



Soil Moisture Distribution over Soil Profile in a Typical Soil of Field of Kosovo

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Abstract: Studying the profile of soil moisture over the soil profile is the object of the presented study. The way the soil moisture gets distributed over soil profile depends particularly on the soil texture and on the soil suction gradients developed. The method of determining the soil moisture profile (distribution) is based on the measuring of soil moisture suctions developed over soil profile when the soil water flow is already ceased, in the conditions of preventing the evaporation. Therefore, to determine the soil moisture distribution over the soil profile a plot of 8m x 6m or 48 m² with no plants was set. The tensiometers and other the electronic devices for soil moisture content measurements were installed in different soil depths and in various distances within the plot. The plot was previously wetted and covered by a plastic to prevent the evaporation. In this way, it was made sure that the only possibility for water is to move internally, which gave us the opportunity to measure the changes in soil water content and in soil water suction continuously. The final result showed that the dependency of soil water potential on the soil depth (soil water profile over soil profile or depth) is represented by straight lines of the general expression as $H_m = a + b \cdot z$, where H_m is the soil water suction, z is the soil depth.

Keywords: *soil moisture content, soil suction, unsaturated soil, water flow, preventing evaporation, internal drainage*
