



IPM adoption in my hub

Facilitation approach and progress made in IPM adoption



My group



Dr. Thomas Rottstock
Julius Kühn – Institut
Stahnsdorfer Damm 81
14532 Kleinmachnow
Germany

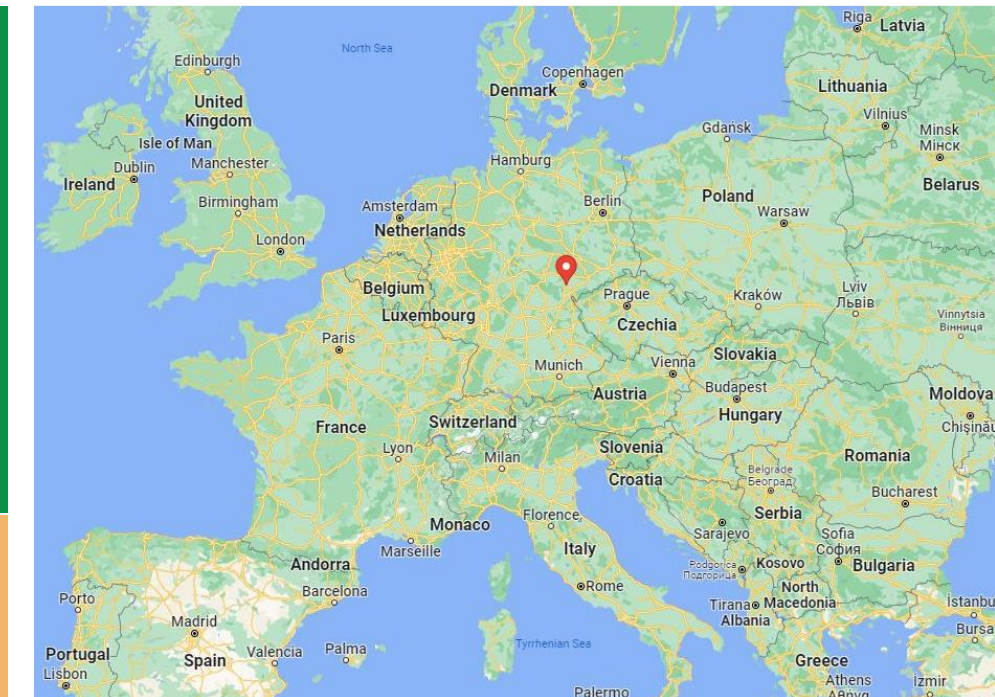
PRESENTATION OF THE HUB COACH ORGANISATION

This hub is coordinated by the Julius Kühn – Institut (JKI), which is the federal research centre for cultivated plants in Germany.

The IPMWORKS project is hosted by the associated institute for strategies and technology assessment.

THE HUB

Our hub consists of 10 arable crop farms, which are located in the federal states of Saxony-Anhalt and Thuringia. The farmers cultivate crops such as: wheat, oilseed-rape, barley, durum, potatoes and sugar beet. The hub focuses on mechanical weeding.



OBJECTIVES AND MOTIVATIONS OF THE FARMERS

Our farmers are interested in alternative solutions to herbicide use, for example using modern machinery for mechanical weeding. The farmers are also working towards more effective use of agro-chemicals (e.g. due to modern spray equipment). A positive public attitude on local agriculture is also an motivation for farmers to apply IPM.

DRIVERS

The farmers are concerned about future political decisions, which restrict the use of plant protection products by law. Farmers are interested in a healthy environment and care about associated public concerns.

BARRIERS

The farmers are concerned about extra costs and risks, associated with IPM. A lack of labour led to farmers rejecting certain IPM practices. Farmers are not able to apply certain IPM practices due to dry spring months. A mentality of clean fields is common and hinders a tolerance to negligible crop damages.





IPM challenges and results

IPM Challenges

What were the main IPM challenges?

Strong focus on economic aspects (high yields) by several farmers.
Difficult to change mind-set in times of increasing costs (inflation).

We tried to make farmers apply more mechanical methods for weeding but high fuel costs and lack of labour made this difficult.

Efficient modern machinery (e.g. for mechanical weeding, spraying) requires investment – farmers look for financial support.



The hub's results

What progress has the hub made on these challenges ?

The farmers have a better understanding of the availability of modern machinery. We have been searching for sources of financial support. Some farmers are willing to invest in modern machinery, which enables the reduced use of plant protection products.

What issues still need to be addressed ?

More diverse crop rotations are still needed on some of the farms.
A higher tolerance of weeds, pests and diseases in the fields.
Organic alternatives to chemical plant protection products.
More knowledge on the benefits of intensive field monitoring and systems for decision making on pesticide use.

How are the hub farmers going to proceed ?

After the end of the project there will be no coordination of the hub by the JKI anymore. So farmers would need to organise exchange among each other by themselves.

Key conclusions

The contribution of 'soft skills' to the hub and issue management

We organized a demo-event on the topic of mechanical weeding where farmers had the opportunity to exchange their experiences on associated machinery and its utilization. A range of modern harrows and hoes were explained and demonstrated in the field.

The discussion with arable crop farmers has shown that there are several circumstances which hinder the shift from herbicide use towards mechanical weeding.

Mechanical weeding requires more effort in terms of labor and higher costs for machinery and diesel. Moreover the efficiency of the mechanical weed control strongly depends on climate and soil conditions.

Facilitation approaches

What is the issue the hub works on more precisely?

Due to large geographical distances among demo farms it is extremely challenging to organise meetings among the farmers. Moreover large distances between the office of the hub coach and the demo farms are challenging.

How did you proceed? What did you do?

We tried to organise the demo-events on farms which are located more centrally in the hub. We also organised online events during winter. However, this worked not as well as expected. The farmers do not really like online meetings.



Individual facilitation

Individual facilitation with hub members was conducted during farm visits for field-monitoring, setup of field trails, data collection (surveys) and the organisation of demo-events and via emails and telephone conversations.

Importance of geographical distance among farms

What conclusions can you draw?

The large distance between the demo farms is the main issue of our hub, which makes exchange and facilitation difficult.

My tips for making it work

Farms need to be selected in close proximity. The best would be not more than 30 Km distance between the hub members. Only highly motivated farmers should join the hub. This is crucial for efficient facilitation.

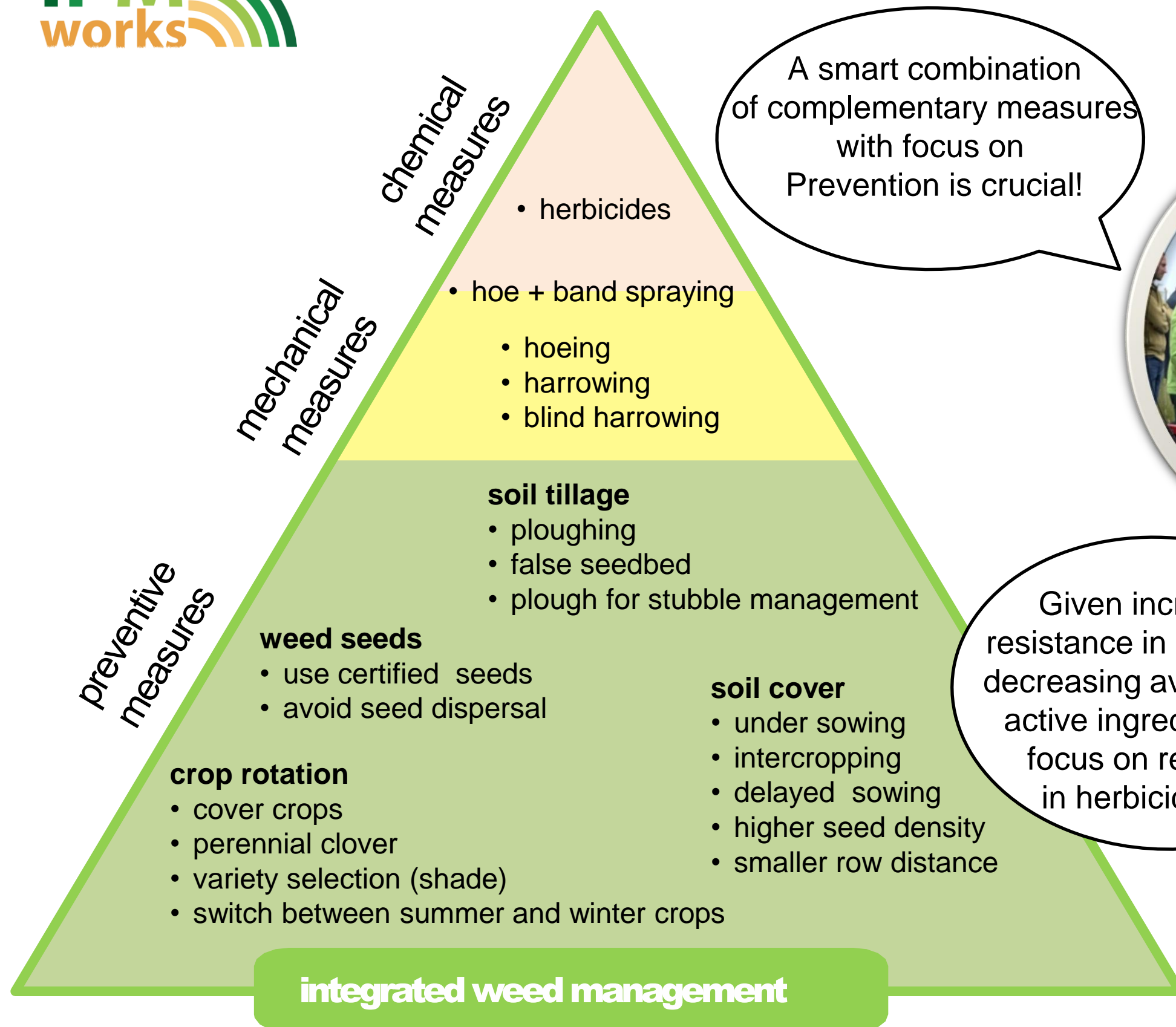


Collective facilitation

Collective facilitation within the hub was done during hub-meetings, demo-events and online workshops.



IPM adoption & pesticide use



A smart combination of complementary measures with focus on Prevention is crucial!



Given increasing resistance in weeds and decreasing availability of active ingredients; we focus on reduction in herbicide use.



“Farmer’s awareness of IPM adoption has increased during the IPMWORKS project. All mentioned methods are used more or less by the farmers. This strongly depends on culture, soil conditions and rainfall.”

Dr. Thomas Rottstock

“IPM was already practiced by most hub farmers before the project. IPMWORKS offered a good basis for the exchange of respective experiences. As hub-coach I have really appreciated the international exchange within the IPMWORKS network.”