



Rainfall Simulator, Erosion and Environmental Education
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Introduction: The rainfall simulator is a piece of equipment that can produce rain of a controlled intensity to simulate a situation in which it is possible to compare what happens when there is precipitation on ground with some type of vegetative cover and when there is no vegetative cover. This project aims to demonstrate the environmental impact caused to the soil by surface drainage, demonstrating the importance of protecting soil, rivers and vegetation. It will also focus on interpreting and understanding the process of erosion on bare soil and vegetated soil and alert the population about attitudes that can contribute to sustainability. **Methodology:** The rain simulator consists of a set of tanks with soil that simulate different soil types in different degrees of inclination; over these tanks is a device that simulates rain and its impact on the soil. The equipment also includes a motor that generates movement to simulate the action of the wind, sprinkling droplets of rain in the intensity chosen by the operator. The project is the result of a partnership between the Agricultural Development Company of São Paulo (CODASP), the Science and Technology Faculty of the University of the State of São Paulo (FCT/UNESP), and the State of São Paulo Water and Power Department (DAEE). CODASP provides the location and houses the rain simulator, making it possible to visit schools, businesses and other institutions that show interest in the subject. **Final thoughts:** The functions performed by the rain simulator enable a better understanding of matters to do with soil conservation, surface drainage, erosion, loss of soil, and silting among other things that become more evident when viewed with the naked eye in simplified form, particularly for people with little understanding of the subject, such as children visiting the project. Taking part in the operation of the rain simulator also makes its actions clearer. The work done by CODASP regarding soil recovery in rural areas throughout the State of São Paulo is also highlighted, demonstrating the importance of the work undertaken and the results achieved.

Key words: Simulator, erosion, silting, rain.