How I implement IPM

Details of a holistic IPM strategy with low pesticide input in a European farm

My farm

Turi Tibor
Bački Vinogradi
(Vojvodina, Serbia)

PEDO-CLIMATIC CONTEXT

Sandy soil, low to medium fertility, low water retention capacity

Semi-arid to arid moderately continental climate, with mild winters and hot summers

MAIN PESTS

- Colorado Potato Beetle
- Potato black spot and Potato blight
- Ambrosia, White goosefoot and Scutch grass

AGRONOMICAL CONTEXT

Crop rotation: potato - corn - sunflower – barley

Processing according to the principles of Regenerative Agriculture

Cultivable area: 60 ha

SOCIO-ENVIRONMENTAL CONTEXT

Workforce: 2 household members + seasonal workforce

Regenerative Agriculture

OBJECTIVES AND MOTIVATIONS OF THE FARMER

Improvement of the quality of arable land,

reduction to the application of mineral fertilizers and pesticides,

reduction of the participation of mechanical work and human work,

integration of agricultural activity into the surrounding landscape

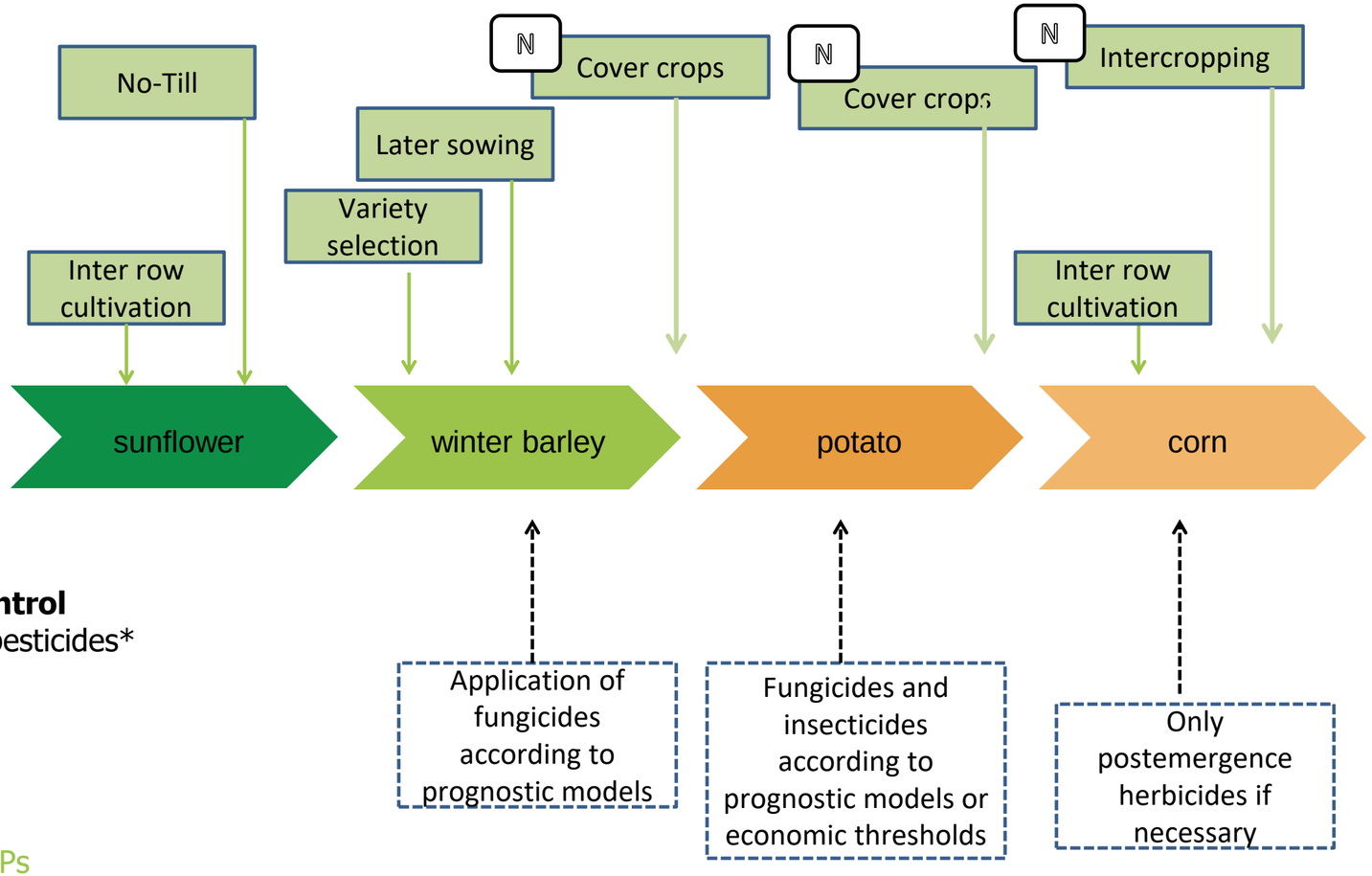
My strategy

Alternative solutions

Agronomical

Genetics

Physical control



Chemicals and biocontrol
Insecticides and other pesticides*

Fungicides*

Herbicides*

*In green = low risk PPPs
* In blue = biocontrol agents

Key measures

By applying the principles of Regenerative Agriculture, exclude the use of mineral fertilizers, and reduce the use of pesticides to a large extent.

We also strive to improve and use available natural resources and processes as much as possible. We also work on fitting production into the surrounding natural environment

Legend N **New solution** ~~**Solution**~~ **Abandoned solution** **Non systematic solution**

My results

Evolution trend on the farm

Pests control

Very good	Medium	To improve
Disease control	Insect control	Weeds control

Evolution of use of pesticides

Very good	Medium	To improve
Fungicides	Insecticides and herbicides	Biologically products

Sustainability indicators

Very good

- ↘ - Use of fossil energy
- ↘ - Use of dangerous or toxic products for the user
- ↗↗ - Level of overall satisfaction of the farmer and his entourage
- ↗↘ - Labour employment
- ↘ - Workload
- ↘↘ - Drudgery of work
- ↘ - Equipment usage time
- ↘ - Pesticides costs

Medium

- ↘ -Use of chemical fertilizers
- ↘ - Distribution of work over the year
- ↗↘ - Standardized operating expenses
- = - Actual mechanization load
- ↗↗ - Energy costs
- - Establishment of grass cover or multi-annual crops

To improve

- ↘ - Use of products that are dangerous or toxic to the environment
- ↘ - Real gross product with self consumption
- ↗↗↘ -"Complexity"of the cropping system
- ↗ - Use of sustainable energy
- ↗ - Use of conservation biological control [landscaping]

Key conclusions

Using IPM and Regenerative Agriculture, by harmonizing agronomic practices with natural processes and the environment, we reduce the pressure and impact on the natural environment.

As a result we get a reduction in the use of energy, human labor and inputs.
At the same time, we increase the economy and profitability of production.

Legend

In green = positive trend
In red = negative trend
In black = comparable

= **Comparable**

↗ **Increase**

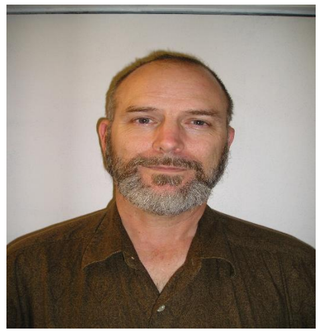
↘ **Decrease**

↗↗ **Significant increase**

↘↘ **Significant decrease**

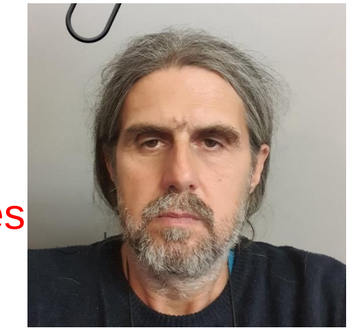
Environmental indicators
Social indicators
Economical indicators

Our feedbacks



“We strive to reduce the need for labor and investment in synthetic chemistry. IPMWORKS provides an additional opportunity to learn about IPM measures and their implementation on the farm.

Turi Tibor (Serbia)



“IPMWORKS provides a chance for producers to become familiar with the principles and practice of Regenerative Agriculture while simultaneously implementing IPM measures on the farm.

Florian Farkaš (Serbia)

MAIN OBJECTIVE OF THE FARMER

Improving the health of the parcel and around the and around her. Apart from nitrogen, the complete emission of primary mineral fertilizers. Reducing the use of pesticides as much as possible. Increasing the sustainability of the farm.

ADVANTAGES OF THE SYSTEM

The possibility of irrigation and the natural environment that creates the conditions for the further implementation of Regenerative Agriculture

LIMITS

Sandy soil and the need for irrigation

OPPORTUNITIES TO DEVELOP IN THE FUTURE

Work on further increasing soil health. Increasing soil moisture capacity in order to reduce the need for irrigation. Further reduction of pesticide application, with particular emphasis on minimizing herbicide use.
Further development of cover crops and combined crops (combined sowing of barley and peas, for example)

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