



# Conservation tillage effects on soil health in maize production

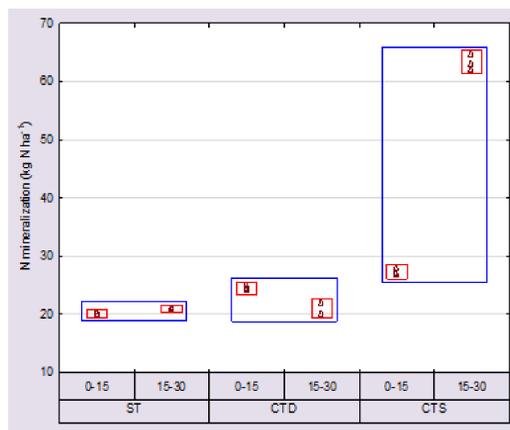
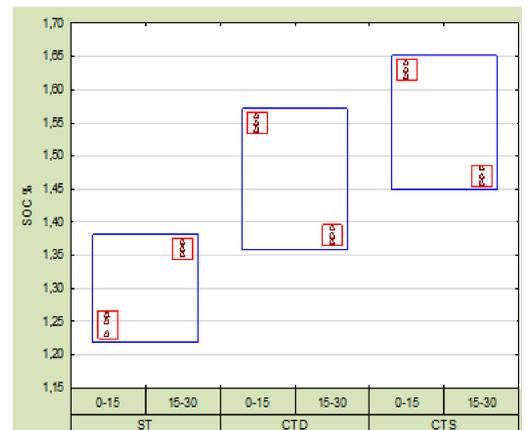
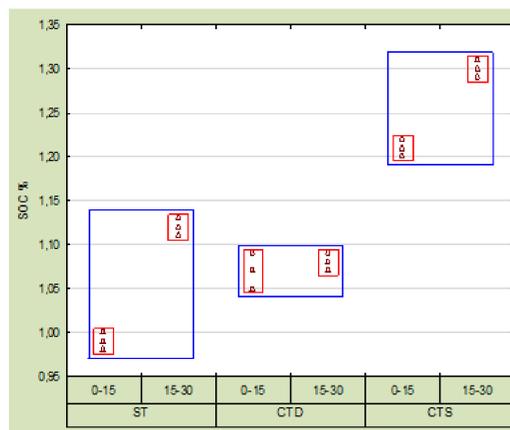
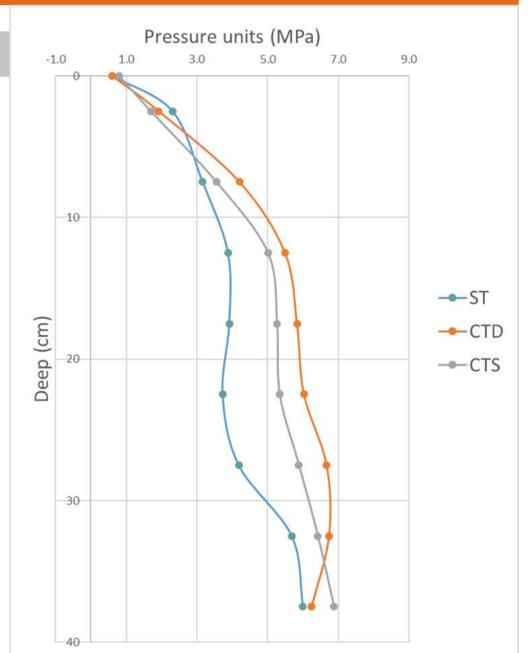
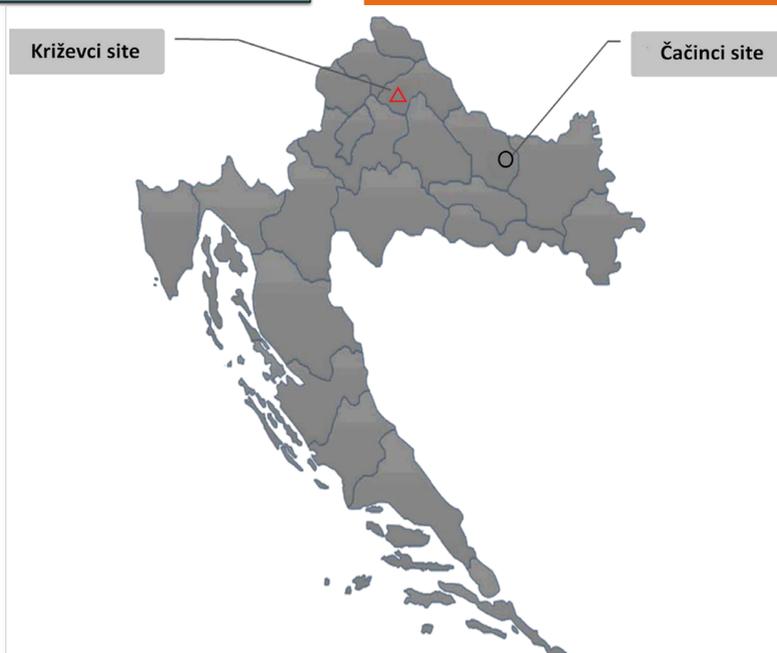
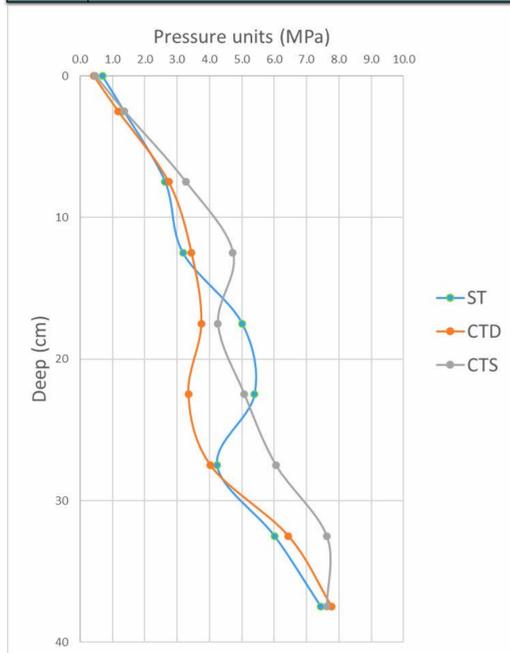


Irena Jug, Boris Đurđević, Bojana Brozović, Vesna Vukadinović,  
Ante Bubalo, Domagoj Veseli, Danijel Jug

Faculty of Agrobiotechnical Sciences Osijek, University of Josip Juraj Strossmayer in Osijek, Vladimira Preloga  
1, Osijek, Croatia (ijug@fazos.hr)

<b>ST</b>	Standard tillage deep mouldboard ploughing
<b>CTD</b>	Conservation tillage deep (chiseling with minimum 30% of surface covered with plant residues)
<b>CTS</b>	Conservation tillage shallow tillage up to 10 cm and minimum 50% of surface covered with plant residues

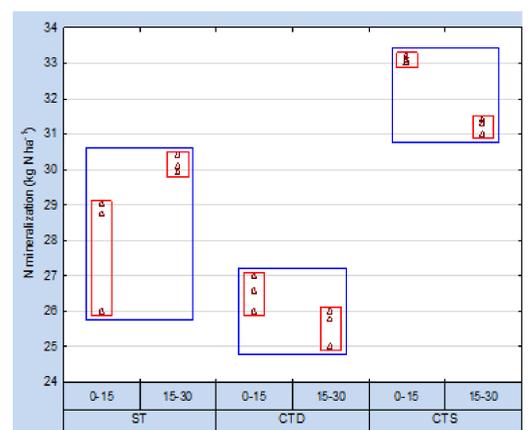
CT is prescribed to prevent and protect soil from degradation processes. Conservation tillage methods improve soil health and productivity, reduce runoff, increase soil carbon sequestration and limit the extent of erosion and also promote certain economic and environmental benefits as decrease in carbon dioxide and greenhouse gas emissions, less reliance on farm machinery and equipment, and an overall reduction in fuel and labor costs.



<http://www.activesoil.eu/>



After the first year of research, a large heterogeneity of the researched parameters between the tillage treatments was recorded



Compared to conventional agriculture, conservational tillage shows many advantages, of which the most important are the prevention of further soil degradation and restoring soil properties. Obtained results shows that the conservational tillage system is much more beneficial than the conventional one.

