

INPUT AND OUTPUT OF NUTRIENTS THROUGH WATER IN SECONDARY VEGETATION

ENTRADA E SAÍDA DE NUTRIENTES ATRAVÉS DA ÁGUA NA VEGETAÇÃO SECUNDÁRIA

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Chemical input-output patterns in secondary forest systems were established by periodical sampling of rainwater, water arriving on the soil and soil solutions at depths up to 105cm. Two (4 and 12 years old) secondary forest areas in Igarapé-Açu, northeastern Pará, were observed half way along the rainy season. The rainwater that entered the system, with pH slightly above 5 and few cations and anions, after leaching the secondary vegetation percolates through soil with a considerable increase of bases and pH. In the soil, the leaching of the bases as well as the increase in pH continues, mainly in the 12 year-old vegetation, probably due to the root system of the dominating species. In this study one observes the absence of NO₃-N. The NH₄-N and PO₄-P which entered the system were retained by the soil or recycled by vegetation but the SO₄-S was lost. The greatest loss observed in soil was that of Si.

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