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No-Till Seeding – Protecting Soil for the Long Term

About No-Till Seeding

This story follows a 39-year-old farmer from the Hanover region who has been practicing no-till farming on her 130-hectare farm since 2018. By eliminating plowing and using direct seeding, she preserves soil structure, reduces erosion, and supports long-term soil fertility. She combines innovation with careful planning and shares her work online through websites and Instagram, including direct sales of her produce, demonstrating how sustainable farming can be both practical and economically viable.

The Challenge

No-till cultivation comes with several challenges:

-Catch crop management: Sowing a catch crop immediately after harvesting is essential to maintain soil cover.

-Soil preparation: without plowing, glyphosate is often required once to prepare the soil surface, raising ecological and social concerns.

-Organizational demands: rapid succession of harvesting and sowing requires careful planning and precision.

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This is important because no-till farming significantly preserves soil structure, increases soil fertility, and reduces wind and water erosion, safeguarding arable land for future generations.

THE SOLUTION

The farmer tackled these challenges through a combination of techniques:
-Consistent no-till method: sowing directly into the soil without plowing.
-Controlled glyphosate use: a single application to prepare the soil for the catch crop.
-Specialized equipment: using or renting no-till drills, sometimes through service providers.
-Diverse crop rotation: maintaining soil health and fertility over the long term.
-Patience and continuity: recognizing that no-till benefits accumulate gradually.

IMPACT AND RESULTS

No-till farming has produced measurable ecological and economic benefits:
-Improved soil structure and increased soil life activity.
-Reduced erosion: permanent soil cover protects against wind and water damage.
-Economic savings: lower diesel use, reduced machine wear, and less working time.
-Stable yields: no short-term yield losses; long-term yields are expected to be more consistent.
-Environmental trade-offs: higher mouse populations require management, and glyphosate use remains a topic of discussion.

No-till farming requires patience, careful planning, and persistence, but with consistent practice, it can deliver long-term soil health, stable yields, and sustainable agricultural benefits.

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