HOW TO BECOME A CERTIFIED LIVING LAB? –THE ÖMKI ON-FARM NETWORK

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How to become a certified Living Lab?

- **Fill in the application form of ENoLL… ☺**

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What are Living Labs?

Living Labs (LLs) are defined as **user-centred, open innovation ecosystems** based on **systematic user co-creation approach**, integrating research and innovation processes **in real life communities and settings**. (ENoLL 2020)



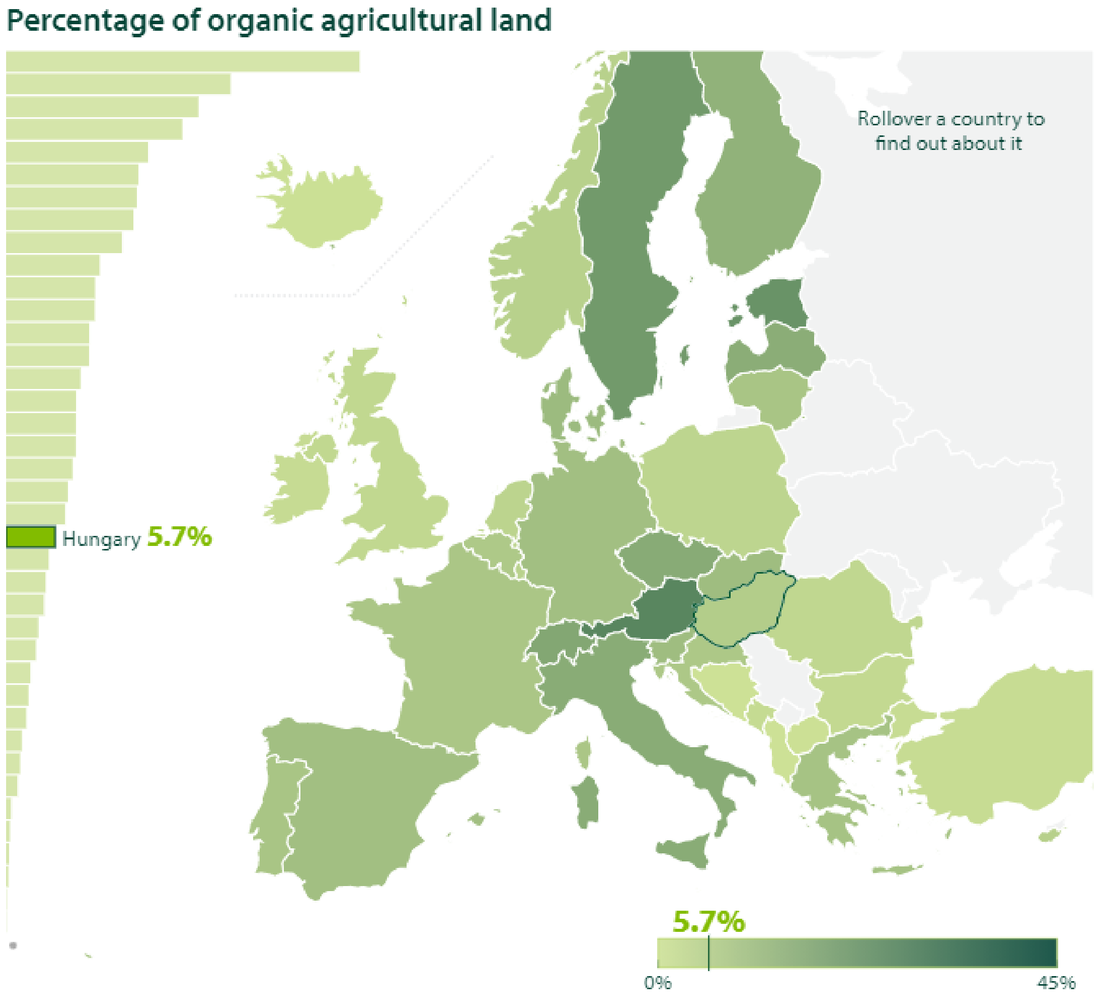
Source: ENoLL.org

ÖMKi's background

Aim: Fostering scientific research of organic agriculture in Hungary on an internationally competitive standard

- **2011**: **Foundation of ÖMKi**, the Hungarian Research Institute of Organic Agriculture Public Benefit Non-profit Ltd.
- **2012: Launch of on-farm participatory research network**
- **2020: Certification of ÖMKi as Living Lab by ENoLL**

Organic sector in Hungary, 2019



*Notes

Sources

Hungary

303 thousand hectares of organic land in 2019

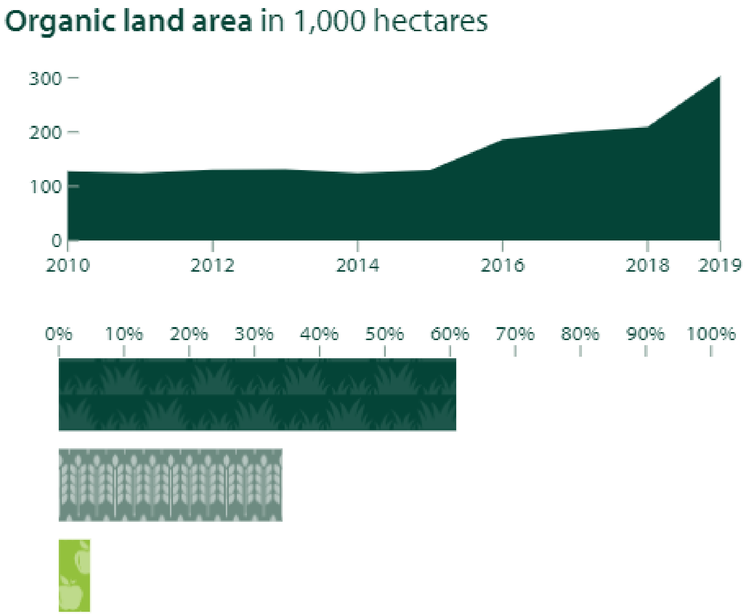
Organic land use*

61% Grassland
184,783 hectares

34% Arable crops
103,887 hectares

5% Permanent crops
14,520 hectares

0% Other
0 hectares



Producers 5,136

Processors 523

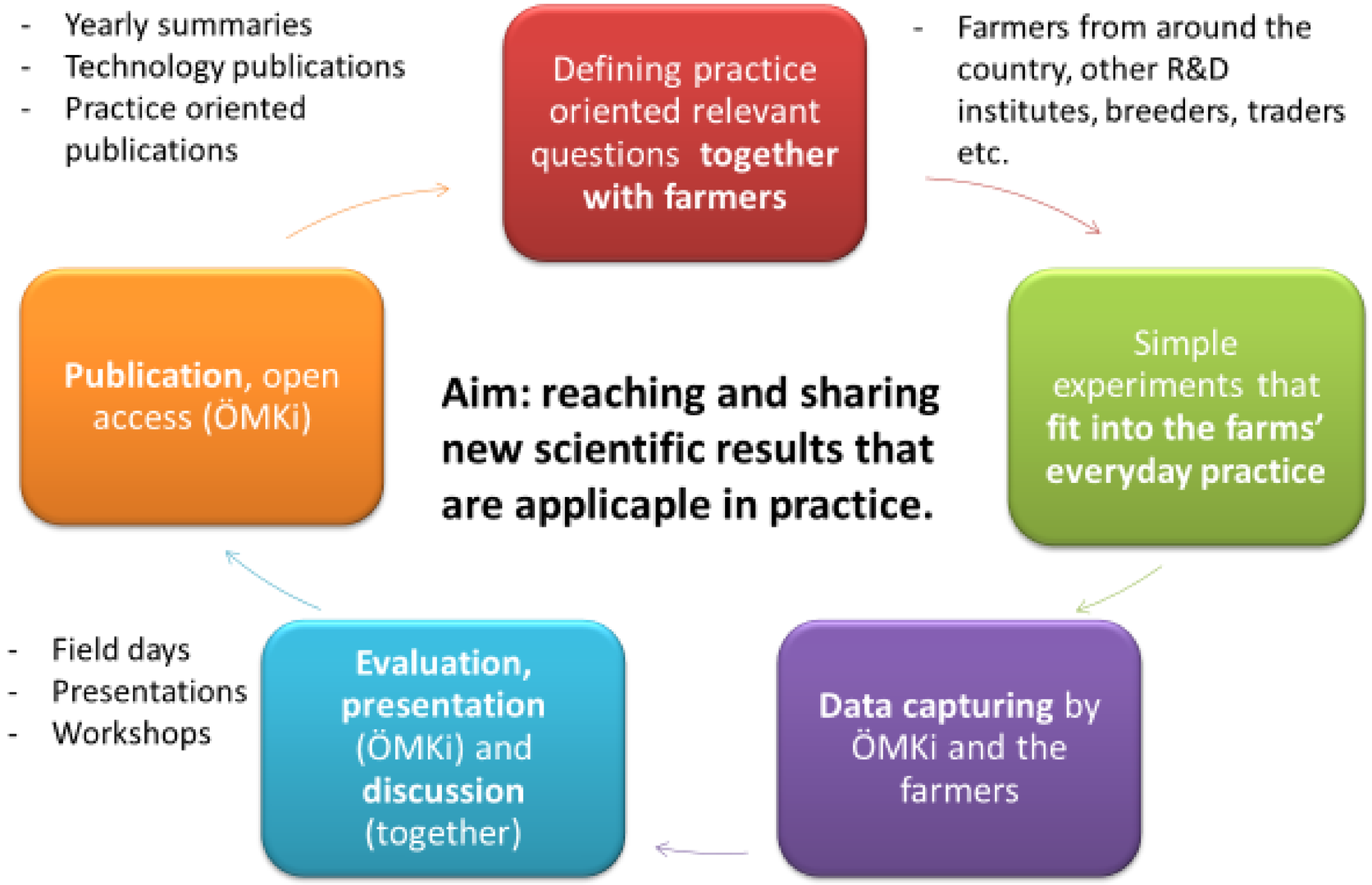
Source: https://www.organicseurope.bio/about-us/organic-in-europe/

What kind of research do we need?

- **Practice oriented results that can be implemented in everyday farming**
- **Research that connects Hungary with the international research community**
- **Research that connects farmers, processors, advisors and the actors of the value chain.**

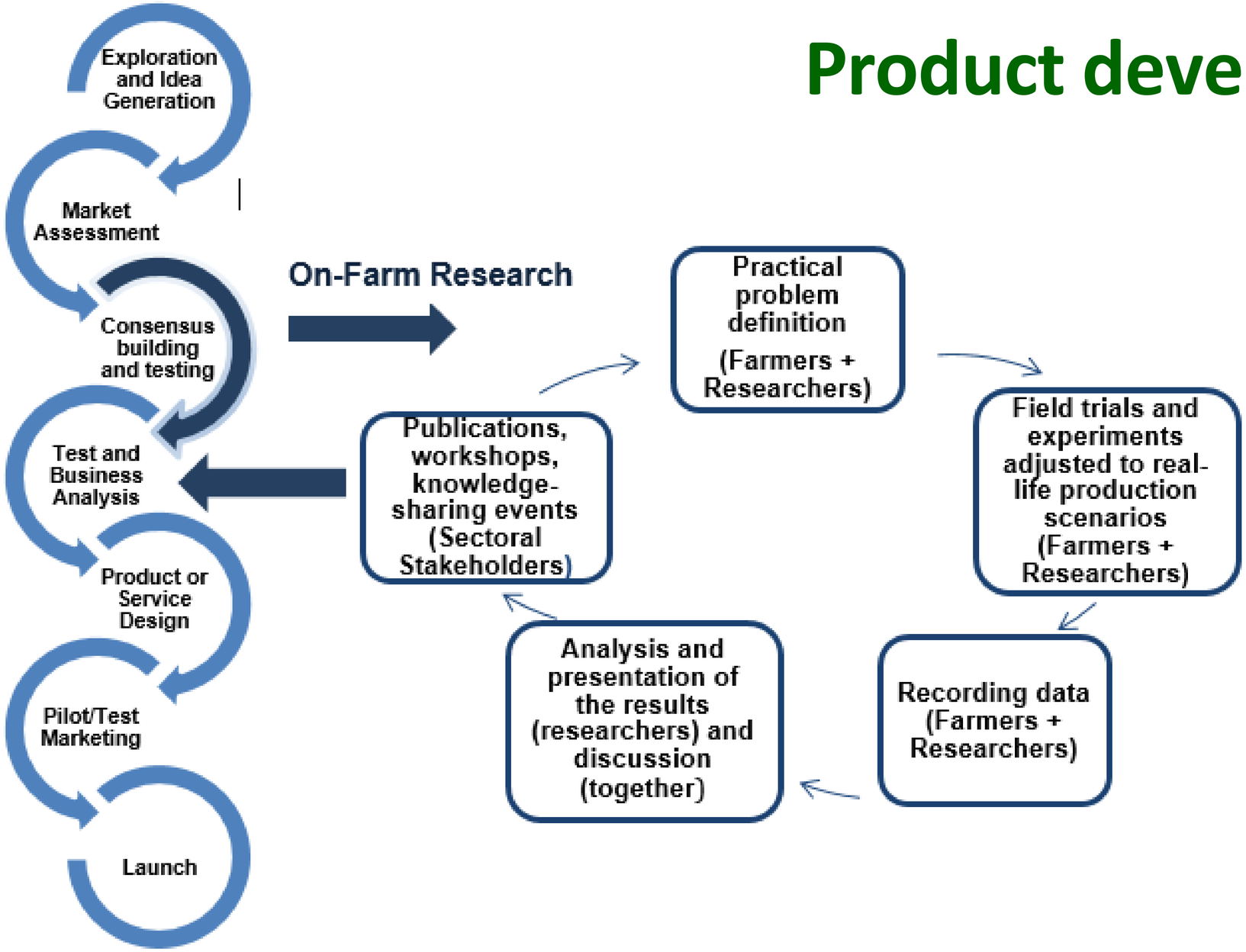
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On-farm experimentation network



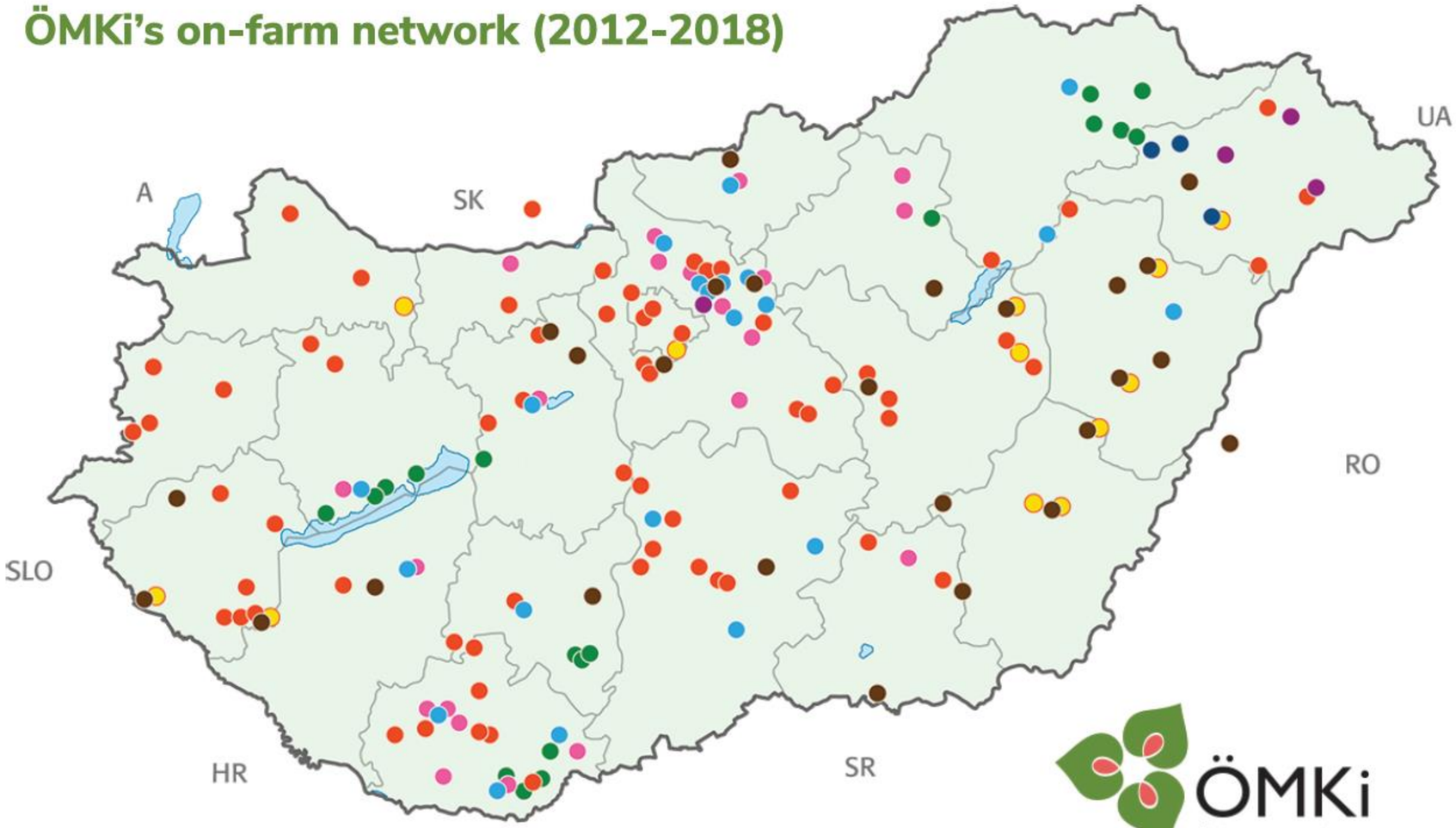
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Product development process



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ÖMKi's on-farm network (2012-2018)

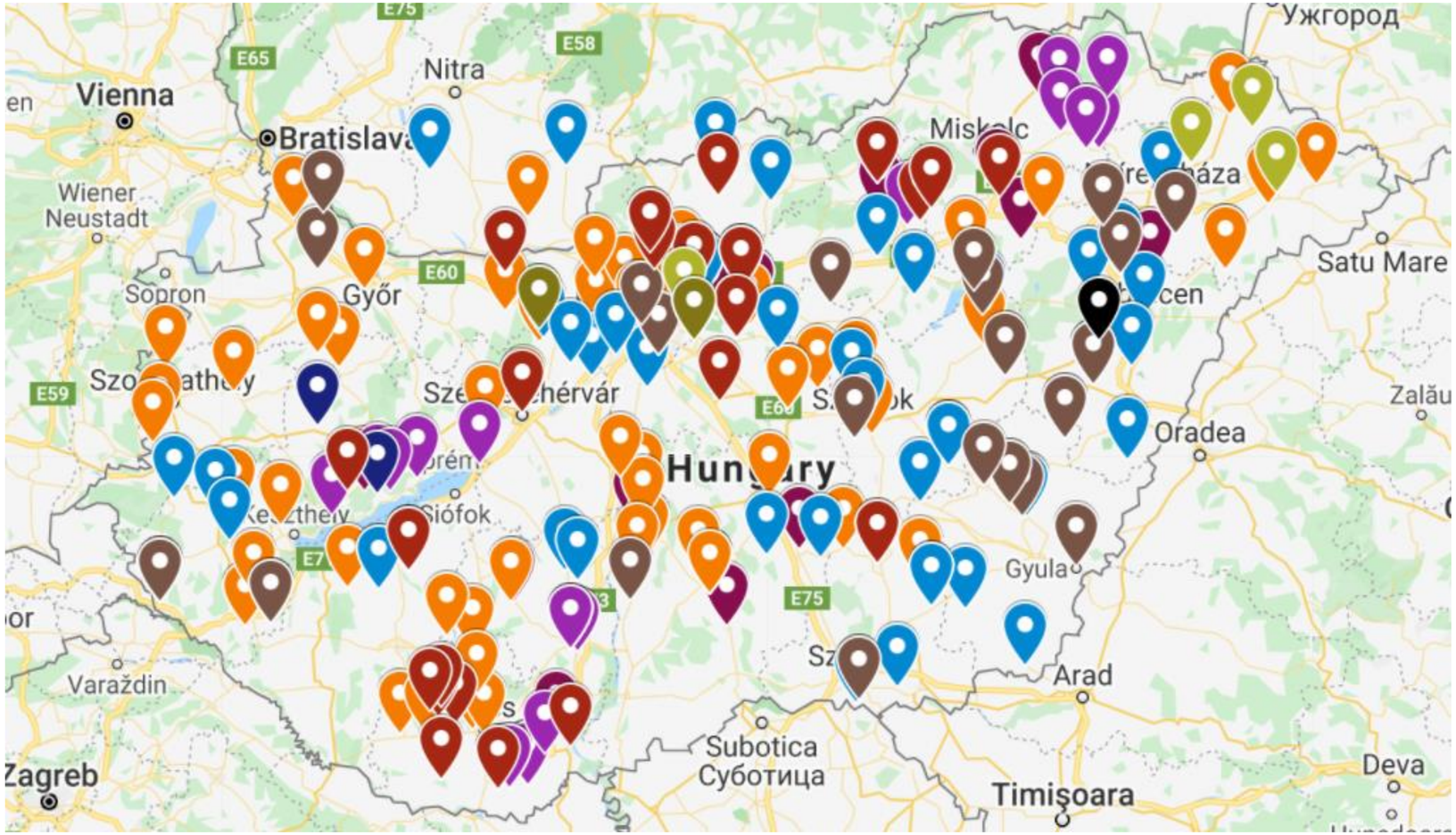


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- 27 Wheat variety tests
- 13 Soy varieties tests
- 22 Potato varieties tests
- 26 Tomato landrace tests
- 21 Inter-row cover crop seed tests
- 69 Testing organic beekeeping methods
- 4 Testing cherry fruit fly control methods
- 3 Testing plant conditioners in apple orchards

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ÖMKi’s On-farm Network 2012-2020



Source: https://biokutatas.hu/en/page/show/onfarm

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Some achievements since 2012

- **Yearly (!) more than 100 farms** take part voluntarily from around the country.
- **New Product: Species rich seed mixure developed for vine interrows (2017-)**
- **New technology: Species-rich cover crop management in vineyards (2017)**
- **New Product: Re-introduction of landrace tomatoes as seedlings (2019-)**
- **New technology: Development of organic bee health management against varroa mite (2017)**
- **New technology support: On-farm and small-parcel variety test network in winter wheat (2020-), emmer, einkorn, spelt (2021-)**
- **New Product: Re-introduction of ancient cereals (emmer, einkorn) (2021-)**

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Some achievements since 2012

- **Good information network** among the stakeholders of each sector
- New results and information become **integrated into practice**, production efficiency increases
- Fostering cooperation: potential for **product development**
- Opportunity to **take part in EU research cooperations** (H2020), **multi-actor approach,** (HE) **Living Lab approach**

DiverIMPACTS

DIVERSIFOOD

Farmer's Pride

Conserving
plant diversity
for future generations

www.farmerspride.eu
#EUfarmerspride

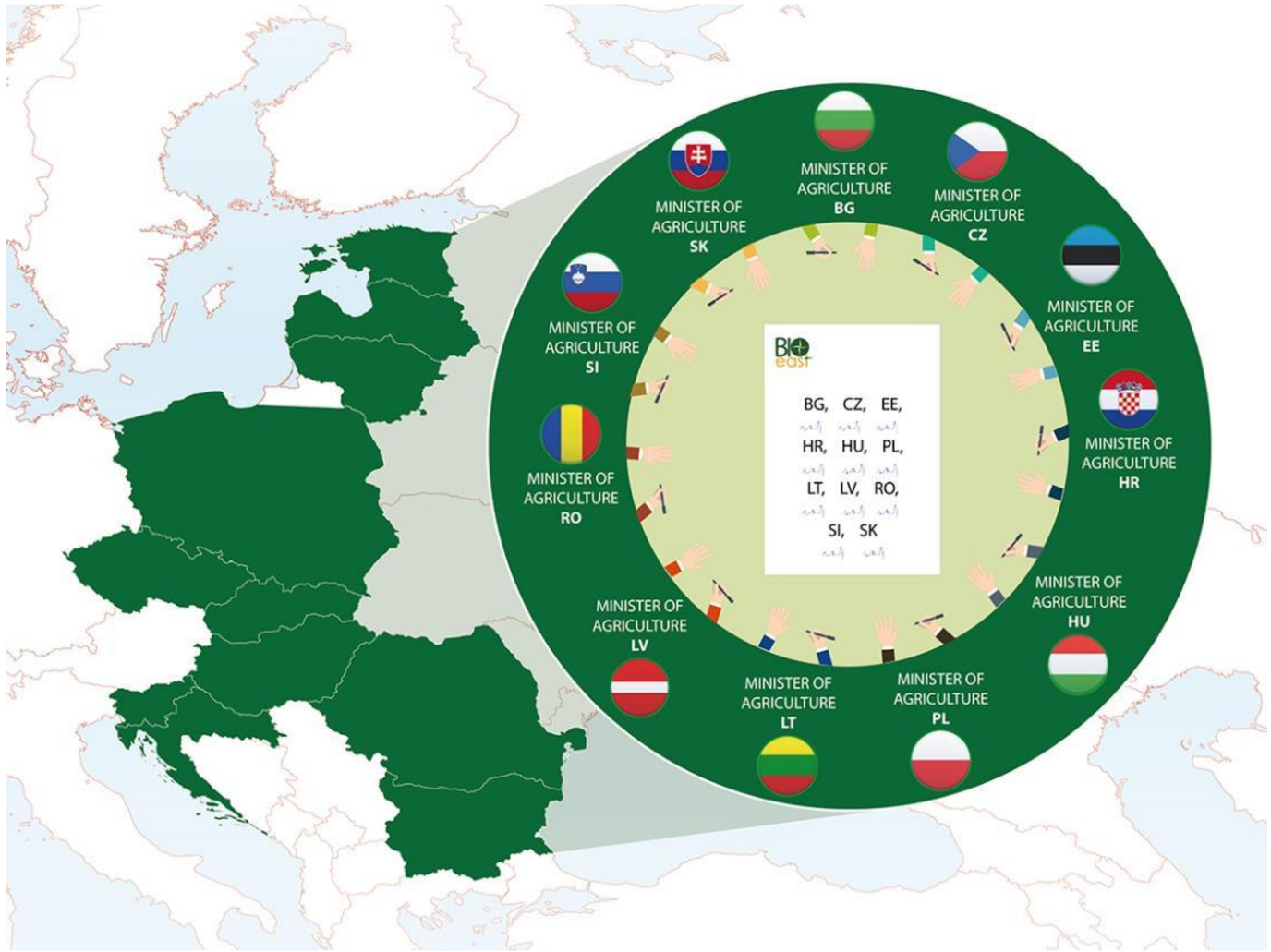
LIVESEED

RELACS
IMPROVING INPUTS FOR ORGANIC FARMING

SolACE

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Agroecology – BIOEAST Initiative



Thematic Working Group on Agroecology and Sustainable Yields

Coordinated by ÖMKi and the Hungarian Ministry of Agriculture

ALL-Ready: Strengthening the European agro-ecological research and innovation ecosystem

SCAR AE strategic working group

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Species-rich, locally adapted interrow cover crop seed mixture development for erosion protection, biological diversity and sustainable weed suppression



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PÁNTLIKA PINCÉSZET

CSÁNYI PINCÉSZET VILLÁNY

Ilyés Kúria SZEKSZÁRD PORKOLÁB VÖLGY

GRÓF DEGENFELD WINERY

GERE GERE ATTILA PINCÉSZETE

DOMAINE EDEGGER BADACSONY

TOKAJ PENDITS M. WILLE-BAUMKAUFF HUNGARY

MÉSZÁROS PÁL BORHÁZ ÉS PINCE

VYZVAN

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TOKAJ OREMUS

BOCK

Stefán Tibor

Trisga BORPINCE Szekszárd

Martinus BORHÁZ

TOKAJ-HÉTSZŐLŐ Szőlőbirtok

GILVESY

Vida

Tars

Ecovin



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Legume based



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Herbs & forbs



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Forrás: Migléz et al. 2015

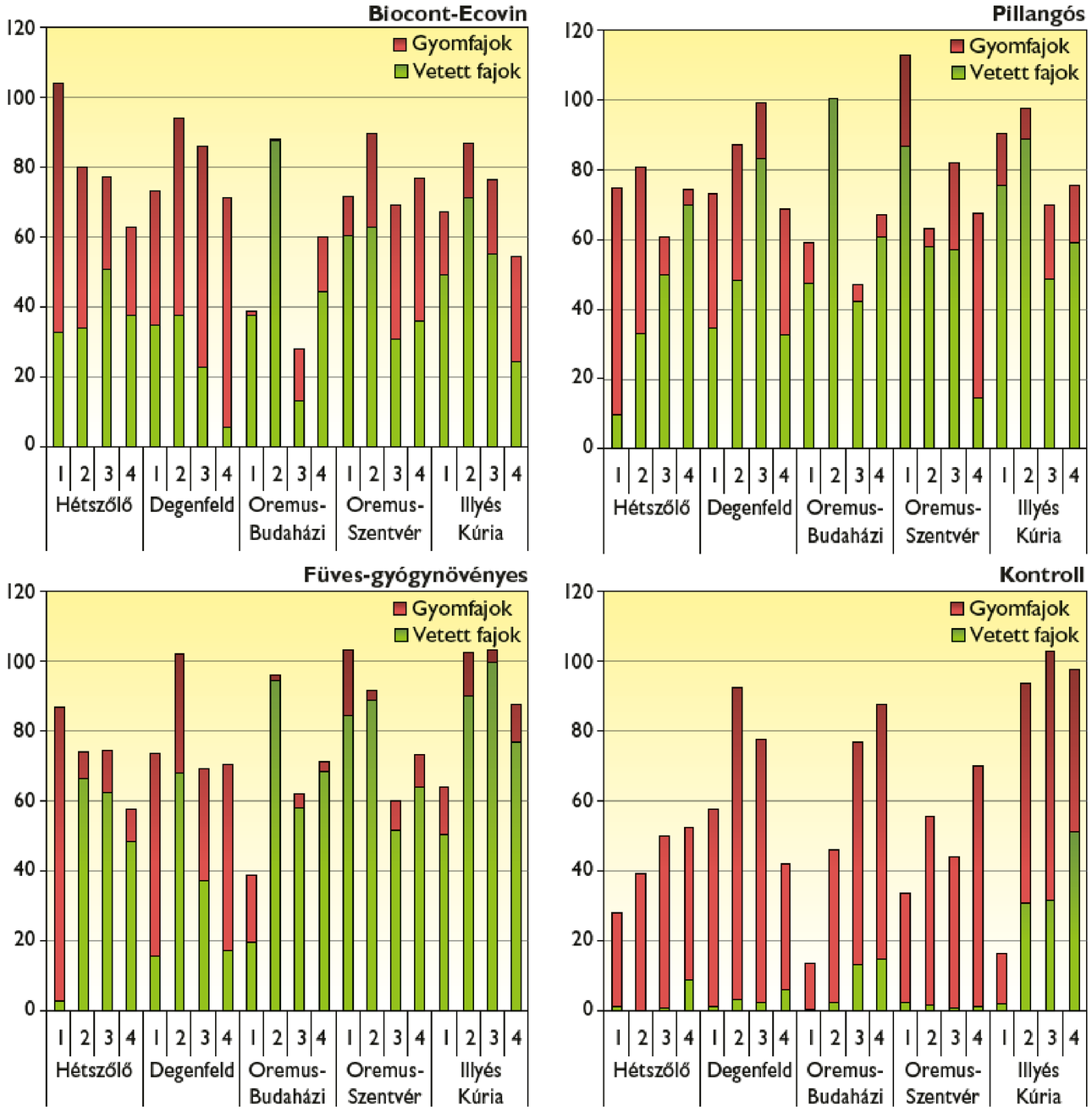
Control



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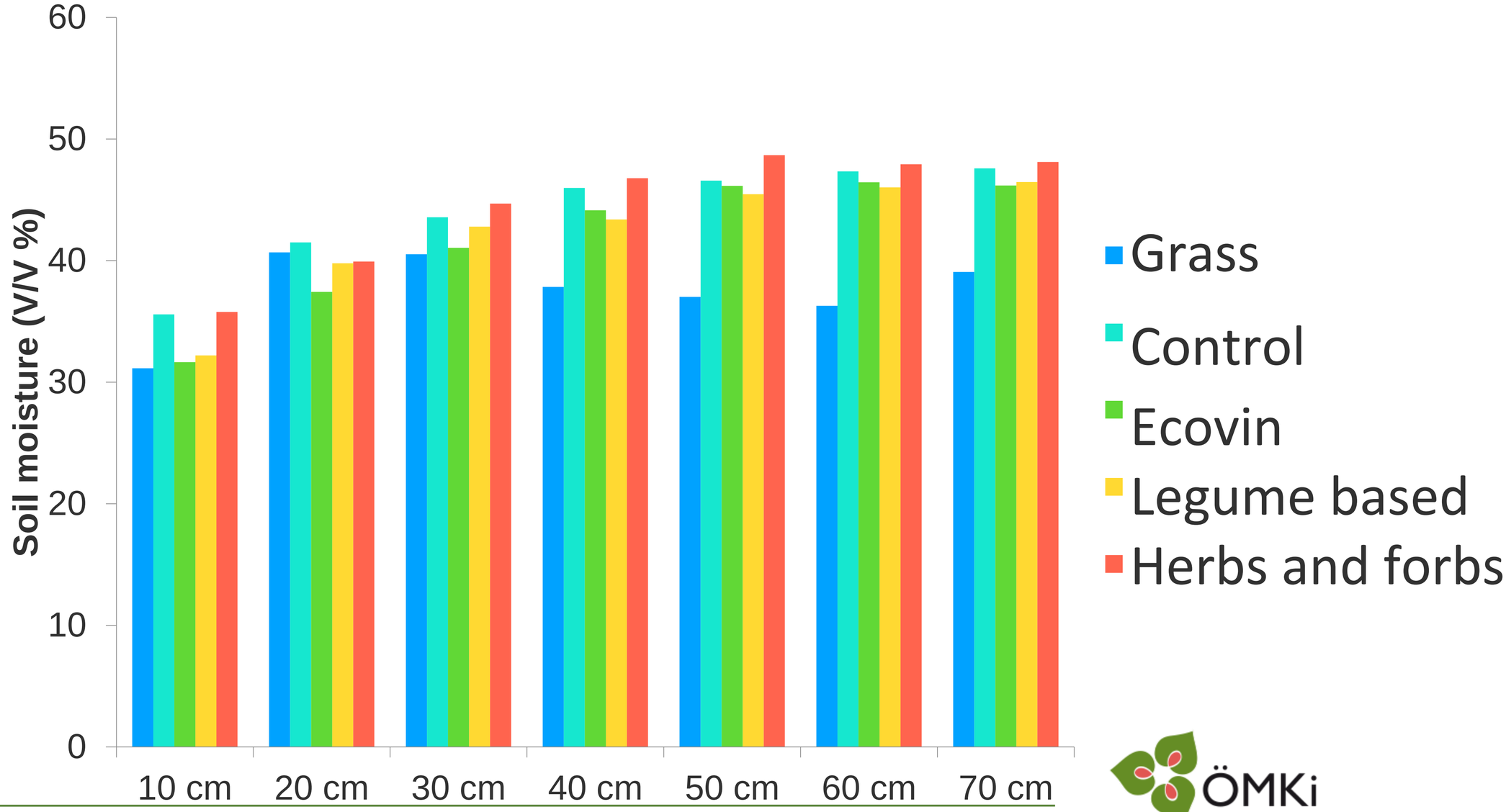
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Source: Miglécz et al. 2015

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Summarized averaged soil moisture data from bi-weekly measurements (V/V %), Feind 2016



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Forrás: Donkó et al. 2017



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https://biokutatas.hu/termekek/omki-elo-sorkoz-vetomagkeverek/

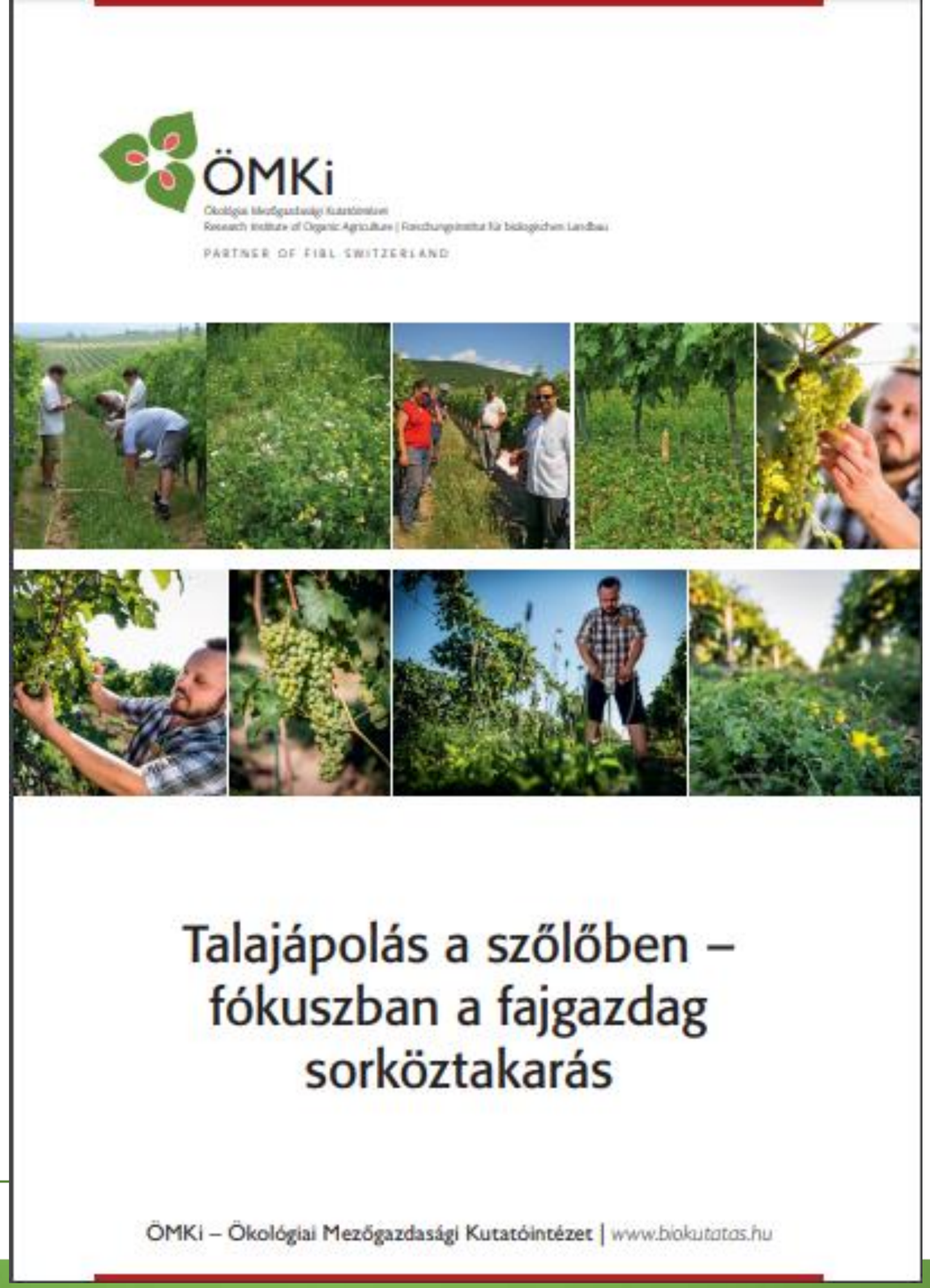
Species in the final mixture:

White clover, black medic, ribwort plantain, bird's-foot trefoil, crownvetch, wild carrot

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Full description of the technology

Donkó et al. 2018



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Tokaj Hétszőlő, 2019



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Follow-up of the vineyard trials

- **Basic seed mixture on the market** (*Trifolium repens, Medicago lupulina, Plantago lanceolata*, *Lotus corniculatus*, *Coronilla varia, Daucus carota*)
- **Technology of cover crop management** adopted by **>200 farms and numerous small holders**
- **Publications** – both scientific and practical
- **A good network to continue with:** LIFE Vinadapt, MNVH

MAGYAR NEMZETI VIDÉKI HÁLÓZAT

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How to become an accredited Living Lab?

- **Its not the ENoLL application, that makes it challenging. ☺**

Thank you for your attention!

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