World Academy of Science, Engineering and Technology International Journal of Agricultural and Biosystems Engineering Vol:17, No:10, 2023

Characterization of the Soils of the Edough Massif (North East Algeria)

Authors: Somia Lakehal Ayat, Ibtissem Samai, Srara Lakehal Ayat, Chaima Dahmani

Abstract : The aim of this work relates to the physicochemical diversity and the characterization of the different types of soils of the edough massif (North East of Algeria) and to the evaluation and characterization of the existing organic matter as well as to the evolution. and the dynamics of the latter, also on its influence on changes in the physical properties of soils. In order to know the soil properties of seraidi forest, we established a stratified sampling plan. The results obtained show that we are in the presence of a great diversity of soils, such as neutral to alkaline, whose adsorbent complex is sufficiently saturated. Also, the presence of limestone offers the soil a fairly significant buffering capacity. In our study region, the texture of the soils is varied between clayey and silty, where it offers medium porosity, there is a strong accumulation of organic matter, therefore soils rich in organic matter. The fractionation of the organic matter of the soils allowed to obtain a very high rate of humification. The soil characteristics of the edough massif (North East of Algeria) are controlled by the contribution of organic matter, which presents a dynamic and an important evolution and which varies with the climatic conditions and the nature and the type of plant formation, and these the latter have a capital and important role in the rate of mineralization of organic matter.

Keywords: organic matter, soil, foresty, diversity, mineralization

Conference Title: ICAACS 2023: International Conference on Agriculture, Agronomy and Crop Sciences

Conference Location : Istanbul, Türkiye **Conference Dates :** October 16-17, 2023