

## **PEDOGEOMORPHIC PROCESSES AND ASSESSMENT OF KAYADHU RIVER SEDIMENT: A STATISTICAL APPROACH**

Sarika<sup>1</sup>, R. Gunderao<sup>1</sup>, S.K.G. Krishnamacharyulu<sup>1</sup> and Md. Babar<sup>2</sup>

<sup>1</sup>*School of Earth Sciences, S.R.T.M. University, Nanded (M.S.)*

<sup>2</sup>*Department of Geology, Dnyanopasak College, Parbhani (M.S.)*

*E-mail: skgkchary@gmail.com*

### **Abstract**

Pedogeomorphic mapping in parts of Kayadhu river sub-basin, in Hingoli District of Maharashtra is carried out at six soil profiles in order to generate data on soil physico-chemical characteristics. The soils are collected from different pedogeomorphic surfaces like hilly region, pediplains, present and older floodplains. The proportion of sand, silt and clay are estimated and measured to classify the soils. The percentage of organic carbon and the amount of CaCO<sub>3</sub>, the pH and electrical conductivity of soils is also estimated using standard methods.

The statistical analysis compiles all the data and reveals the interrelationship between different physico-chemical characteristics in terms of location and time. This study suggests that the present flood plain marks a vibrant geomorphic system and in other areas the exogenic and endogenic processes are energetic.

*Keywords:* Pedogeomorphic surfaces, Organic Carbon, CaCO<sub>3</sub>