



THE IMPACT OF MECHANIZATION TECHNOLOGIES ON SOIL

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Abstract

The mechanization technologies of soil works have a major impact on physical state of soil. This situation is generated by the mechanical action of working parts which are involved in soil works and by the traffic of running systems of tractors and agricultural machines.

These mechanization technologies have been tested to determine which of them correspond to the highest degree of sustainable agriculture concept and ensure protection, preservation and improvement of agricultural lands. The testing results of mechanization technologies for soil works variants which include a wide spectrum of conservative and unconventional works, performed with appropriate equipment, were compared both between them and also with witness variant which involved the classical and conventional technologies for soil processing.

In the variants of selected mechanization technologies, the soil works are reduced even up to their total disappearance. This is the situation of directly sowing into the stubble, in unploughed or untillage soil.

Key words: mechanization technologies, protection, soil structure, sustainable agriculture

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