

Agricultural friendly management in Estonia - reduced tillage

Reduced (minimum) tillage is a tillage method that does not turn the soil over. Usually, only the upper 10-18 cm of the soil surface is tilled.



The technology was implemented in Estonia less than 10 years ago.

In Estonia 2/3 of cereals is cultivated by minimum tillage technology.

Depth of the soil preparation before:

cereals 10-12 cm

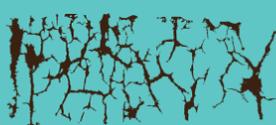


oilseed rape 15-18 cm

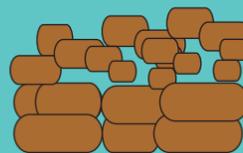


The main goal is to:

maintain soil structure



reduce compaction



improve water infiltration



reduce fuel and labour costs

the labour cost for a driver is 15-18 EUR/ha
the use of fuel is ca 38% less



Less disturbance in deeper layers increases number of:

earthworms



species diversity



The reduced tillage is more suitable for crop rotations without root crops

winter oilseed rape ● winter wheat ● pea (or bean) ●

winter wheat ● spring barley undersown with red clover ● red clover