

Avoid compaction, promote soil life



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Soil compaction reduces soil pores, which store water, nutrients, and air, leaving soil organisms and plant roots without essential resources.

How to counteract soil compaction

- Use equipment appropriately: Flat working passes, lower machine weights, and wider or dual tyres reduce soil pressure and depth of impact.
- Consider the weather: Avoid soil disturbance during wet conditions, when soil is easily damaged. In dry or cold weather, earthworms retreat deeper into the soil and are less affected from disturbance.
- Minimise tillage depth: Shallower tillage is gentler on soil organisms. Harrows can often replace ploughs depending on soil type.
- Choose soil-conserving sowing methods: Mulch, direct, or strip sowing limits soil disturbance. Leaving harvest residues on the surface protects against rain and heat, suppresses weeds, and reduces herbicide use.
- Use precision farming: GPS steering systems enable consistent track use over multiple years. Sensors allow precise, targeted application of fertilisers and pesticides, cutting the number of passes needed.



Photo credit: Theres Rutz

Support soil functions

Healthy, fertile soil depends on abundant soil organisms. Avoiding deep ploughing and intensive cultivation protects soil structure, preserves humus, and improves bearing capacity, erosion protection, and water balance.

Even small steps make a difference, reducing ploughing depth, for instance, is low-effort and low-risk, yet meaningfully improves soil life and fertility.

Further Information on farmbionet.eu

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