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THE DYNAMIC ASPECT OF COARSE PARTICULATE ORGANIC MATTER (CPOM) ON THE  
SEDIMENT SURFACE OF A SECOND ORDER STREAM FREE OF DEBRIS DAMS  
(RITRODAT-LUNZ STUDY AREA)

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Abstract:

The importance of allochthonous organic matter for low order streams is described. Oberer Seebach is a second order stream, draining an uninhabited and densely forested catchment. Because of flood control the channel is free of debris dams since more than a century. The study site is characterized. Main emphasis is laid on the riparian vegetation and the distribution of dry and overflowed channel areas in space and time. Amounts of leaf material deposited on the sediment surface of the channel are significantly larger during defoliation (20 days) and shortly afterwards ("accumulation period", 6.64 (110 days) and 29.42 g/m<sup>2</sup> DW (133 days, mean of five years) for wet and dry areas, respectively) than during the rest of the year ("intermediate period", 0.98 and 3.94 g/m<sup>2</sup> (mean of five years) for wet and dry areas, respectively). Woody debris is too scarce to increase the retention capacity. Deposition of leaf material depends on the interaction of input (wind-drift and bank run-off, 124 and 85 g/m<sup>2</sup> for the accumulation- and intermediate period, respectively), discharge regime and the relationship between dry and wet channel areas. Periodically inundated areas increase the retention capacity of the stream channel and are comparable with the interrelationship between stream and floodplain.

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