



## Stakeholder perceptions of the most frequently used agroecological method of weed control in arable crops in Steppic Region (Romania)

### PROBLEM

What are the most popular and effective agroecological methods for weed control in arable crops in the Steppic Region (Romania)?

### STAKEHOLDER PERCEPTIONS

Crop rotation emerges as the predominant agroecological method for weed control among farmers, with near-universal adoption. This is followed by the use of certified seed material and special sowing date with locally tested competitive varieties. Less frequently employed methods include weed maps and flame weeding, due to outdated technology for analogic weed maps and high costs associated with AI-based weed management solutions. Flame weeding is also less common in arable areas compared to vineyards and horticulture. Historically, hand weeding and high planting densities were more common but are now less favoured due to reduced precipitation and labour shortages. Methods such as narrow rows and inter-row cultivation are known but not widely used.



*Figure 1: Rapeseed fields in Steppic Region, Romania*





## RECOMMENDATION

Focus on enhancing crop rotation practices, employing certified seeds, and utilizing competitive varieties to manage weeds effectively. Incorporate minimum tillage and mulching to improve soil health and reduce weed pressure. Update and integrate technologies like weed maps and explore flame weeding where feasible. Promote ongoing education and research to support these strategies and address practical challenges faced by farmers in the Steppic Region.



*Figure 2: Soil sample from Steppic Region in Romania*

### KEYWORDS

agroecology, weed control

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