Arable layer agro-physical properties indexing in a long-term soil management systems in Lithuania

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The goals of this paper – to investigate changes of physical soil properties within arable layer of the Endocalcari Epihypogleyic Cambisol under different soil management systems and to evaluate the agro-physical soil quality according to Amacher, O'Neill ir Perry scheme. Traditional, reduced and no-tillage (direct drilling) systems have been investigated for 9 successive years. It was revealed that the best (highest) agro-physical Soil Quality Index (SQI physical) within 0-20 cm soil layer was determined to be by managing conventional tillage system.