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Rainfall simulator or Rainulator

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Rainfall is the driving force in erosion and related processes of runoff, sediment transport, infiltration and soil surface sealing. Hence it is important to have knowledge of rainfall characteristics such as amount, duration, intensity, drop size distribution and related factors as erosivity, kinetic energy, momentum.

The wide range of characteristics of rainfall makes it difficult, not to say impossible to 'simulate' rainfall. No unique rainfall event does exist and neither does a 'perfect' rainfall simulator.

However, if rainfall is applied (with a so-called 'rainulator')in a standardized form on a soil sample under standardized conditions, the processes of erosion, runoff and infiltration will be better understood and valuable data can be collected. Therfore the goal of 'rainulator' research should be the collection of useful data and not trying to construct a 'perfect' rainfall simulator.