



AGROECOLOGY FOR WEEDS

www.goodhorizon.eu

AGROECOLOGICAL WEED MANAGEMENT REPOSITORY

The Agroecological Weed Management (AWM) Repository

<https://www.goodhorizon.eu/platform/awm-practices/>

is a virtual space where you can freely and openly find information and educational material on current and agroecological weed management practices in the European Union. You can browse and learn about several weed management practices and crops.

The **Agroecological Weed Management (AWM) Toolbox**, our Decision Support System that supports the user to reduce the use of synthetic herbicides and/or improve weed management by combining different Agroecological Weed Management (AWM) strategies with cover crops is LIVE !

<https://dss.goodhorizon.eu/>



#@Agroecology is GOOD

Version 2.0 – June 2026



37

DECISION SUPPORT SYSTEMS + COVER CROPS

DESCRIPTION & BENEFITS

Decision Support Systems + cover crops combines digital tools, models, field data or advisory platforms with cover crop management. DSS can help farmers choose suitable cover crop species or mixtures, plan sowing and termination dates, estimate weed suppression potential, assess risks for the following crop and support integrated weed management decisions. This combination can:

- **improve cover crop selection** according to climate, soil, rotation and weed pressure
- **support better timing of sowing and termination**
- **reduce reliance** on trial-and-error decisions
- **improve** weed monitoring and field records

STRENGTHS

- Improves decision-making by matching cover crop species, sowing dates and termination strategies to local weed pressure, soil conditions, climate and rotation
- Supports more preventive weed management by helping farmers plan cover crops before weed problems become severe
- Improves monitoring and learning over time by linking cover crop performance, weed suppression, management records and crop outcomes

OPPORTUNITIES

- Could increase adoption of cover crops by giving farmers clearer guidance on species choice, management timing and expected weed suppression benefits
- Integration with remote sensing, weed mapping, weather data and precision agriculture tools can improve targeted and adaptive AWM planning
- Could support pesticide-reduction goals by improving the reliability of cover crops within integrated weed management programmes

WEAKNESSES

- Requires accurate field data, weed identification, user input and regular updates; poor or incomplete data can lead to weak recommendations
- Availability and quality of DSS tools may vary by country, crop, language, region and farming system
- Cover crop performance remains variable even with DSS support because biomass, establishment and weed suppression depend on weather and field conditions

THREATS

- Over-reliance on DSS outputs without field scouting may lead to poor decisions if local weed pressure, weather or crop conditions are not correctly represented
- Limited digital skills, lack of internet access, subscription costs or low trust in advisory tools may limit farmer adoption
- Inaccurate models, outdated databases or recommendations not adapted to local conditions may reduce effectiveness and farmer confidence

TIPS

- use DSS together with field scouting and local agronomic knowledge, not as a replacement for farmer observation
- enter accurate information on soil type, crop rotation, weed species, sowing date, climate and management objectives
- choose cover crop species or mixtures that fit the available growing window and target weed problems
- use DSS outputs to plan sowing, termination and follow-up weed control
- update decisions with field observations, weather conditions and crop performance
- keep records of weed pressure, cover crop biomass, termination success and cash crop yield to improve future recommendations
- combine DSS-supported cover crops with other AWM practices

LIABILITY DISCLAIMER

This is the second version of the AWM repository released in April 2026. While every effort has been made to ensure the accuracy and reliability of the information provided in this factsheet, we make no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability, or availability of the information contained herein for any purpose. Any reliance you place on such information is therefore strictly at your own risk. In no event will we be liable for any loss or damage, including without limitation, indirect or consequential loss or damage, or any loss or damage whatsoever arising from loss of data or profits arising out of, or in connection with, the use of this factsheet.