



## Global warming is forcing urgent changes in farming systems of Moldova

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One of the severest droughts was noticed in Moldova in 2007. The yields of winter cereal crops have been determined by the stocks of soil moisture to the optimal terms of their sowing. The yields of winter wheat after early harvested predecessors consisted 4,5-5,14 t/ha, but after late harvested predecessors only 2,5 t/ha. In order to decrease the negative influence of "green house effect" the whole farming system in drought conditions should be directed both to efficient water management and to carbon sequestration. The data obtained during 45 years in the long-term experiment with different crop rotations in monoculture of corn and winter wheat, in continuous black fallow and meadow proved the real possibilities to influence on soil fertility by influencing carbon sequestration. The best system for management of soil organic matter allows to increase carbon sequestration and to improve soil fertility.