

# ÖMKi On-farm Living Lab

---

Korinna Varga  
Research Project Lead

Hungarian Research Institute of Organic Agriculture (ÖMKi)



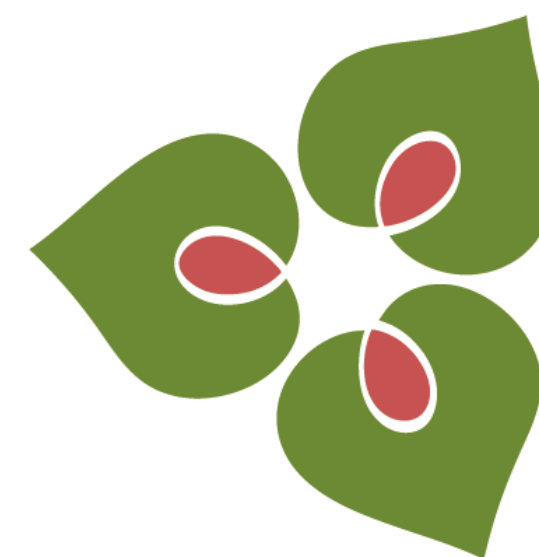
# ÖMKi On-Farm Living Lab

**Agroecology-focused nationwide participatory experimentation network that includes variety of field trials and technology tests co-designed and co-implemented with farmers with the aim to improve and/or develop new organic/agroecological practices, products, technologies**





# Background



# ÖMKi

Ökológiai Mezőgazdasági Kutatóintézet

Research Institute of Organic Agriculture | Forschungsinstitut für biologischen Landbau

ÉLVONALBELI KUTATÁS. ÖKOLÓGIAI SZEMLÉLET. FENNTARTHATÓ JÖVŐ.

**Host organization: Hungarian Research Institute of Organic Agriculture (ÖMKi)**

**Aim:** Fostering scientific research of organic agriculture and agroecology in Hungary on an international level.

- **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:** Living Lab certification by ENoLL



# Research

## Living Lab Ecosystem



### Crop diversification for food system stability

- Ancient cereal variety tests and product development
- Landrace tomatoes - cultivation technologies
- Soybean in the crop rotation



### Soil-building cultivation technologies

- Species-rich inter-row cover in vineyards and orchards
- Organic nutrient replenishment
- Herbicide-free tillage technologies (reduced-till, ground cover, etc.)

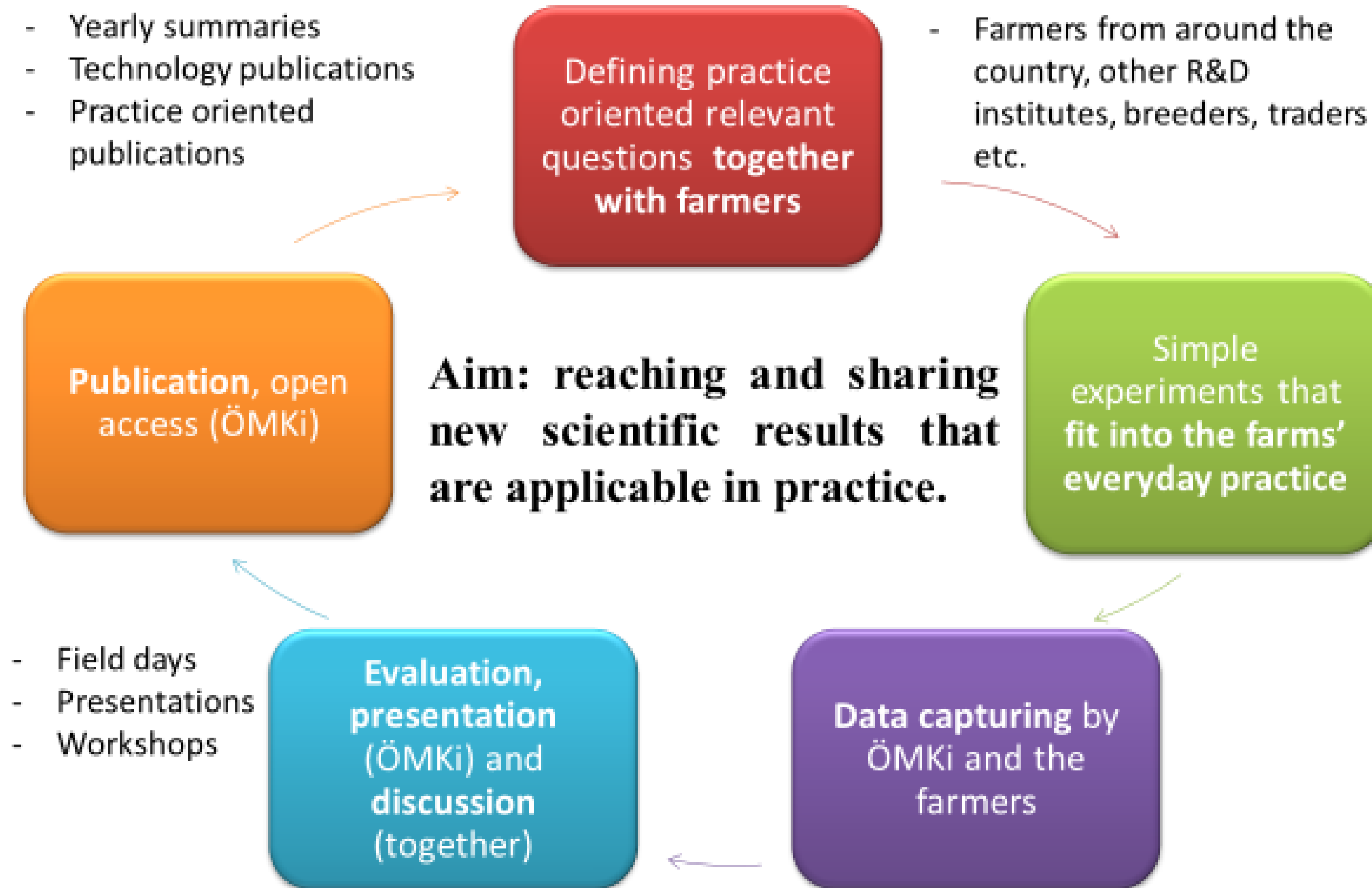


### Precision farming solutions for organic agriculture

- Remote sensing for plant protection
- Sensors for developing customized feeding and disease prevention system

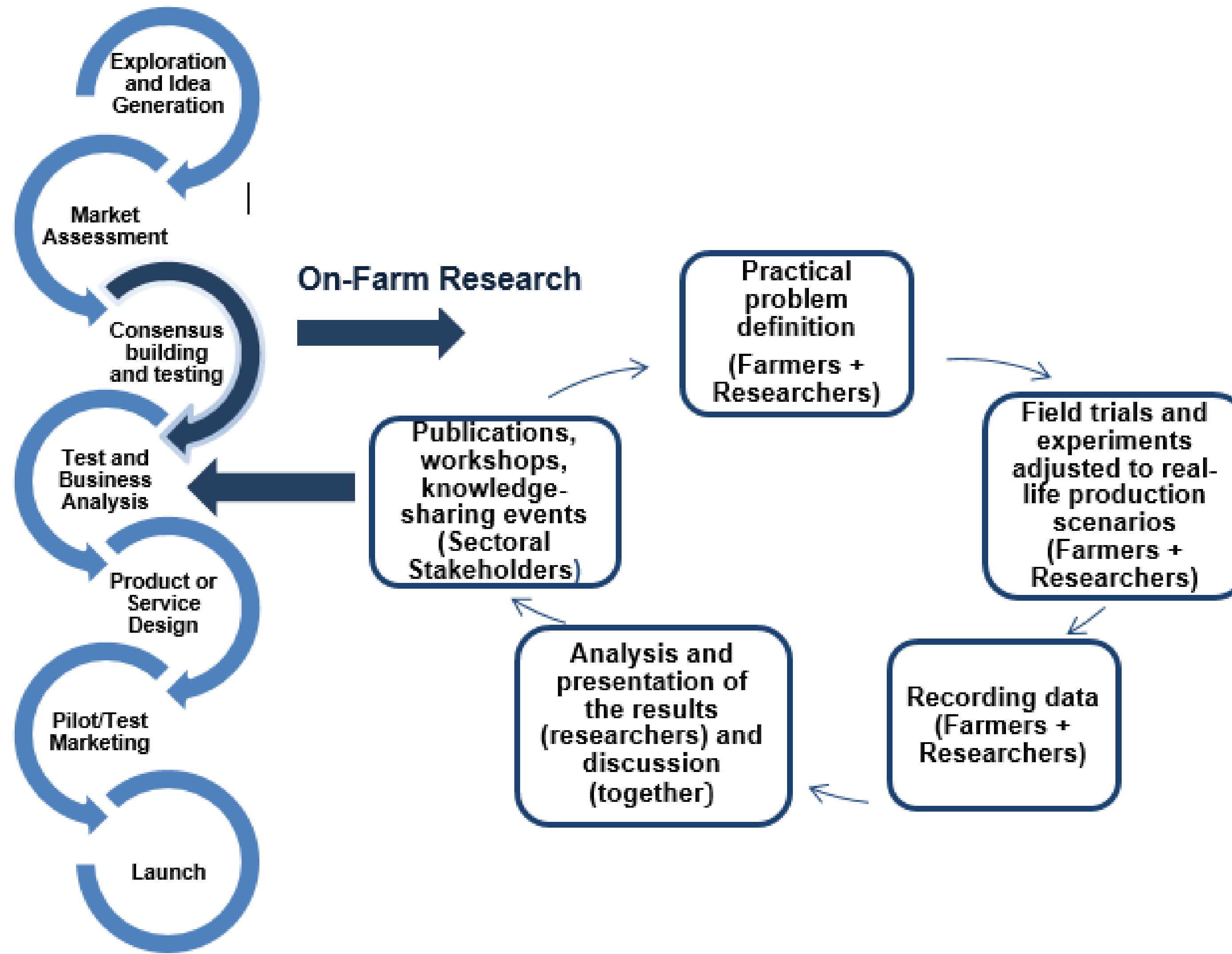
# ON-FARM Method

## On-farm experimentation network

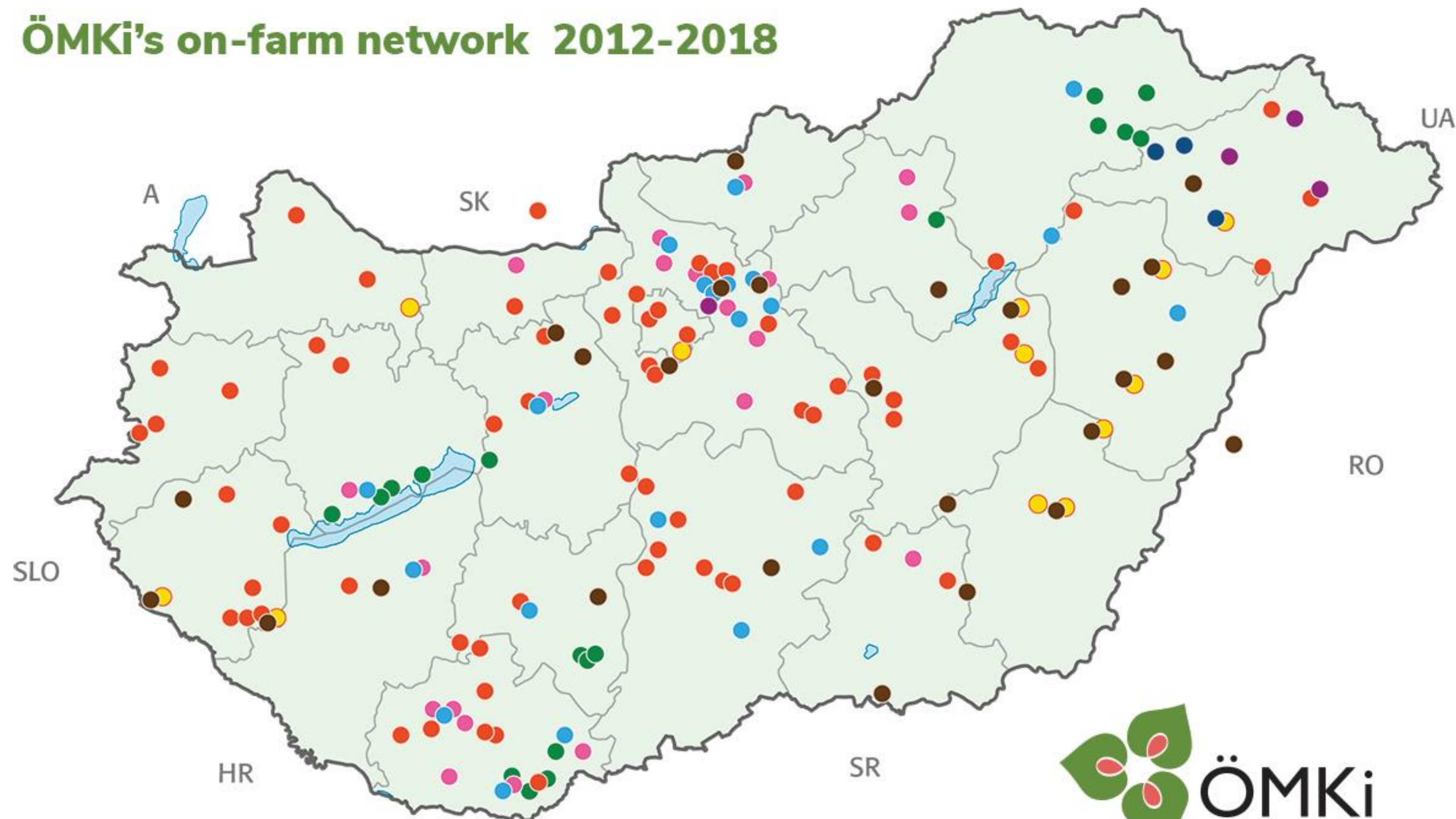




# Product development



## ÖMKi's on-farm network 2012-2018



Wheat variety tests



Soy varieties tests



Potato varieties tests



Tomato landrace tests



Inter-row cover crop seed tests



Testing organic beekeeping methods



**ÖMKi**

Ökológiai Mezőgazdasági Kutatóintézet  
Research Institute of Organic Agriculture



Testing cherry fruit fly  
control methods



Testing plant conditioners  
in apple orchards

ÖMKi On-farm Living Lab

ÖMKi | Ökológiai Mezőgazdasági Kutatóintézet



**ÖMKi**

Ökológiai Mezőgazdasági Kutatóintézet  
Research Institute of Organic Agriculture | Forschungsinstitut für biologischen Landbau



# Living Lab Achievements

- Yearly (!) more than 100 farms took part voluntarily from around the country.
- Introduction of organic bee health management against varroa mite
- Variety tests and agrotechnical development in winter wheat, soya, potato and wine production.
- Good information network among the stakeholders of each sector
- New results and information become integrated into practice, production efficiency increases
- Opportunity to take part in EU research cooperations (H2020), multi-actor approach





# Living Lab Achievements

## Living Lab Products/Services on the Market:

- 1. ÖMKi Living Interrow:** Species rich seed mixture developed for interrows.
- 2. Landrace Tomato Seedling:** Re-introduction of landrace tomatoes as seedlings
- 3. Organic Landrace Flour (Einkorn, Emmer):** Reintroduction of ancient cereals in arable cropping
- 4. Advisory service for organic and agroecological farmers**



ÖMKi On-farm Élő Laboratórium

ÖMKi | Ökológiai Mezőgazdasági Kutatóintézet



**ÖMKi**

Ökológiai Mezőgazdasági Kutatóintézet  
Research Institute of Organic Agriculture | Forschungsinstitut für biologischen Landbau



# Thank you for your attention!

---

Korinna Varga  
Research Project Lead

[korinna.varga@biokutatas.hu](mailto:korinna.varga@biokutatas.hu)

[www.biokutatas.hu](http://www.biokutatas.hu)