

# The Pilot Project “Farmer’s toolbox for Integrated Pest Management”



DG AGRI/B.3

CDG Environment and climate change

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European Union



# Background

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- **Request from the European Parliament** in 2019 in the context of the Pilot Projects
- **Call for tender** in 2020
- **Kick-off** meeting on 15 January 2021
- **Steering Group** with Commission representatives and contractors
- **Publication** on 28 February 2023
- **Presentation in COMAGRI** on 23 March 2023



# Integrated Pest Management (IPM)

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***IPM is about emphasizing the growth of a healthy crop with the least possible disruption to agro-ecosystems and encouraging natural pest control mechanisms (chemical pesticides are the last resort)***

The definition is translated in the Directive on sustainable use of pesticides (SUD) by applying 8 general principles:

1. Prevention and suppression
2. Monitoring
3. Decision-making
4. Non-chemical methods
5. Pesticides selection
6. Pesticides use reduction
7. Resistance prevention
8. Evaluation

# Themes

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1. **Identification and assessment** of effective practices and technologies to reduce dependency on the use of pesticides in the EU (database)
2. **Estimation of the potential** to reduce dependency on pesticide use and its **key drivers and barriers**
3. **Assessment of how public bodies, private certification schemes, and other strategies are contributing** to the reduction of the dependency on pesticide use
4. **Strategies on how to scale up** good practices throughout the EU

## Methodological tools

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- **Literature review** at EU and MS levels
- **Surveys** in the EU 27 MS
- **Interviews** (ca. 350) with EU and national authorities, advisory services, farmers' representatives, and research experts
- **12 case studies** to illustrate the practices
- **Workshop** on scaling up good practices, **conference** (>60 participants, EP, MSs, NGOs, etc.)

## Outputs

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- **Final report:**
  - ❖ Analysis of the 4 themes (no recommendations)
  - ❖ Executive summary
  - ❖ Leaflet
  - ❖ Case studies: BE (crop-specific guidelines), FR (vegetables), PT (wine), ES (rice), DK (weeds), IT (fruits), NL (chrysanthemum), BG (bioproduct), DE (demonstration farms), LT (weeds), CH (weat), Quebec (IPM)
  - ❖ Country fiches
- **Database** of IPM measures (differentiation between 273 crop-specific guidelines and 1342 best practices)

## Main findings: 1. Effective practices/technologies

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- ***Each type of practice collected was assessed for the potential of reduction of pesticides dependency, the implementation cost and the overall effectiveness (see database).***
- ***Wide range of approaches developed in MSs to promote uptake: training, information, warning systems, recommendations, crop-specific guidelines, ....***
- ***The crop-specific guidelines are also based on various approaches: controls, recommendations, descriptions, etc.***

## Main findings: 2. Potential to reduce dependency

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### ➤ **Drivers:**

- *The presence of a dense network of independent **advisory services***
- *The development of **certification labels and private schemes***
- ***Policies** need to play the role of “sticks and carrots” however based on understanding of farmer decision-making processes*
- ***Promotion campaigns and training***
- ***Generational renewal** as a lever to change cropping practices*
- ***Taxation systems** if precise and support a specific policy (e.g., risk reduction)*
- *Pressure from **civil society and policy developments***
- ***Collective actions***
- ***R&D**, however further efforts are needed*

## Main findings: 2. Potential to reduce dependency

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### ➤ **Barriers:**

- ***Lacking economically viable alternatives to conventional practices***
- ***Perceived cumbersome regulatory framework for placing alternative products on the market***
- ***Economic risks of substitutes vs. chemical pesticides***
- ***Lacking market compensation for farmers to change practices***
- ***Lack of knowledge***
- ***The difficulties in estimating the long-term societal and environmental costs (and benefits) of pesticide use***

## Main findings: 3. Contribution of policies/private schemes

- *The **role of national authorities** as regards IPM implementation or awareness **is crucial***
- ***Market preferences and public opinion** may have an **influence** to a certain extent. However difficult to market IPM schemes due to low demand and awareness (except F&V)*
- *The **past CAP** has been **useful** for the promotion of IPM uptake beyond legal obligations, **although to a limited extent.***

## Main findings: 4. Scaling up strategies

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- *The role of independent **advisory services** is important for the reduction of pesticides use.*
- *However the set-up, type and presence of advisors significantly vary between MSs.*
- *Various initiatives were observed for **knowledge transfer** (demo farms, EU funded projects, ...)*
- *However language can be a barrier as well as the need to adapt IPM practices to local conditions.*



# « IPM Toolbox » Database

<https://datam.jrc.ec.europa.eu/datam/mashup/IPM/index.html>



## Data-Modelling platform of resource economics

Home > Farmer's Toolbox for Integrated Pest Management

### Farmer's Toolbox for Integrated Pest Management

The Pilot Project – Developing a farmers' toolbox for integrated pest management practices from across the Union, was commissioned by the European Commission – Directorate-General for Agriculture and Rural development, following a request from the European Parliament and carried out by a Consortium led by Arcadia International E.E.I.G..

The Pilot Project, retitled "Farmer's Toolbox for Integrated Pest Management", was conducted between December 2020 and November 2022, with the main objective to provide background knowledge on the most promising ways that could help farmers, advisors, and policymakers to scale up the reduction of the dependency on pesticide use across the EU, as advocated in the European Commission's Farm to Fork Strategy and in the context of the European Green Deal.

The Pilot Project provides a comprehensive description of the main drivers and barriers regarding the full uptake of Integrated Pest Management (IPM) practices that lead to a significant reduction of pesticide use.

The Pilot Project produced a [final report](#) with a summary available in [English](#) and [French](#).

As part of the Pilot Project a database with IPM practices, techniques and technologies and with crop- and sector-specific IPM guidelines currently developed in the different Member States was created. Building on the original database, the JRC has developed this visualization tool where interested stakeholders can search for IPM documents developed in the different Member States for specific crops or groups of crops. A total of 273 IPM guidelines and 1342 IPM practices are accessible.

The ambition of this visualization tool is to facilitate the disseminate the database across the EU as a source of inspiration for farmers and farmers' advisors.

#### IPM - Best practices

Browse IPM Best practices

Best practices >

#### Crop/Sector specific guidelines inventory

Browse crop/sector specific guidelines

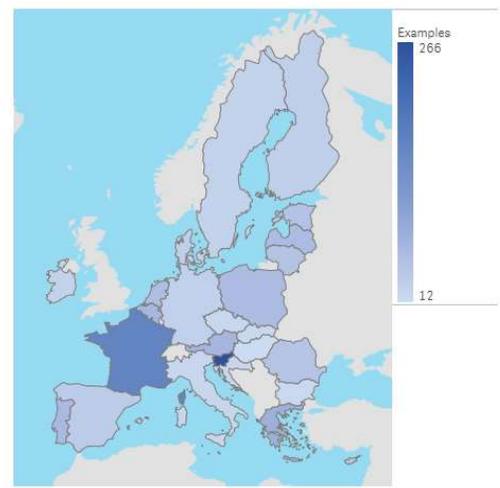
Guidelines >

# IPM best practices

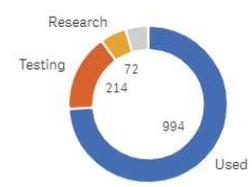
**Crop sector:**  **Implementation costs:**  **Potential economic impacts:**  **Search by title:**

Examples **1,342** Countries **26**

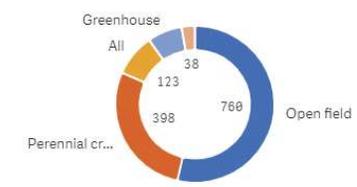
Examples by country



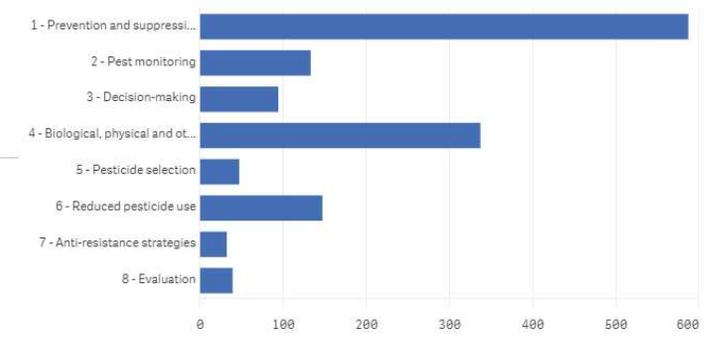
Level of development



Production type



Examples by principle



## Crop/Sector specific guidelines inventory

Can be used directly by farmers?

Used by authorities for controlling implementation of IPM by farmers?

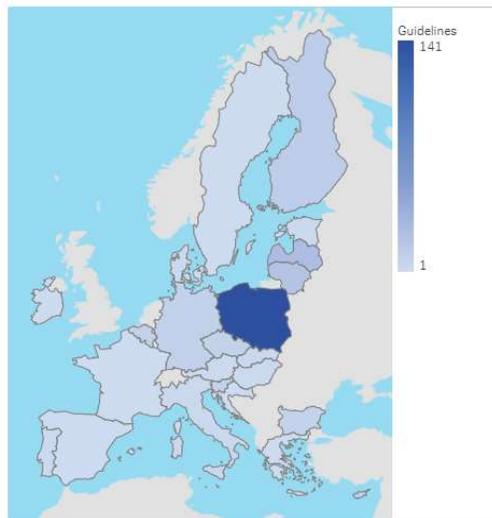
Includes obligations to be fulfilled by farmers/producers?

Geographic coverage:

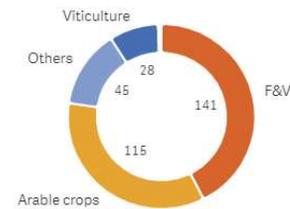
Search by title:

Guidelines  
273

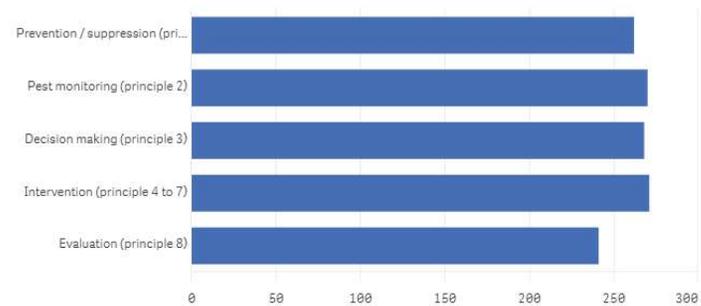
Countries  
24



Guidelines by crop coverage



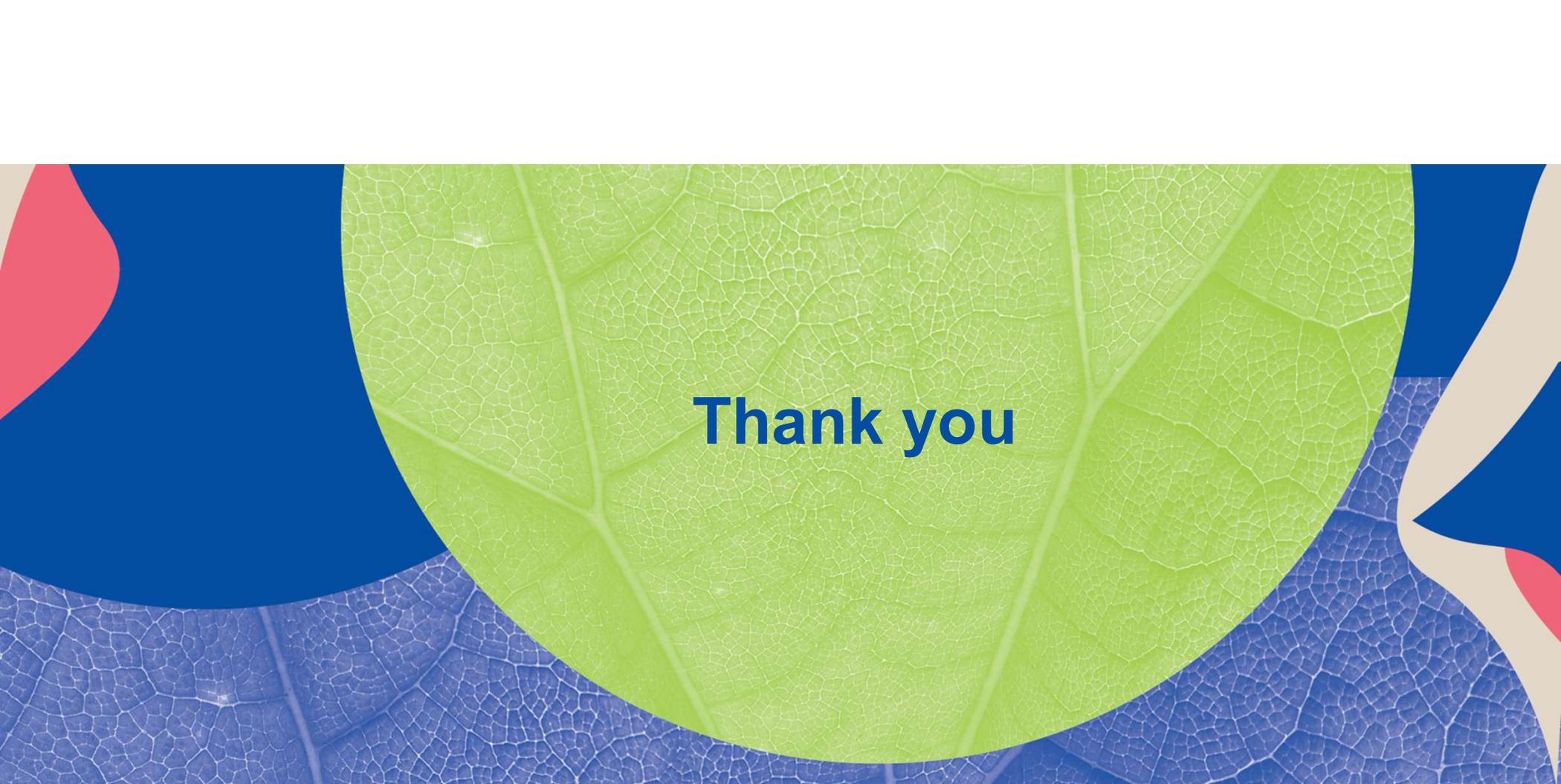
Guidelines by principle



# Database

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- The database must be considered as **an inspirational tool** and not, by far, an exhaustive tool on how to implement IPM at farm level
- The **main users** of the database should be
  - **National authorities** to develop their crop-specific guidelines/rules
  - **Farm advisors** to include the IPM approaches in their advice
  - **Farmers themselves** to take inspiration. Adapting the practices to local/regional farm and agro-climatic conditions is important: the practices are not and "out of the shelves" solutions)
  - Other **interested stakeholders** (research, NGOs, journalists, etc.) as benchmarks of IPM practices.



**Thank you**

Weblink to the Pilot Project:

[https://agriculture.ec.europa.eu/news/using-less-chemical-pesticides-european-commission-publishes-toolbox-good-practices-2023-02-28\\_en](https://agriculture.ec.europa.eu/news/using-less-chemical-pesticides-european-commission-publishes-toolbox-good-practices-2023-02-28_en)

European Union

