Test of possible standard samples for soil physical analyses

Aurore Degré, Alexandre Pomes-Bordedebat, and Imène Belazereg
Univ. Liège, GxABT, Gembloux Agro-Bio Tech, Soil - Water Systems, Gembloux, Belgium (aurore.degre@uliege.be)

As they mostly deal with undisturbed samples, soil hydrophysics analyses often present variability in their results. No one can deny that soil, and particularly structured soil, is a very complex and challenging media to describe. But it remains that the lab measurements themselves deserve attention. To what extent are they reproducible? To what extent different labs following the same protocol do they provide the same results for a given soil sample? Is this uncertainty quantifiable? Is there a way to standardize or harmonize the analyses? And of course, to what extent does it really matter when it comes to produce reliable information about i.e. drought consequences?

When most of the labs related to chemical analyses can rely on ring tests to improve their capacity, soil physics labs can’t. Building reference samples that could fit into classical measurement devices is one of the options that could allow to run ring tests in soil physics measurements.

The poster will present an attempt to develop reference samples in view to measure the wet end of the retention curve.