

**Das Erosionsverhalten verschiedener Böden bei unterschiedlichen  
Bedeckungsgraden und Hangneigungen unter Starkregen-Simulation,  
dargestellt anhand eigener Untersuchungen**

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Abstract

The imitation of erosion processes with rainfall simulators as a research tool is a method for quantifying runoff und soil loss. It helps getting a better comprehension of the whole erosion process.

Such an experimental station was designed, constructed und calibrated at the university of Kassel.

It's use may be found specially in tropical und subtropical countries, where a transfer of the universal soil loss equation seems not possible.

This improved experimental station can be thought of as a pilot project to show which factors should be studied locally for finding efficient erosion control managements.

In this work the used methods for quantitative data collection and appeared difficulties are described, and the results received are discussed.

The objective was not to find secure data material, but more searching for trends.

The most important conclusion may be seen in the tremendous ability of a plant cover as a soil protecting agent.

Soil loss and runoff volume is significantly reduced even at a 25 % cover level.

Secondly slope angle takes an influencing role on erosion while soil-type is not as important as the before mentioned factors. Soil type in fact with a higher content of organic matter will be less eroded.