

Classification Systems of Peat Soils Based on Their Geotechnical, Physical and Chemical Properties

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Abstract : Peat is a partially carbonized vegetable tissue which is formed in wet conditions by decomposition of various plants, mosses and animal remains. This restricted definition, including only materials which are entirely of vegetative origin, conflicts with several established soil classification systems. Peat soils are usually defined as soils having more than 75 percent organic matter. Due to this composition, the structure of peat soil is highly different from the mineral soils such as silt, clay and sand. Peat has high compressibility, high moisture content, low shear strength and low bearing capacity, so it is considered to be in the category of problematic. Since this kind of soil is generally found in many countries and various zones, except for desert and polar zones, recognizing this soil is inevitably significant. The objective of this paper is to review the classification of peats based on various properties of peat soils such as organic contents, water content, color, odor, and decomposition, scholars offer various classification systems which Von Post classification system is one of the most well-known and efficient system.

Keywords : peat soil, degree of decomposition, organic content, water content, Von Post classification

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