RELATIONSHIP OF SOIL TEXTURE AND ORGANIC MATTER WITH SATURATION PERCENTAGE OF SOIL

Majid Ali Khan Aman Ullah Bhatti* and Nisar Ahmed***

ABSTRACT

The study to find out the relationship of soil texture and organic matter with saturation percentage of soils of District Haripur was conducted in Soil and Water Testing Laboratory, Department of Agriculture, Haripur during June-August 2001. Fifteen soil samples were collected from different sites of district Haripur. Maximum levels of sand, silt, clay and organic matter were 40%, 68.40%,41% and 2.17%, whereas minimum levels of sand, silt, clay and organic matter were found to be 1.6%, 35.40%, 21.60% and 0.69% respectively. Maximum saturation percentage was 54.37 and minimum 34.16. Organic matter was positively correlated with silt and clay (r= 0.05, r=0.55, respectively), while negatively correlated with sand (r=-0.33). Saturation percentage was positively correlated with silt, clay and organic matter (r=0.32, r=0.99, r=0.61, respectively) whereas negatively correlated with sand (r=-0.72). Texture of Haripur soils ranged from loam to silty clay loam. Generally the organic matter content was found to be medium in Haripur soils. Soils having high percentages of clay and organic matter had high saturation percentages. Regression equations were developed to predict saturation percentage using soil separates and organic matter.