

Study: Fallen leaves found less polluting

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U.S. government scientists say freshly fallen leaves contribute less to the levels of carbon in mineral soil than was previously believed.

A team led by Mats Froberg and Paul Hanson at the Oak Ridge National Laboratory used the local release of carbon-14 to track dissolved organic carbon movement from canopy leaves, or litter, sources.

The scientists said they were able to quantify the proportion of dissolved organic carbon that originated from decomposing fresh litter. Dissolved organic carbon has an important role in the soil carbon cycle, since it represents a key transport pathway for carbon in solution to move from forest floor carbon sources to the mineral soil, where it can contribute to the buildup of carbon stocks.

The research, funded by the U.S. Department of Energy's Office of Science, is said to provide another step toward predicting the fate of terrestrial carbon.

The study appears in the March-April issue of Soil Science Society of America Journal.

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