SoilInfo App: soil data anywhere anytime
An App for mobile devices that serves soil information across borders

ISRIC
World Soil Information

What is SoilInfo App?

SoilInfo is an App for mobile devices that allows anyone in the world to access predictions of soil properties and classes (SoilGrids1km layers) in a simple format i.e. as soil profile depth curve plots or tabular summaries. The main idea of SoilInfo is to allow access to standard soil properties directly on the field. The only requirement is that a user has a GPS enabled mobile device and an Android or IPhone operating system.
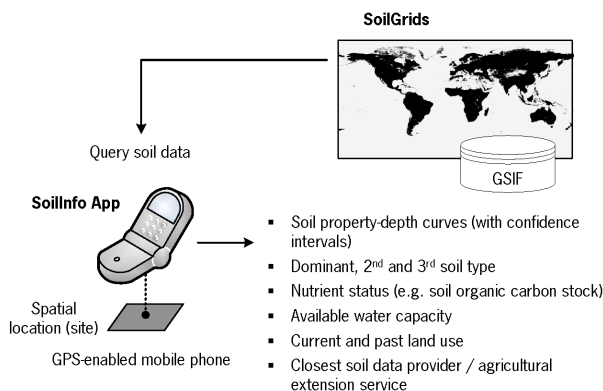

Fig. 1: SoilInfo App scheme.

SoilInfo has been inspired by the SoilWeb App developed by Dylan Beaudette and used in USA to query NRCS produced soil (spatial) data products. It has also been inspired by large crowd-sourcing projects such as Wikipedia and OpenStreetMap. SoilInfo is the last component of the **Global Soil Information Facilities** (GSIF) developed at ISRIC to facilitate automated soil mapping.

Available data

- Soil pH (measured in H_2O);
- Soil organic carbon;
- Soil texture fractions (sand, silt, clay);
- Coarse fragments;
- Bulk density;
- Soil type according to the WRB and KST classification systems and similar.

Who is it for?

Because the current spatial prediction framework focuses on producing soil information at coarse scale of 1 km, SoilInfo App is probably of limited use to farmers and agricultural extension services, however this might change as the new versions of SoilGrids data are produced. Consider contributing to this crowd-sourcing project and help us improve these data!
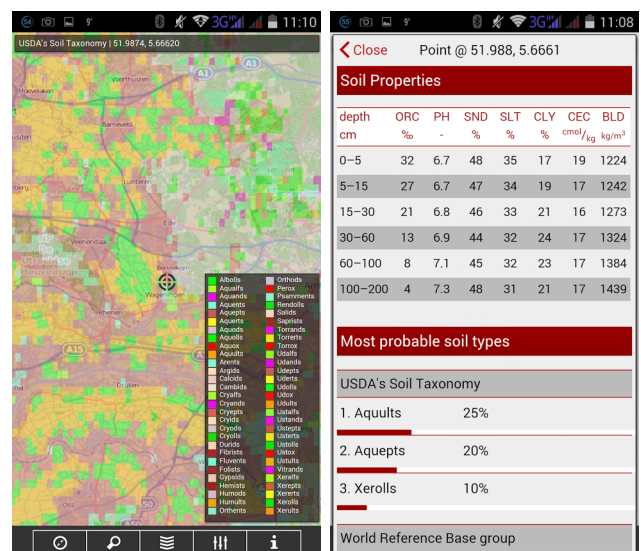

Fig. 2: A preview of the SoilInfo App (user interface).

In addition, SoilInfo serves not only predicted values for the basic soil properties, but also the 90% confidence intervals for each prediction. This allows any spatial modeller to incorporate the uncertainty information about soil properties to further scenario testing and decision making.

How much does it cost?

SoilInfo App uses functionality of various Open Source software and serves data published under one of the Creative Commons licenses and hence is free. It is however a system based on crowd-sourcing, so if you discover any discrepancy between the values obtained via SoilInfo and what you observe on the field, please help us improve this system!

WAGENINGEN UR
For quality of life

ISRIC – World Soil Information has a strategic association with Wageningen UR (University & Research centre)