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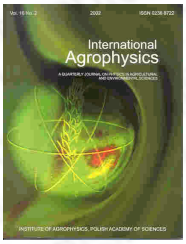

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Magnetic and mineralogical properties of different granulometric fractions in the soils of the Lublin Upland Region

(get PDF)

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abstract The magnetic and mineralogical properties of 5 selected soil granulometric fractions from A and B horizons of Orthic Luvisol, Eutric Cambisol, Haplic Phaeozem and Dystric Cambisol were investigated. The magnetic susceptibilities determined (MS) of consecutive fractions are in the range 5×10-8 - 70×10-8 m3 kg-1; they vary between 5×10-8 and 30×10-8 m3 kg-1 for brown soils and between 15×10-8 and 70×10-8 m3 kg-1 for degraded chernozem. Differences in the distribution of MS in fractions taken from A and B horizons reflect peculiarities of the soil forming processes and are connected with soil typology. Relationships between chemical and physical properties and transformation of mineral composition of the soil fractions are discussed.

keywords magnetic susceptibility, mineralogical com- position, soil granulometric fraction