023/2024



Botanischer Name



Applications in the
cut flower sector : 1.540

... thereof 143
different species





Summary & findings Determination of needs

- there is a high demand for certified organic seeds
- clear trends are recognisable for the desired species
- the wide range of varieties makes it difficult to clearly determine demand
- requested quantities from general authorisations are not meaningful



 The results of the survey are therefore important



Some results of the workshop

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challenges

assortment:

no professional varieties
and no knowledge of the
companies....

Offer (flowerfarms):

no complete overview, not
in OXS, little knowledge
about cultivation and
marketing

Offer (PRM companies):

no centralised processing and
no common structures,
demand is too little

solutions

more collaboration and
exchange

Training on production
seeds and legal
requirements for
selling

Increase demand
and supply through
consumer education
etc.



**practicability study for production of
bed & balcony base material**

**Status quo survey of legal framework
conditions**

Evaluation and development
of the product ranges

Recording the need for research



Status quo survey of legal framework conditions

- EU Bio-Verordnung 2018/848
- Plant protection law
- EU-Richtlinie 98/56/EG

Production process mother plant

- cuttings
- seeds



**practicability study for production of
bed & balcony base material**

Status quo survey of legal framework
conditions

Evaluation and development
of the assortment

Recording the need for research



**Evaluation and development of a sustainable
assortment of organic ornamental plants**



More Informations:

- www.bio-zierpflanzen.de (Webside Network föga e.V.)
- www.bio-zierpflanzen.info (Guideline BioZier for certification of production and marketing from organic ornamental plants)
- www.bio-zierpflanzen.de/anbauerinnen/forschung/projekte/biozier-pvm/ (more Infos about the project and the results)



picture sources: floralita, Bioland, LVG, Klaus Bongartz, canva (changed)



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Thank you for your attention