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MIS006-P15

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## Amino acid composition of stream waters in Nagano and Yamanashi

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Amino acid composition of stream waters was analyzed in Nagano and Yamanashi in 2009. The concentration of amino acids ranged from 0.7 to 15.5 microgram N/L (2.9 micro g N/L on average) in the stream waters. Amino acids amounted to from 0.1 to 4.5 % (1.2 % on average) of the dissolved organic nitrogen (DON). 36 species of amino acids were observed in the stream waters. Glycine, alanine, and proline are relatively abundant. The composition of amino acids was various among the streams, and did not show any trends with the concentrations of total amino acids, DON, or total dissolved nitrogen in stream waters. Amino acids were also observed in rain and throughfall, and their composition was similar to that in close-by stream water. The concentration of amino acids decreased downstream (several kilometers) with no major change in their composition in a stream.

Keywords: amino acid, stream water, nitrogen, Nagano, Yamanashi