

Soil Erosion Workshop 2022

Abstracts



Development of rainfall simulators for soil erosion research

MSc Vukašin Rončević^{1*}, dr Nikola Živanović¹

¹University of Belgrade – Faculty of Forestry, Kneza Višeslava 1, ZIP 11000 Belgrade, Serbia

To conduct experimental research related to soil erosion there was a need to create and apply rain simulators, both in the laboratory and in the field. Also, the initiative came from the idea of making equipment that would ensure further research, produce high quality data and create a database that could be easily integrated together. In the paper is represented methodology of development of rainfall simulator through several phases. According to the given methodology three rain simulators were designed one after the other: portable field simulator with sprinklers, dripper simulator with one dripper and simulator with more than one dripper. All three have already been developed while the third is in the process of calibration and validation. In order to successfully implement the development of rain simulators, it is necessary that its design and performance meet the needs of research (given criteria) in accordance with available resources.

^{*}Corresponding author's email address: vukasin.roncevic@sfb.bg.ac.rs