

ANALYSIS OF QUANTITATIVE C-13 AND N-15 CPMAS NMR-SPECTRA
OF SOIL ORGANIC MATTER AND COMPOSTS.

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Sensitivity in C-13-CPMAS experiments could be enhanced by optimizing the durations in the CP-pulse-sequence. For this the relevant relaxation-times in soil organic matter were measured. The enhancement was sufficient to measure native soils with a carbon content of about 1% in 12 hours.

C-13-CPMAS spectra of different soils are discussed with regard to the significance of other soil science aspects.

NMR spectra of composts from N-15 enriched plants provide information concerning the nitrogen distribution during the composting process. First results from N-15 CPMAS spectra of soil extracts are given.