



## Aspects of drip irrigation on slopes

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Nowadays, water and its supply raise problems of strategic importance, of great complexity, being considered one of the keys to sustainable human development. Drip irrigation consists in the slow and controlled administration of water in the area of the root system of the plants for the purposes of fulfilling their physiological needs and is considered to be one of the variants of localized irrigation. Water is distributed in a uniform and slow manner, drop by drop, in a quantity and with a frequency that depend on the needs of the plant, thanks to the exact regulation of the water flow rate and pressure, as well as to the activation of the irrigation based on the information recorded by the tensiometer with regard to soil humidity. This method enables the exact dosage of the water quantity necessary in the various evolution stages of the plant, thus eliminating losses. By applying the irrigation with 5 liters of water per linear meter, at a 7 days interval, in the month of august, for a vine cultivated on a slope, in layers covered with black film and irrigated via dropping, soil humidity immediately after irrigation reaches its highest level, but within the limits of active humidity, on the line of the irrigation band. Three days later, the water content of the soil in the layer is relatively uniform, and, after this interval, it is higher in the points situated at the basis of the film. This technology of cultivation on slopes favors the accumulation, in the soil, of the water resulted from heavy rains and reduces soil losses as a result of erosion.