



NATIONAL WORKSHOPS REPORT TEMPLATE

IPMWORKS National Workshop: SLOVENIA

Date: 22nd of March 2024

Place:

Type: online

National Focal Point for Slovenia:

Reporting person for this meeting: Stanka Klemenčič Kosi

Participants:

	Name	Institution	Position
1.	Mateja Strgulec	KGZS – Institute Novo mesto	Agriculture adviser – Arable crops
2.	Iva Imperl	KGZS – Institute Novo mesto	Agriculture adviser
3.	Iris Škerbot	Administration for Food Safety, Veterinary Sector and Plant Protection	Higher councillor
4.	Igor Škerbot	KGZS – Institute Celje	Agriculture adviser – vegetable
5.	Primož Žigon	KIS - Agricultural Institute of Slovenia	Plant Protection Department
6.	Peter Berk	University of Maribor - Faculty of Agriculture and Life Sciences	Professor
7.	Karmen Rodič	KGZS - Institute Novo mesto	Plant protection specialist
8.	Vesna Zalokar	KGZS – Institute Celje	Plant protection specialist
9.	Polona Grahovac	RS Ministry of Agriculture, Forestry and Food – Development Plans Department	Head of Sector Development Plans Department
10.	Simona Hauptman	KGZS - Institute Maribor	Head of the agricultural advisory service Maribor
11.	Miro Mešl	KGZS - Institute Maribor	Plant protection specialist

12.	Stanka Klemenčič Kosi	KGZS – Institute Maribor	Head of Project&Research Dpt.
13.	Mojca Hribernik	KGZS – Institute Maribor	Project&Research Dpt.
14.	Katarina Kresnik	KGZS – Institute Maribor	Agriculture adviser for environmental protection
15.	Tanja Vaupotič	KGZS – Institute Maribor	Head of STS Ivanjковci
16.	Biserka Donik Purgaj	KGZS - Institute Maribor	Head of SC Gačnik

Despite the regular dissemination of IPMWORKS activities and achievements by invited participants at various occasions like expert group meetings, events, and conferences, we highlighted the importance of visiting the project website during the NCP workshop. In addition to sending out invitations, we included attachments such as IPMWORKS recommendations and a presentation detailing the demonstration events held in the SI Hub. The workshop participants represent a diverse range of stakeholders, including the Slovenian Ministry of Agriculture, Forestry and Food, the Administration for Food Safety, the Veterinary Sector and Plant Protection, the Agriculture Institute, academic faculty, and the Chamber of Agriculture and Forestry of Slovenia, along with its agriculture advisers.

1. Agenda

Session 1: Validation of the IPMWORKS recommendations for scaling IPM adoption through IPM demo networks in the AKIS

- Introduction of IPMWORKS project, network and methodology
- Factors for effective functioning of the HUBs
- Presentation of demonstration events in IPM Hub – Slovenia – arable crops, orchards and vineyards
- Questions (Mentimeter)

Session 2: IPMWORKS strategy for Long Term Sustainability

- Let's talk about it! Discussion
- Conclusions

2. Outcomes on Session 1: Validation of the IPMWORKS recommendations

2.1 Introduction

The concept of establishing and operating HUBs has been emphasized to facilitate a comprehensive understanding of their role within the project and their function within the EU HUB network. These HUBs serve to promote and demonstrate effective Integrated Pest Management (IPM) strategies, facilitate knowledge exchange among farmers both within and outside the HUBs.

It is necessary to emphasize that in Slovenia, IPM has already been established as a superior standard (co-financed by the EU from 2007 to 2013). This approach has been adopted in the majority of orchards, vineyards, and arable crops since 2015. The standard already encompasses a reduction in pesticide usage.

The Slovenian HUB is elaborated upon in detail, delineating its specificities and highlighting the pivotal role played by coaches across various areas and levels of activity, whether individually, within the HUB, or beyond. Furthermore, the significance of demonstration events and a platform showcasing collected project results aimed at professionals, the general public, and political decision-makers was underscored. Detailed presentations were made regarding demonstration events in Slovenia, which featured showcased IPM strategies, expert conclusions regarding the advantages and obstacles associated with the methods employed in arable crop, orchard, and vineyard sectors.

2.2 Factors for a good functioning of the HUBs

The concept of establishing and operating HUBs has been emphasized to facilitate a comprehensive understanding of their role within the project and their function within the EU HUB network. These HUBs serve to promote and demonstrate effective Integrated Pest Management (IPM) strategies, facilitate knowledge exchange among farmers both within and outside the HUBs. The Slovenian HUB is elaborated upon in detail, delineating its specificities and highlighting the pivotal role played by coaches across various areas and levels of activity, whether individually, within the HUB, or beyond. Furthermore, the significance of demonstration events and a platform showcasing collected project results aimed at professionals, the general public, and political decision-makers was underscored. Detailed presentations were made regarding demonstration events in Slovenia, which featured showcased IPM strategies, expert conclusions regarding the advantages and obstacles associated with the methods employed in arable crop, orchard, and vineyard sectors.

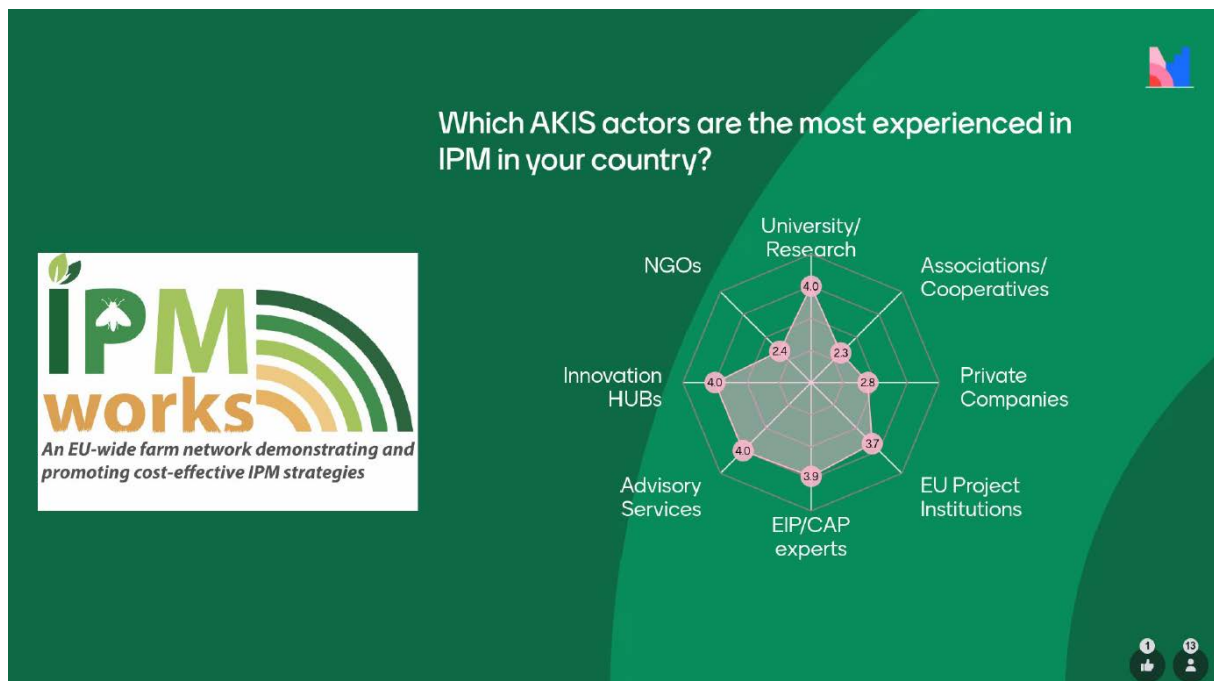
Members of the Slovenian NFPs were invited to and attended IPMWORKS demo events on farms several times. They were present at almost all organized demo events and additionally in April 2024, where the meeting focused on the effective IPM method for detecting Grapevine Flavescence Dorée and suppressing the American grapevine leafhopper (vineyard sector). In June 2024 (orchard sector), the topic of discussion was how to make efficient IPM strategies more accepted by farmers and financially supported. All members of the Slovenian NFP are aware of the importance of reducing the use of pesticides in agricultural production with IPM approaches. However, due to the increasing presence of diseases and pests in agricultural production, as well as natural disasters, more EU and national-level research into IPM methods is urgently needed, considering other factors such as environmental, economic, and social impacts.

2.3 Identified barriers


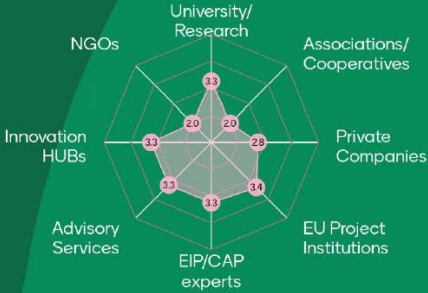
Several barriers have been identified that impact the functioning of the HUB such as:

1. **CAP&Regulations:** Farmers perceive that both EU and national regulations are distant from addressing their specific problems, particularly those faced by small-scale farmers, such as yield loss, energy crises, impacts from the Ukrainian war, and natural disasters.
2. **Challenges in Orchards:** Mechanical cultivation of soil under trees and sowing grasses (both annuals and perennials) pose challenges. Insufficient research or experimentation have been conducted regarding the selection of the optimal grass mix adapted to the soil and growth conditions.
3. **Issues in Vineyards:** Implementing mating disruption methods against pests like the European grapevine moth (*Lobesia botrana*) and the European grape berry moth (*Eupoecilia ambiguella*) faces several challenges:
 - **Cost:** The biotechnical method does not fully cover the expense of purchasing dispensers.
 - **Labor Intensity:** It requires substantial labor force to place dispensers in vineyards within a short timeframe.
 - **Weather Impact:** Weather conditions can affect the effectiveness of the method; for example, even in north-eastern Slovenia, where the harvest typically starts at the end of August, major damage from botrytis hasn't been observed in recent years. However, in case of a stronger occurrence, action with FFS (foliar fungicide sprays) is required.
4. **Economic Viability of Crops:** Further reducing pesticide usage in Slovenia could potentially make some crops economically unviable for cultivation. For instance, under changing climatic conditions, such as barley typically being sprayed up to twice a year, with the reduction goal of 50% in pesticide use, treatment of barley with pesticides would no longer be feasible.

2.3 Questions and Answers (Mentimeter):



Which groups show a higher degree of interaction with other actors, fostering the exchange of information and knowledge on topics of common interest?

Group	Score
University/Research	33
Associations/Cooperatives	20
Private Companies	28
EU Project Institutions	34
EIP/CAP experts	33
Advisory Services	33
Innovation HUBs	33
NGOs	20

Rate the perceived difficulty among these five IPM practices




Practice	Score
Agricultural landscapes with diverse semi-natural habitats designed to manage pests, weeds, and diseases	4.7
Cropping systems designed to manage pests, weeds, and diseases	4.2
Optimized decision-making guiding operational and strategic IPM choices	3.8
Preferential use of non-chemical control options	4.2
Increased efficiency of treatments	3.5

3. Outcomes on Session 2: IPMWORKS strategy for Long Term Sustainability

3.1 Let's talk about it! Discussion

The discussion with the participants was very fruitful, with numerous suggestions made regarding the continuation of project activities and increasing the visibility of project results among political decision-makers, professional services, and farmers.

Participants were interested in how we attracted farmers to participate in the HUB?

The Agricultural Advisory Service and the Department of Plant Protection, which are in regular contact with farmers, invited those farmers to participate who are interested in IPM methods and are willing to demonstrate them on their farms and share knowledge with other farmers.

Were economic calculations made for the purchase of grass mixtures in orchards for the use of IPM methods, how was germination after sowing, and which perennials sprouted and survived in the following years?

Establishing grass regulation is very difficult because they do not persist for several years; manual sowing requires a lot of physical labor, and purchasing mixtures is also expensive. In orchards, the mixtures sprouted in the first year, but they were completely different mixtures from those declared or some did not sprout at all. The following year, mixtures from another provider were selected, cheaper and with better grass associations, sown in strips between rows, with better germination. We also found that soybeans are hosts for the marbled stink bug, so it's better to redirect the sown strip elsewhere, outside the orchard. We are aware that the germination and durability of grass mixtures are unpredictable, and prices are high, approximately €700 for 3 kg of seed.

In vineyards, the mating disruption method, requiring more labor for timely installation of dispensers, which also need to be ordered on time. However, what is good and encourages the sustainability of implementing the IPM method is that the purchase of dispensers is co-financed by a measure within the CAP, namely for 500 dispensers at €120.

3.2 Conclusions

1. AKIS plays a crucial role in connecting farmers, researchers, advisory services, decision-makers, and other stakeholders to promote IPM strategies in the agricultural sector. Therefore, we will continue to work together with expert services in agricultural advisory and plant protection, universities, and other relevant institutions within expert groups where the needs will be highlighted and how to support individual IPM methods within CAP measures.
2. A professional task is set for the use and monitoring of grass mixtures in IPM, for a period of approximately 5 years, within public agricultural advisory service in fruit growing and plant protection service. The goal is to monitor the suitability of flowering mixtures in strips near orchards, specifically what they contribute to attracting and preserving beneficial species in orchards, considering location, soil, and germination.
3. The method of confusion is supported within the professional task, seeking all possibilities for these tasks to continue.
4. The findings and professional outcomes of projects, whether they are European Union-funded, nationally researched, or from other sources, focusing on Integrated Pest Management (IPM) methods, should be disseminated to the public. Proposal: publication on the **PORTAL ZNANJA** at the Ministry of Agriculture, Forestry, and Food, in connection with the **IVR PORTAL** and on **EU FARM BOOKS**, which is expected to launch soon.