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## **MATHEMATICAL MODELLING OF WATER MIGRATION TIME IN SOIL**

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### **Abstract**

This paper proposes a tridimensional mathematical model for water migration time in a soil sample, as a prerequisite for the study of migration of various liquid pollutants in soil. The variables taken into consideration were measurement position, soil type, porosity and the height of soil column. The mathematical models were elaborated and tested based on experimental data, assisted by TableCurve 3D software for generating linear and non-linear equations. The proposed mathematical models offer a reliable method for determining water migration time in various soil samples, with future focus on other liquids migration ability.

*Key words:* water, mathematical modelling, migration, porosity, soil

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