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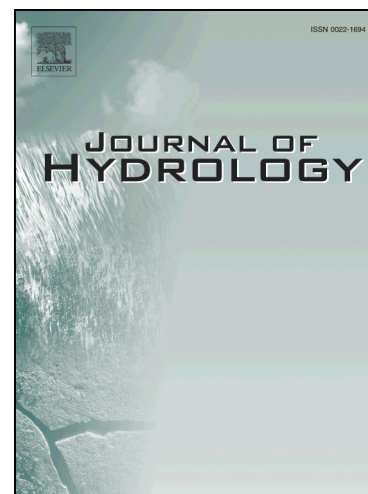
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Velocity of water flow along saturated loess slopes under erosion effects

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Abstract: Rainfall or snow-melted water recharge easily saturates loose top soils with a less permeable underlayer, such as cultivated soil slope and partially thawed top soil layer, and thus, may influence the velocity of water flow. This study suggested a methodology and device system to supply water from the bottom soil layer at the different locations of slopes.

Water seeps into and saturates the soil, when the water level is controlled at the same height of the soil surface. The structures and functions of the device, the components, and the operational principles are described in detail. A series of laboratory experiments were conducted under slope gradients of 5°, 10°, 15°, and 20° and flow rates of 2, 4, and 8 L min⁻¹

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