

EXPERIMENT – SOIL POROSITY FOR WATER

Instructions for the execution of the experiment:

(note: The experiment may be executed as a demonstration, or even better in groups of two or three students. For group work we must prepare an adequate number of samples.)

For the execution of the experiment we need:

- 4 funnels,
- 8 cups with scales labelled in *ml*,
- filter paper,
- stopwatch,
- soil samples (100 g or 100 ml),
- distilled water.

We place the filter paper into the funnels. We put the soil samples on the filter paper. The soil samples must not be overly compressed. We put the funnel containing the sample into a cup or we hold it over a cup so that water will leak into it. We pour distilled water into another cup. We label or note the amount of water in the cup.

We slowly pour the water from the cup into the funnel. We must make sure we slowly moisten the soil, because if we pour the water too quickly, we will not get accurate results. When we start pouring the water we start the stopwatch. When water begins running from the soil we stop pouring it in.

When water stops running into the cup we compare the amounts of the poured and the drained water and we compare the results.