



International Agrophysics

Polish Journal of Soil Science

Acta Agrophysica

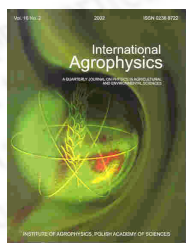
Instytut Agrofizyki

International Agrophysics

General information

Issues

Search



International Agrophysics

publisher: Institute of Agrophysics
Polish Academy of Sciences
Lublin, Poland

ISSN: 0236-8722

vol. 22, nr. 3 (2008)

[previous paper](#) [back to paper's list](#) [next paper](#)

Relationship between van Genuchten's parameters of the retention curve equation and physical properties of soil solid phase

([get PDF](#) )

D. Porębska, C. Sławiński, K. Lamorski, R.T. Walczak

Institute of Agrophysics, Polish Academy of Sciences, Doświadczalna 4, P.O. Box 201, 20-290 Lublin 27, Poland

vol. 20 (2006), nr. 2, pp. 153-159

abstract Van Genuchten parameters were determined for 24 Phaeozems and 54 Gleysols samples taken from surface, subsurface and subsoil horizons. No evident dependences between van Genuchten's parameters and the physical properties of Phaeozems soil samples were observed, which was due to a similar genesis and similar properties of soil solid phase. Analysis of Gleysols, on the other hand, revealed dependences between the physical soil properties and van Genuchten's parameters resulting from different geneses of these soils and, hence, different physical properties of soil solid phase. The obtained results should be considered as preliminary and further studies on a larger number of soil samples are planned.

keywords water retention curve, van Genuchten's parameters, pedotransfer functions

Instytut Agrofizyki PAN
ul. Doświadczalna 4
20-290 Lublin

e-mail: sekretariat@ipan.lublin.pl
tel.: +48817445061
fax.: +48817445067