Termite Mound Floors: Ready-to-Use Ecological Materials

Authors : Yanné Etienne

Abstract : The current climatic conditions necessarily impose the development and use of construction materials with low or no carbon footprint. The Far North Region of Cameroon has huge deposits of termite mounds. Various tests in this work have been carried out on these soils with the aim of using them as construction materials. They are mainly geotechnical tests, physical and mechanical tests. The different tests gave the following values: uniformity coefficient (4.95), curvature coefficient (1.80), plasticity index (12.85%), optimum moisture content (6.70%), maximum dry density (2.05 g.cm⁻³), friction angles (14.07°), and cohesion of 100.29 kN.m2. The results obtained show that termite mound soils, which are ecological materials, are plastic and water-stable can be used for the production of load-bearing elements in construction.

Keywords : termite mound soil, ecological materials, building materials, geotechnical tests, physical and mechanical tests **Conference Title :** ICMBMET 2022 : International Conference on Modern Building Materials and Emerging Trends **Conference Location :** Dubai, United Arab Emirates

Conference Dates : January 28-29, 2022