



Organic - part of the solution!

SOIL: the living resource under our feet

Soil is the basic prerequisite for all agricultural activity and one of the most important natural resources. Since it is also a non-renewable resource, the prevention of further decline in European soils is an urgent matter. Already, an estimated 45% of soils in Europe suffer from depleted organic matter. Organic farming practices protect soil from contamination, compaction, sealing and erosion.

Organic farming keeps soils healthy

Because healthy soil is at the core of successful organic farming, many organic practices are designed to promote it, such as multi-stage crop rotations; the return of organic matter to the soil in the form of animal manure, compost or crop residues; and year-round soil coverage with intertillage, undersown crops or perennial forage. These practices increase Soil Organic Carbon (SOC) and promote soil biological activity, with benefits for soil structure. Thus, soils under organic management show the following characteristics:

- **Erosion control:** high SOC improves soil aggregation, creating a more stable structure that reduces vulnerability to wind and water erosion.
- **Flood control and drought tolerance:** organically managed soils are less compacted and therefore allow better infiltration and retention of rainwater.
- **Reduced soil acidification:** NH₃ (ammonia) emissions from mineral and organic fertilisers cause the acidification of soils, negatively affecting soil life and plant nutrient availability. The NH₃ emissions from organic farming are lower than those from conventional farming due to reduced fertiliser use, lower stocking density of animals, and the choice of a straw-based barn system.
- **Higher biodiversity:** organic soils are a paradise for earth worms, insects and spiders which feed on organic matter, turning and aerating the soil to create favourable conditions for microorganisms (bacteria, fungi and algae).
- **Improved soil fertility:** not only do organically managed soils have high SOC, but their biological activity makes more nutrients available to plants, increasing productive potential.
- **CO₂ sequestration:** soil microorganisms create humus from organic matter added to the soil; humified organic matter is stable (large, complex molecules which cannot be broken down by larger soil animals), and therefore represents a long-term store of carbon.

EU policies must ensure sustainable soil management

The European Commission has identified soil degradation as a serious problem for Europe, a leading cause of which is poor agricultural and forestry practices. Following from this, the Commission published a communication on soil protection and proposed a Soil Framework Directive in 2006.

IFOAM EU Group urges the EU to adopt a Soil Framework Directive setting minimum soil protection standards and ensuring that all EU Member States establish national soil protection policies. Meanwhile, supporting organic agriculture will help to conserve Europe's soils and secure the sustainability of our food production systems.