

Correlation of Georgia's Soil with World Reference Base Groups

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In today's world - one of the most popular classified-diagnostic systems is World Reference Base for Soil Resources (WRB). This approach is based on fundamentally different principles and aims of the development of scientific relations. WRB is standard of soil correlation and international communication [1, 2]. It is also a fundamental part of the soil resources management and rational use. WRB is not a dogmatic and legal document, it is developing an open system, which serves the national soil classification and correlation diagnostics [1, 3]. WRB is not intended to replace the national classifications. It is a real opportunity for individual countries/regions, the doorway to the international scientific community and the general orientation.

Soil science as a global science, require the existence of a common unified language . WRB is such common "soil language". The main goal of project "Soil investigation of Georgia on the base of World Reference Base for Soil Resources", realized with the financial support of Shota Rustaveli National Science Foundation was the placement of Georgia in international soil information space.

The main taxonomic unit of national classification is genetic type, and next: subtypes, variety, etc. WRB classification is based on a combination of soil properties, which are divided into three categories: diagnostic horizons, diagnostic characteristics-features and diagnostic substrate. Existences of specific diagnostic horizons (or absence) are the first-level classification units of WRB - soil groups, which are divided by physical-chemical and morphological (macro-, micro-) features on lower level units [1, 3].

To characterize and classify the soil profiles, WRB system uses qualifiers - indicators of diagnostic characteristics of soils. Qualifiers as a specifiers are added to the names of soil groups [1].

Using this approach in Georgia shows the following: soils, which are formed in different bio-climatic conditions, can be merged into same group, or the opposite - the same soil types (national classification) may be in different groups. An electronic version of Georgia's Soil map was drawn up, where the main soil types are correlated with WRB classification.

Reference

- [1] World Reference Base for Soil Resources, 103 (2006).
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- [3] Мировая коррелятивная база почвенных ресурсов: основа для международной классификации и корреляции почв. М., Товарищество научных изданий КМК, 280 (2007)