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Neutral Sugar Contents of Laurel-leaved and Cryptomeria japonica Forests

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Abstract : Soil neutral sugar contents in Kasuga-yama Hill Primeval Forest (Nara, Japan) were examined using the Waksman's approximation analysis to clarify relations with the neutral sugar constituted the soil organic matter and the microbial biomass. Samples were selected from the soil surrounding laurel-leaved (BB-1) and Carpinus japonica (BB-2) trees for analysis. The water and HCl soluble neutral sugars increased microbial biomass of the laurel-leaved forest soil. Arabinose, xylose, and galactose of the HCl soluble fraction were used immediately in comparison with other neutral sugars. Rhamnose, glucose, and fructose of the HCl soluble fraction were re-composed by the microbes.

Keywords : forest soil, neutral sugaras, soil organic matter, Waksman's approximation analysis
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