



Bio4Ag

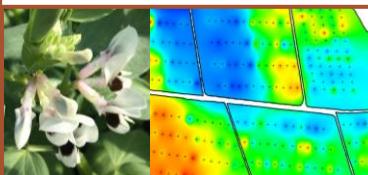
A toolbox for farmers



Enhance biodiversity to increase pollination and natural control of crop pests and diseases, reducing reliance on crop protection inputs to maintain yield.



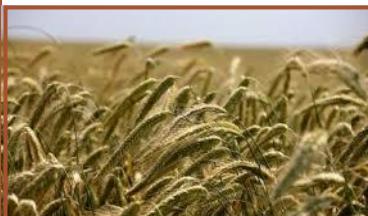
Improve soil health to promote faster decomposition rates, nutrient cycling and uptake of resources by crops, plus lower rates of erosion, leaching and runoff.



Manage nutrients to minimise fertiliser inputs using legumes for Biological Nitrogen Fixation and Soil Nitrogen Supply to calculate crop fertiliser requirement.



Reduce losses by incorporating Nature Based Solutions in field margins for managing erosion, runoff and flood risk



Maintain crop productivity by applying a whole-systems approach to optimise production efficiency with reduced agrochemical inputs, maintaining yields with lower environmental impact.

A SEFARI Gateway Innovative Knowledge Exchange project in collaboration and co-developed with



Bio4Ag

A toolbox for farmers

A free, open-source, interactive toolbox for growers and policy makers interested in low impact, biodiversity-based solutions for sustainable crop production

- Design your own system to optimise biodiversity and soil health for multiple environmental and economic benefits.
- Explore how management options affect sustainability outcomes via agroecological networks.
- Review evidence for long-term impacts on soil health, biodiversity and crop yields.
- www.Bio4Ag.hutton.ac.uk live from April 2026



SEFARI

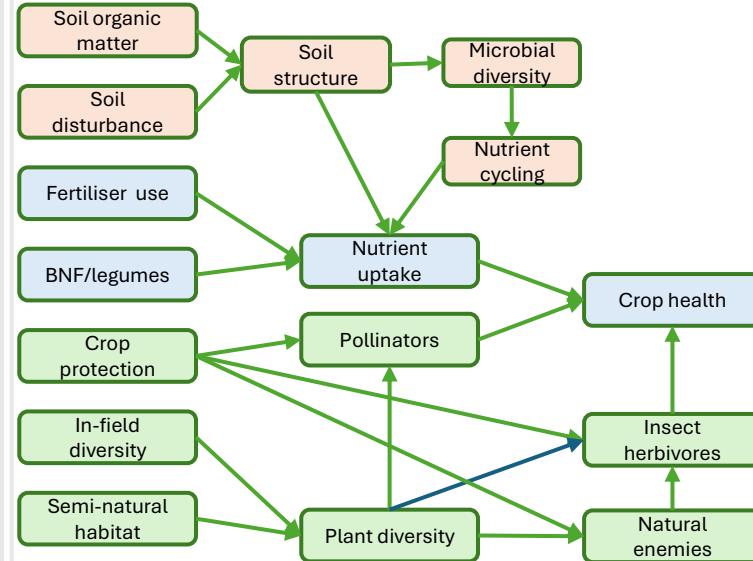
Contact: Cathy.Hawes@hutton.ac.uk



Management

Soil management	<input type="checkbox"/> Compost <input type="checkbox"/> Crop residue <input type="checkbox"/> Direct drill <input type="checkbox"/> Plough
Nutrient management	<input type="checkbox"/> Soil testing <input type="checkbox"/> Precision spray <input type="checkbox"/> Legume crops <input type="checkbox"/> Cover crops <input type="checkbox"/> Companion crops
Integrated Pest Management	<input type="checkbox"/> Forecasting <input type="checkbox"/> Thresholds <input type="checkbox"/> Biocontrol <input type="checkbox"/> Biofortification
Biodiversity management	<input type="checkbox"/> Targeted weed control <input type="checkbox"/> Weedy stubbles <input type="checkbox"/> Diverse field margins

Agroecological impact



Outputs

Biodiversity



Carbon footprint



Pollution



Productivity



- Bespoke system design based on a check-list of best practice management options, a resource library of technical notes and an interactive network to explore consequences of management choices.
- Data dashboards on indicators providing experimental evidence from the Centre for Sustainable Cropping for long-term impacts on yield, biodiversity and soil.
- User friendly methods for monitoring baselines and recording progress towards management goals.
- Guidance on rare arable species and conservation opportunities.