

**POTENTIAL NITRIFICATION AND DENITRIFICATION OF AUTOMORPHIC AND
HALF-HYDROMORPHIC SPODOSOLS**

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The soils formed at different parts of meso-relief of a single agricultural field were studied for potential nitrification and denitrification. Quantitative contributions of each of the processes to the N₂O emission from the soils were studied in a laboratory experiment with disturbed soil samples.

It was found that nitrification was responsible for 3–15%, while denitrification resulted in 85–97% of the total N₂O emission from the studied soils.

Key words: nitrous oxide, nitrification, denitrification, meso-relief, automorphic and half-hydromorphic soils.