## Impact of Climatic Parameters on Soil's Nutritional and Enzymatic Properties

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**Abstract:** Soil is incoherent matter on Earth's surface having organic and mineral content. The spatial variation of 4 soil enzyme activities and microbial biomass were assessed for two seasons' viz. monsoon and winter along the latitudinal gradient in North-central India as the area of this study is fettered with respect to national status. The study was facilitated to encompass the effect of climate change, enzyme activity and biomass on nutrient cycling. Top soils were sampled from 4 sites in North-India. There were significant correlations found between organic C, N & P wrt to latitude gradient in two seasons. This distribution of enzyme activities and microbial biomass was consequence of alterations in temperature and moisture of soil because of which soil properties change along the latitude transect.

Keywords: latitude gradient, microbial biomass, moisture, soil, organic carbon, temperature

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