

Research Article

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Characterizing soils under different land use patterns in *Terai* region of West Bengal

■ D. PAL, P.K. PATRA AND D. MUKHOPADHYAY

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MEMBERS OF RESEARCH FORUM:

Corresponding author :

D. PAL, Department of Environmental Studies, Siksha-Bhavana, Visva Bharati, SANTINIKETAN (W.B.) INDIA
Email: dip_anod@rediffmail.com

Co-authors :

P.K. PATRA, Department of Environmental Studies, Siksha-Bhavana, Visva Bharati, SANTINIKETAN (W.B.) INDIA
Email: pulakpatra@visva-bharati.ac.in

D. MUKHOPADHYAY, Department of Soil Science and Agricultural Chemistry, Uttar Banga Krishi Viswavidyalaya Pundibari, COOCH BEHAR (W.B.) INDIA
Email: dibsm107@gmail.com

Summary

A study under four different eco-systems (forest land, agricultural land, tea garden and fallow land) was conducted under *Terai* situation of West Bengal to characterise the soils with important physico-chemical properties and also to find out the available nutrient status in soils with the increasing depth. It was observed that the available N-P-K of the soils and the exchangeable ($\text{Ca}^{+2} + \text{Mg}^{+2}$), electrical conductivity (EC), oxidisable organic carbon (OC) and total C-H-N-S in soil significantly varied with the depth of soils in most of the cases. The soils were acidic in reaction and non-saline in character. The available N-P-K and OC of soils of forest, agricultural and tea-garden differed with the uncultivated fallow. The survey of the regions showed that the buildup of nutrients (N-P-K, $\text{Ca}^{+2} + \text{Mg}^{+2}$) varied with the changing ecosystems as reflected by the C/N, C/S and C/H ratio of the soils.

Key words : Ecosystem, Nutrients, Physico-chemical

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