



# INTEGRATED WEED MANAGEMENT (IWM)

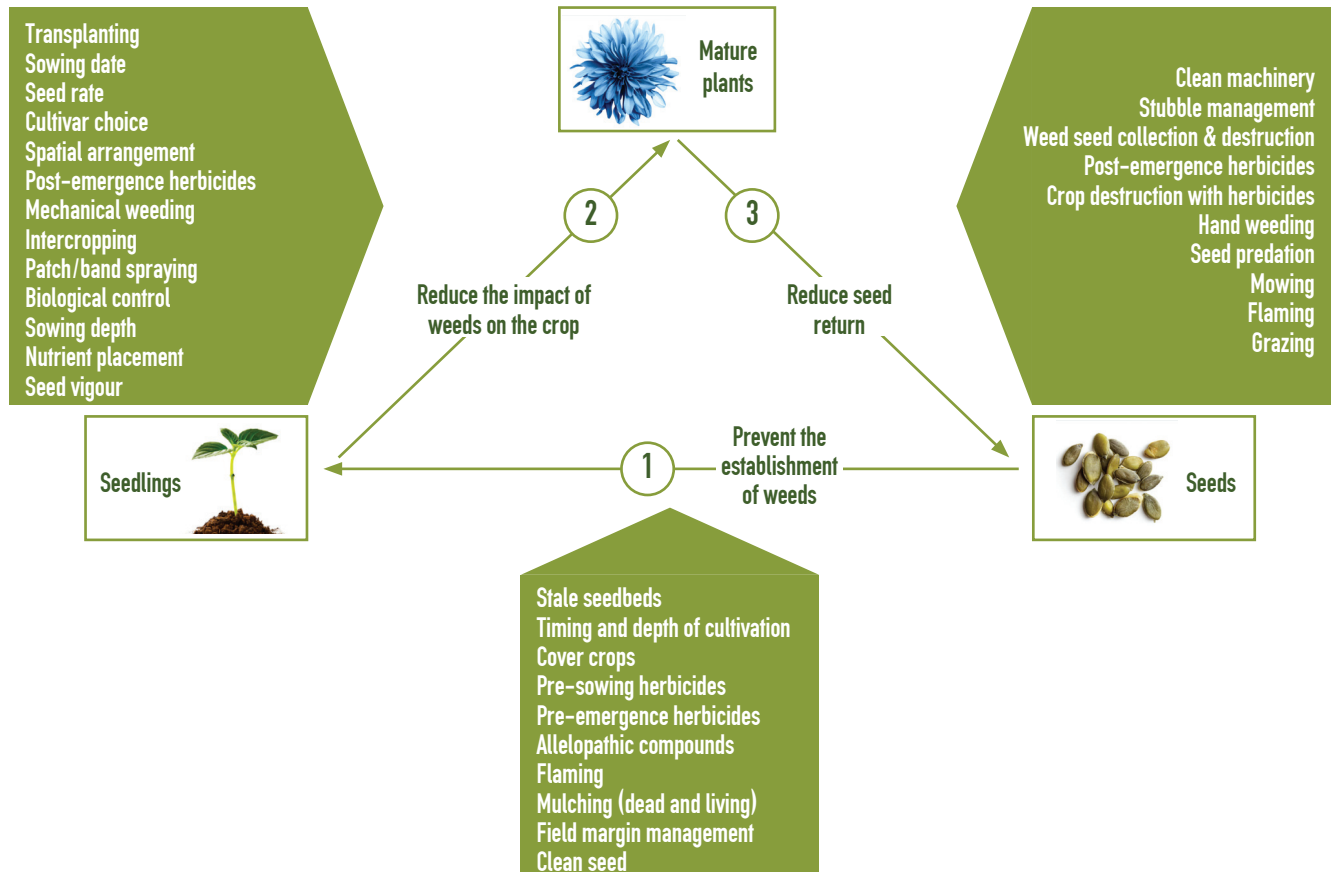
Integrated Weed Management (IWM) is a complex system approach in which many tools and tactics are combined to manage weeds. In order to support farmers in defining integrated weed management strategies we propose a framework consisting of 5 different pillars for integrated weed management. Each pillar contains a list of tactics. The tactics affect one or more parts of the weed life cycle (Figure 1) or affect the weed-crop interaction. The framework was developed based on literature review and expert interviews in participating countries.

## DID YOU KNOW?

The implementation of integrated weed management strategies using different tools and tactics can significantly reduce the use of herbicides

## SOME QUOTES FROM EXPERT INTERVIEWS PERFORMED THROUGHOUT EUROPE ABOUT THE MEANING OF IWM:

- “Using different strategies and tactics to manage weeds”
- “To know your fields and know what kind of problems there were last year. Build your plan on that experience and even better prevent that those weed problems come back again by growing crops that can control them and stabilize your soil”
- “It consists in minimizing the negative effect of weeds on the main crop with a viable agronomic management, economically profitable and preserving natural resources”
- “It implies the knowledge of the biology and ecology of weeds”
- “Use many tools at once, combination of chemical and mechanical control, prevent weeds establishment, combination of short and long term considerations”

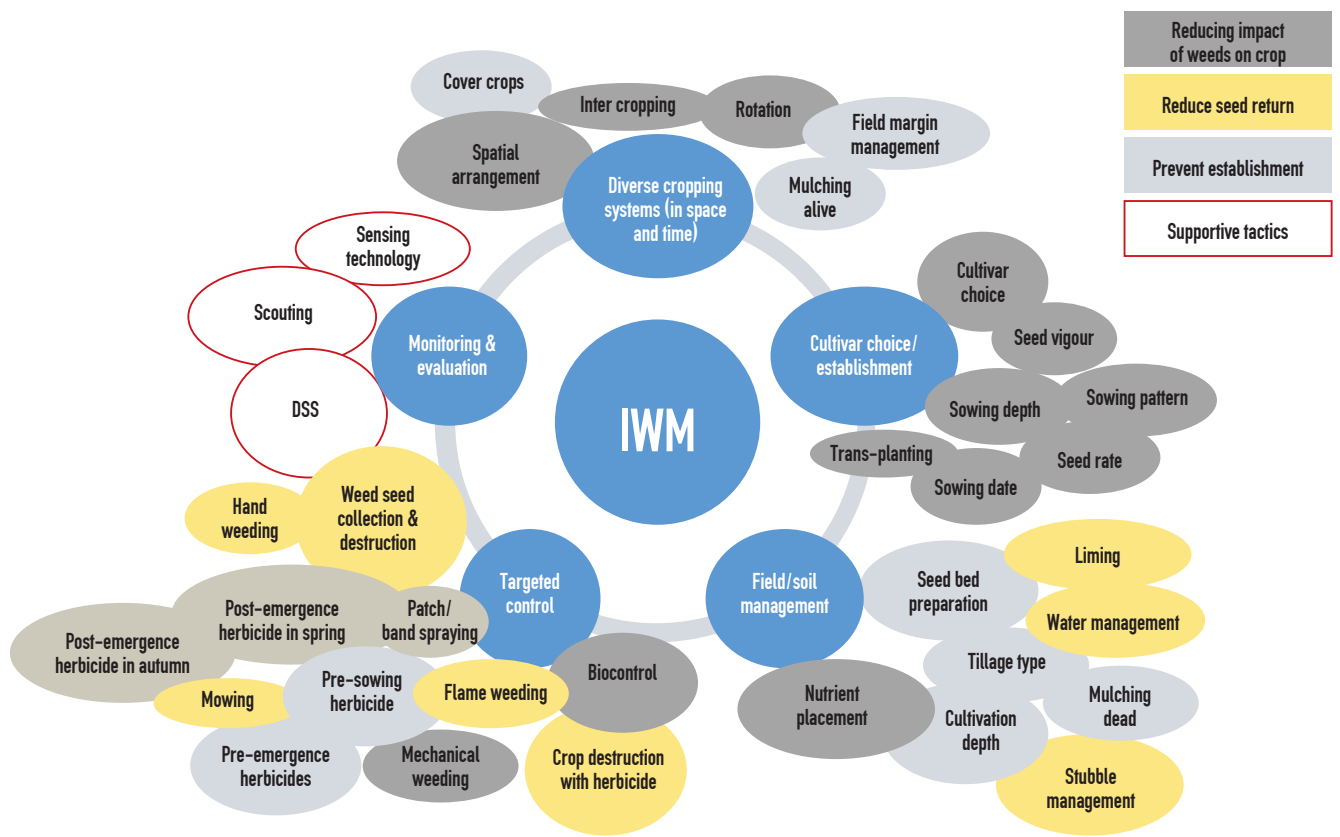


**Figure 1** – Integrated weed management tactics may affect one or more axes in the weed life cycle. They may prevent the establishment of seedlings from the seedbank (axis 1), reduce the impact established weeds have on the crop (axis 2), or reduce the weed seed/bud return to the soil (axis 3)

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### SUCCESSFUL IWM STRATEGIES WILL COMBINE TACTICS FROM ALL OR MOST OF THESE 5 PILLARS OF THE IWM FRAMEWORK (Figure 2):

1. Diverse cropping system for increased or equal crop yields or profitability compared to conventional systems
2. Cultivar choice and establishment: selecting weed-suppressive and tolerant crops
3. Field and soil management, enhancing crop growth
4. Targeted control tactics to disturb weeds life cycle
5. Monitoring & evaluation



**Figure 2** – Five pillars of Integrated Weed Management (blue) with examples of weed management tactics and the key mechanism with which the tactic contributes to reduce weed pressure in the crop

## CONTACTS



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