# Leaching of Colloidal Matter and Dissolved Organic Carbon from Surface Soil Columns during Multiple Irrigation periods. (S01-komatsu004036-Poster)

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# Abstract:

This study investigated mobilization and leaching of three natural soil constituents, inorganic colloidal matter (ICM), colloidal organic carbon (COC) and dissolved organic carbon (DOC) from a surface soil (loam) during repeated irrigation events. IMC, COC and DOC showed widely different leaching behavior and, also, behaved differently in soil with and without continuous macropores. COC contributed with only 7% to total colloid leaching. However, DOC dominated total organic carbon leaching with a contribution of 84%. Using these results, calculations on transport of a strongly sorbing Benzo(a)pyrene suggested that DOC-facilitated transport could be a dominating part of Benzo(a)pyrene transport, and potentially violate drinking water criteria indicated by IRIS of EPA.

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