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Perspective

Soil and its factors of formation

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DESCRIPTION

Soil formation is a complicated natural process of soil generation from mountainous rock under effects of the soil forming factors in natural or anthropogenic ecosystems of the Earth. Soil formation is a generic biospheric process and as a result of its externalization a soil attains a number of characteristic features, those are absent in the soil forming rock and differentiate the soil from other factors of the biosphere. The soil forming process takes place under the influence of certain soil forming factors. Five factors of the soil formation that are distinguished climate, relief, mountain rocks, organisms, and time. Each of these has its influence upon the soil formation and this process is insoluble without contribution of one of them. In this sense, all these factors are equivalent and irreplaceable. The formation of every soil passes through a number of consecutive stages whose direction, duration and intensity are determined by an actual complex of soil forming factors in each particular point on the Earth the stage of first soil formation, the stage of evolution, the stage of equilibrium and the stage of elaboration. The whole process of soil formation can be distinguished into component processes of a less level, which are called abecedarian processes of soil conformation. The diversity of natural conditions in different geographies results in manifestation of actual varied mixtures of soil formation. Diversity of these combinations is determined by both, proof or absence of one or another process under certain natural conditions and the intensity of each of these procedures. This extremely wide variety of complexes of the soil forming operations leads eventually to a large variety of soils on the land.

Soil formation is a general biospheric process and as a result of its objectification a soil attains a number of characteristic properties, which are absent in the

soil forming rock and those distinguish soil from all other factors of the biosphere. Among the most essential features of this type is the presence in the soil of one or another quantity of specific organic material that's soil humus. Its absence in the soil forming rock and it appears as a result of the soil forming operation. Accumulation of humus in the soil is associated with one of the most important biophytic essentials which is the nitrogen that's also absent in a soil forming rock. As a result of soil formation the soil gains specific structure. A soil profile is a system of horizons, which are more or less parallel to the Earth's surface and configuration of those is determined by the soil formation.

CONCLUSION

A soil forming process runs its methodology under influence of agents of soil formation, which are natural conditions external to the soil. Founder of the soil science (pedology) V. Dokuchaev and his followers recognize five factors of soil formation climate, relief, mountain rocks and time. Each of these factors exerts its influence upon soil formation and this process is insolvable without any of them. In this sense, all these agents are equivalent and irreplaceable. A soil forming rock, which is occasionally called the mother (parent) one, based on this soil is formed. The mineral part in an overwhelming majority of soils constitutes more than 90 and more constantly 95 of the soil mass. A rock mainly determine the rate of soil formation. Accordingly, under identification of other conditions, this rate will be significantly less on loamy sediments, rather than on sands and the same on alluvium of basalts soils will be formed considerably faster than on alluvium of granites. Functions of organisms in the soil formation are extensive and various types. Soil formation is a biogenic process and it starts since from the moment of settling of living organisms on massive crystalline and sedimentary rocks.