Title: Dissolved Organic Carbon concentration and export in Irish catchments

Abstract

The seasonal variability of stream water dissolved organic carbon (DOC) concentration and annual export, depends on temperature, precipitation, stream discharge, land use and soil type. To study this variability and its environmental drivers, water samples from 55 streams were analysed for DOC on seven occasions from November 2006 to October 2007. The DOC concentration ranged from 0.9 to 25.9 mg L\(^{-1}\), while the annual DOC exports ranged from 1,121 to 15,622 kg km\(^{-2}\) yr\(^{-1}\). Soil class better explained the variability in DOC concentrations and exports as processes regulating DOC are controlled directly by soil attributes and only indirectly by land use.

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Categories

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