IPMWORKS

First results

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Strategy for data collection

IPMWORKS farms

1. **Survey #1 : 2021**
   Qualitative data : IPM awareness, IPM adoption, rough estimate of pesticide use, and self-assessment

2. **Survey #2 : 2023**
   Quantitative data Details of cropping systems and crop management
   - Computation of indicators of pesticide use and pesticide impact, indicators of cost-efficiency
   - Demonstration that "IPM works"

3. **Survey #3 : 2024**
   Similar to Survey#1
   Evaluation of changes in IPM adoption in IPMWORKS farms thanks to the work done in the hubs

First results from survey #1

on IPM awareness, IPM adoption and self-assessment

Self-assessment

Quality of disease control

Arable Field crops

83 IPM***WORKS*** farmers from the arable field crops sector

Increasing IPM implementation does not jeopardize disease management

First results from survey #1

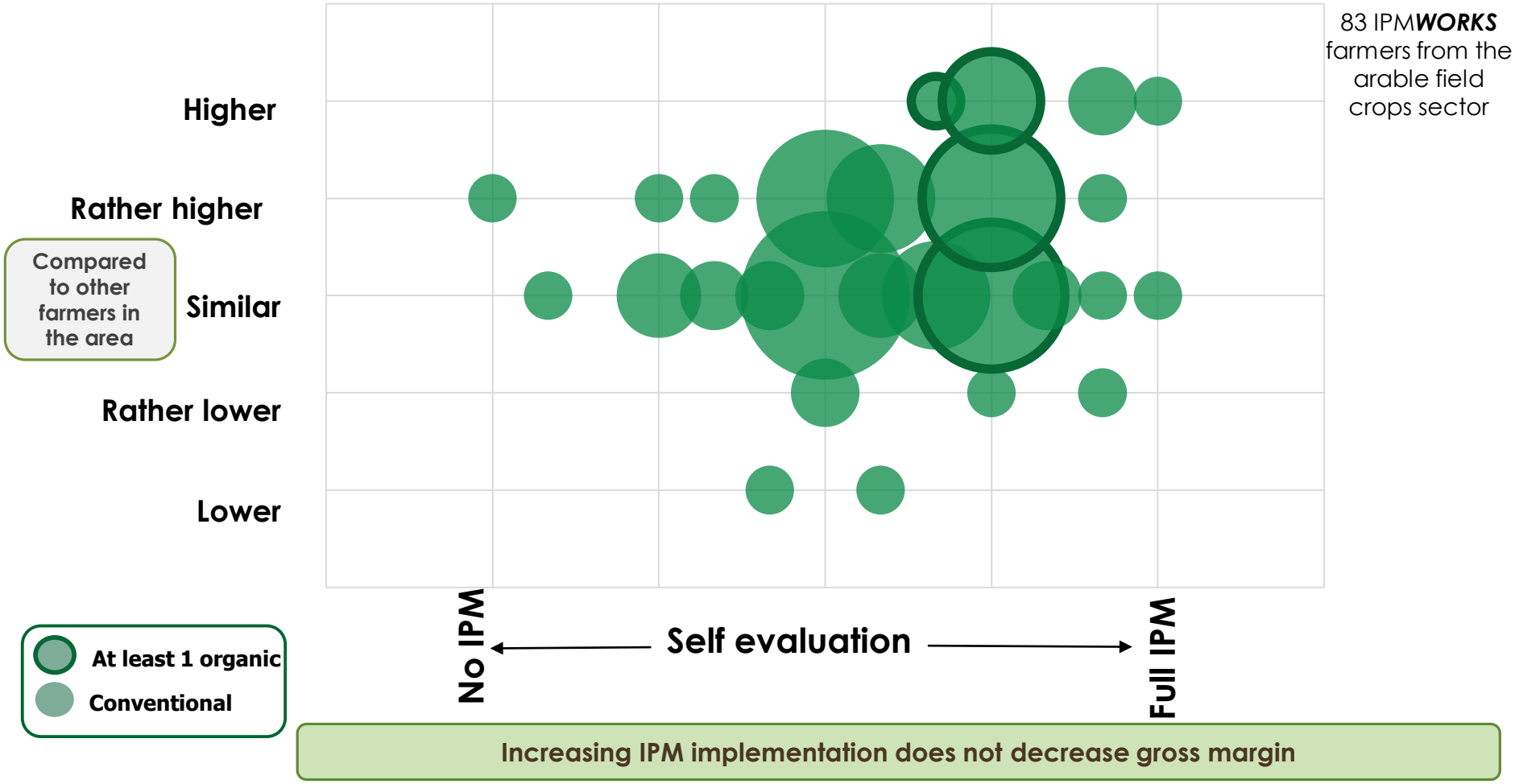
on IPM awareness, IPM adoption and self-assessment

Self-assessment

Profitability (gross margin)

Arable Field crops

83 IPM***WORKS*** farmers from the arable field crops sector



Increasing IPM implementation does not decrease gross margin

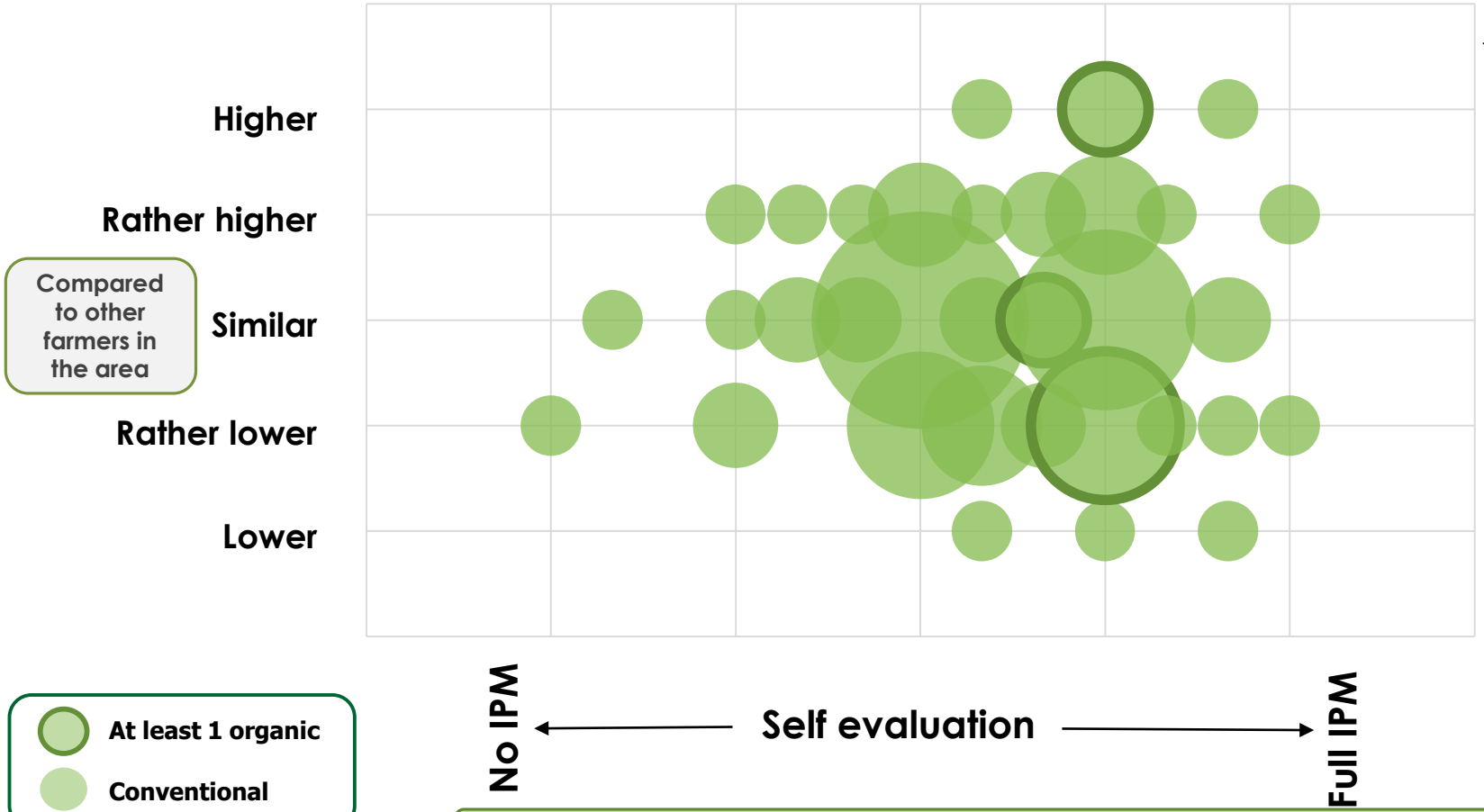
First results from survey #1

on IPM awareness, IPM adoption and self-assessment

Self-assessment
Work load

Arable Field crops

83 IPM***WORKS*** farmers from the arable field crops sector



Increased IPM implementation does not always increases work load

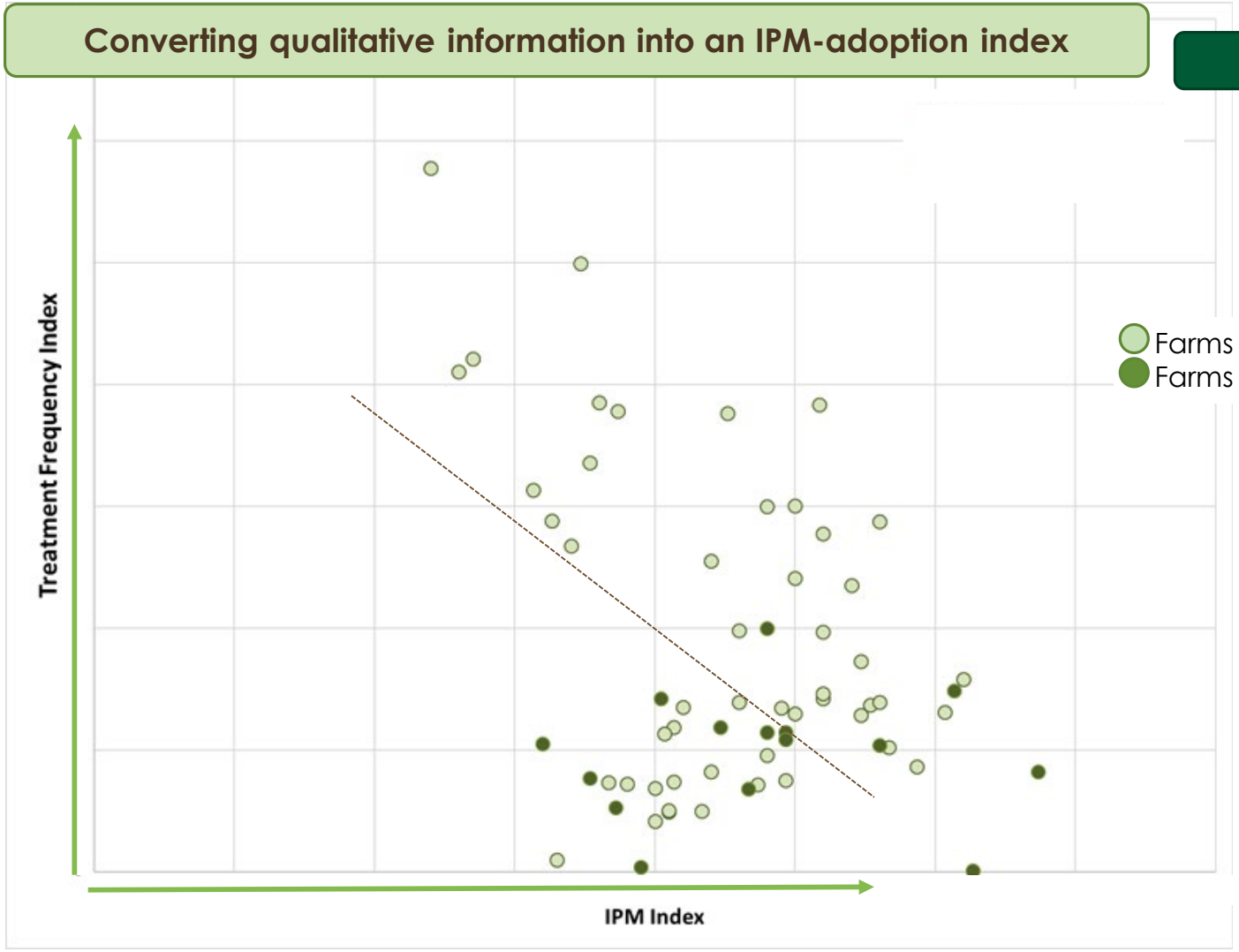
Preliminary results from survey #1

on IPM awareness, IPM adoption and self-assessment

Converting qualitative information into an IPM-adoption index

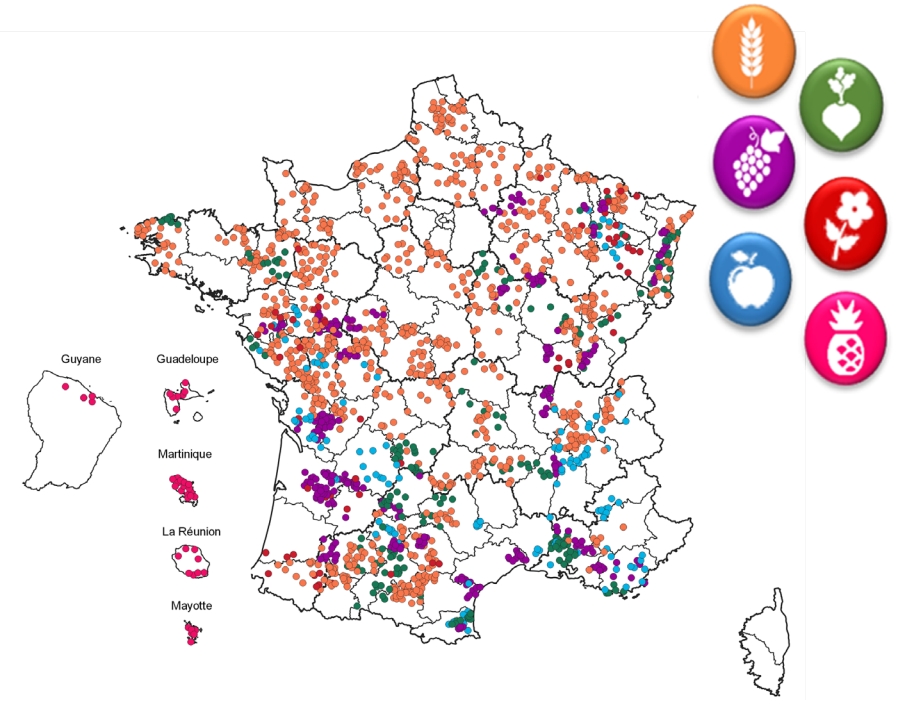
Arable Field crops

83 IPM***WORKS*** farmers from the arable field crops sector



Expected results from survey #2

example from the French DEPHY network



Launched in 2010

2100 volunteer farmers
6 agricultural sectors *arable crops, vineyards, orchards, vegetables, ornamentals, tropical crops*

Same objective and methodology as IPMWORKS

Expected results from quantitative data

examples from the French DEPHY network

Development of the Treatment Frequency Index (TFI) from initial practices in 2010 to 2018-2020 [number of farms]

		TFI
	**Arable field crops [774]: -26% *****	**2,6 → 1,9**

Farms with low TFI in arable crops always combine several management measures, e.g.

- Temporary grasslands
- Crop diversification
- Cultivar diversification
- Cereal delayed sowing dates
- Reduced doses/precision spraying
- Soil tillage – alternating ploughing
- Moderate fertilisation

(Lechenet et al., Agricultural Systems 2016)

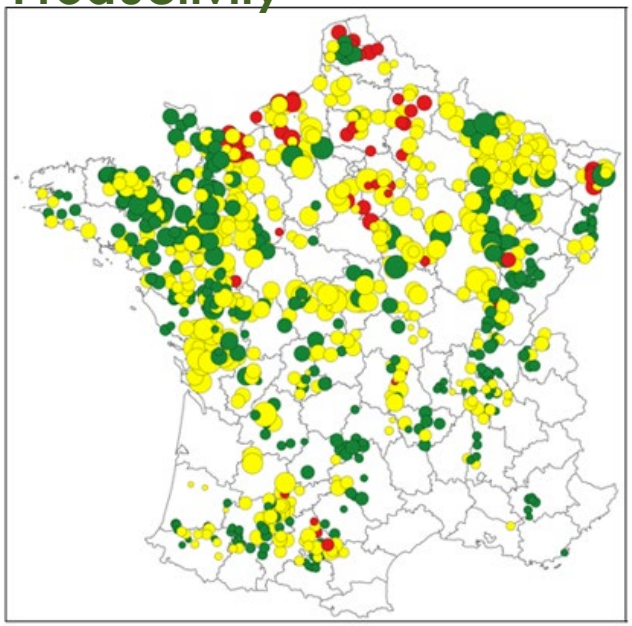
Expected results from quantitative data

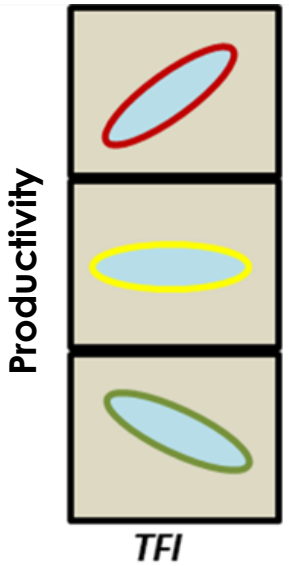
example from the French DEPHY network

Sector : Arable Field Crops

Cost-efficiency of IPM, the correlation between pesticide use and performance
Does low TFI = low productivity?

Productivity





No difference or higher productivity by reducing TFI: 94% of sites

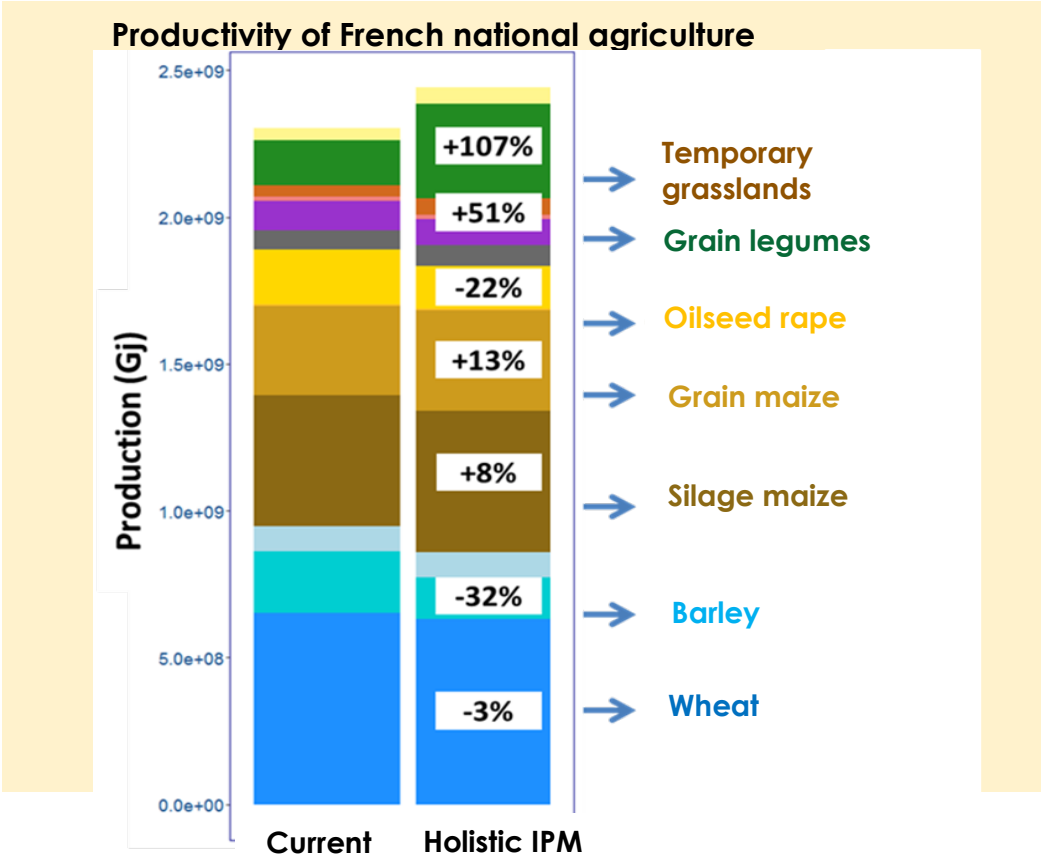
Lechenet et al., Agricultural Systems 2016

Expected results from quantitative data

example from the French DEPHY network

Sector : Arable Field Crops

Scenario of general adoption of IPM-based systems at the country level -France



≈ + 6%

Lechenet et al, Nature Plants 2017

THANKS for your attention!

The IPM***WORKS*** Hub Coach 'Capacity building', May 2022, Toulouse, France

HORIZON 2020
N. 101000339

IPMWORKS is a FarmDemo aligned project and is partnered with the IPM Decisions Project