

Studying of the layland soils organic matter by Ir fourier spectroscopy method

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Abstract

© Research India Publications. Organic matter uneven-age layland soils are investigated by method of IR-Fourier spectroscopy of the mixed exemplars. Exemplars of the arable horizon, selected on depths of 0-5cm, 5-10cm, 10-15cm, 15-20cm were investigated. For correction of quartz and clay minerals absorption bands in ranges of native exemplars as background we used the mineral phase received by combustion of organic matter of 30% H₂O₂ soils. Feature of the studied exemplars uneven-age layland soils is existence of reference absorption bands aliphatic acids ethers, which are the stablest and constant base units of organic matter. Use of this approach allowed to estimate specter absorption changes of the functional humic substances groups and fragments in fiber exemplars of uneven-age layland soils, bound to secondary accumulation of detritus (rough) humus in upper arable horizons under the influence of secondary vegetation.

Keywords

Acid-base extraction, Humus, IR spectrums, Soil organic matter