

CARBON DIOXIDE EQUIVALENT EMISSION LOAD WITHIN PRODUCTION AND PROCESSING OF WHEAT UNDER CONDITIONS OF ORGANIC AND CONVENTIONAL FARMING SYSTEMS

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Abstract

The achieved results proved, that the conventional wheat production release the CO^{2e} amount of 0, 5581 kg into the air compared to 0, 4624 kg of CO^{2e} produced by organic wheat. Higher amount of emission reached within conventional farming is primarily contributed to high volume of CO² emission released from easily dissolving conventional nitrogen fertilizers. An evident difference in emission load and greenhouse gases production is reached within flour production as well. It is 12% (0,5855 kg CO^{2e}) lower when the organic flour is produced compared to the conventionally produced flour (0,6664 kg CO^{2e}). Also transport plays an important role as far as the emission production is concerned. It has been proved, that regional transport (distance up to 50 km) contributes to the release of CO^{2e} by 0,0137 kg compared to super-regional transport (distance up to 400 km) producing the CO^{2e} amount of 0,1094 kg. Based on the achieved results it is evident, that the environmental load is affected by the farming system applied and observance of the principles of regional activity as well.

Key words: CO^{2e}, wheat, processing, organic farming

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