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INFLUENCE OF FARMING SYSTEM ON GREENHOUSE GAS EMISSIONS WITHIN CEREAL CULTIVATION

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Abstract

The emissions of greenhouse gases (GHG) from anthropogenic activities have still been a topical and much-discussed issue. In farming, room for reducing GHG emissions may also be available in crop farming. The measures aimed at the mitigation of GHG emissions may include a change in the farming system or partial switch to more extensive farming methods, including organic farming. The life cycle of oat, rye, wheat and spelt wheat cultivation in conventional and organic farming systems in the conditions of Central Europe was evaluated by LCA method, impact category: climate. The results clearly show that there are considerable differences between conventional and organic farming systems in individual subcategories of the farm phase of the production of cereals. The CO_2e emissions produced in the cultivation of the monitored cereals are lower in organic farming systems, both when converted to an area unit and when converted to a production unit.

Key words: cereals, emissions, greenhouse gases, LCA, organic farming

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