



REDUCING THREATS TO SOIL BIODIVERSITY

The EU Thematic Strategy for Soil Protection encourages the sustainable use of soil.



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To minimize threats to soil biodiversity, the Strategy proposes:

Increased organic matter content: Regular additions of organic matter improves soil structure, enhances water and nutrient holding capacity, protects soil from erosion and compaction and support a healthy community of soil organisms. Practices such as leaving crop residues in the field, crop rotations that include high residue plants, applying compost and low or no tillage systems increase organic matter content.

Reduce tillage: Less ploughing reduces the loss of organic matter and protects the soil surface with plant cover. Tillage breaks up soil structure, destroys the habitat of soil organisms while increasing decomposition rates, the loss of organic matter and the threat of erosion.

Limit agro-chemicals: Pesticides and chemical fertilizers have valuable benefits but can harm soil organisms. Even nutrients from organic sources can pollute when mis- or over-applied. Non-chemical approaches to pest and nutrient management are increasingly used.

Prevent soil compaction: Compaction of the soil by repeated traffic, heavy machinery, or travelling on wet soil reduces the amount of air, water, and space available to roots and soil organisms. As remediation is difficult or impossible, prevention is essential.

Minimise the risk of erosion: Bare soil is susceptible to wind and water erosion, drying and crusting. Vegetation protects soil, provides habitats for soil organisms and can improve water availability. The soil can be protected by leaving crop residue on the surface or by planting cover crops. In addition to ground cover, living cover crops provide additional organic matter, and continuous cover and food for soil organisms.