

ACROSUS AGROecological strategies for SUStainable weed management in key European crops

Stakeholder perceptions of the most frequently used agroecological method of weed control in perennial crops in Boreal Region (Estonia)

PROBLEM

What are the most effective agroecological strategies for weed management in perennial crops in the Boreal Region?

STAKEHOLDER PERCEPTIONS

Perennial farmers demonstrate a high level of awareness and adoption of agroecological practices for weed management. The most common methods include mowing (e.g., under tree canopies), organic and inorganic mulching, and planting cover crops. Mowing is well considered for controlling weeds and creating green mulch, which protects soil health. Farmers also noted that organic and inorganic mulches act as a barrier to light, reducing weed germination. Less familiar are bioherbicides and thermal weed control, which offer sustainable, non-chemical alternatives. Other stakeholders also highlighted grazing (by sheep and chickens) in organic orchards. Traditional methods (mowing, mulching) are preferred for ease and effectiveness, while newer techniques (thermal control) are more limited by the need of specialized equipment.



Figure 1: Grass mulch application at apple orchard. Photo Merrit Shanskiy

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RECOMMENDATION

For Boreal perrennial crops, an integrated approach is recommended, emphasising mowing, mulching, grazing and cover crops to sustanably manage weeds while improving soil health. Additionally, farmer training in less used and known methods (e.g., bioherbicides, thermal control), together with financial support, could further enhance the adoption of sustainable weed management practices.

KEYWORDS

weed control, crop rotation, mechanical weed management, boreal region

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