More sustainable use of pesticides in the EU

REDUCING PESTICIDES WITH INTEGRATED PEST MANAGEMENT (IPM)

IPM is an environmentally friendly approach to control pests, prioritising all other methods for pest control before chemical pesticides can be used as last resort. This minimises risks to human health and to the environment.

1. PREVENT
Practice good hygiene, and place physical barriers to exclude pests. Use crop rotation, resistant plants, high quality seeds, fertilisation and proper drainage for strong crops.

2. IDENTIFY/MONITOR
Monitor the field and identify pests, set up early diagnosis systems, get advice from qualified professionals.

3. EVALUATE
Assess whether identified pests are causing damage, and whether there is a need to act. Consider first non chemical controls. Chemical pesticides as last resort.

4. CONTROL
Verify effectiveness of control actions. Learn and adapt for the future.

BETTER ENFORCEMENT OF ENVIRONMENTALLY FRIENDLY PEST CONTROL

Crop specific rules
Member States have to draft crop specific rules. They have to offer practical guidance to farmers and other professional pesticide users on non-chemical methods for pest control and on low-risk pesticides.

Mandatory record keeping
Farmers and other professional pesticide users have to keep electronic records of pest monitoring, inspection, pest prevention and control actions.

Stronger enforcement
Authorities will be able to control the implementation of IPM based on the crop specific rules and the electronic records kept by each user.
ALTERNATIVES TO CHEMICAL PESTICIDES

**ALTERNATIVES AND GOOD IPM PRACTICES**

- **Cultural controls**  
  Modifying the environment to favour the crop over the pest e.g. alternating between different crops to break the pest life-cycle.

- **Mechanical and physical controls**  
  Preventing pest damage by using physical means such as barriers to prevent insects damaging plants, or by mechanical or hand weeding. Technological developments, such as robotic weeding, are making these techniques cheaper and efficient.

- **Plant breeding**  
  Plant breeding can develop crops resistant or tolerant to insect attack, avoiding the need to use chemical insecticides. Already used in mainstream farming in key arable crops.

- **New breeding techniques**  
  Offering the potential to speed up the development of new varieties and therefore to transition away from our current dependence on chemical pesticides.

- **Biological pest control**  
  The use of plant-derived extracts, micro-organisms and natural enemies to control pests. Currently, widely used in greenhouses growing fruit and vegetables to control pests like whitefly and aphids.

- **Low risk chemical alternatives**  
  Low-risk substances can also provide satisfactory pest control in some situations. The EU has expanded the range of these substances on the market. Examples include sodium hydrogen carbonate (baking soda) and calcium carbonate (limestone).

The Commission has amended the data requirements and criteria for the approval of micro-organisms (the biggest group of biological pesticides) to accelerate approval and authorisation procedures and to increase the availability of biological alternatives for farmers and other users. See Micro-organisms (europa.eu).

**Steady Increase in the number of biological and low-risk products**

![Graph showing the increase in the number of active ingredients](chart.png)

*Source: EC Pesticide Database*