Rainwater harvesting in Algeria: utilization and assessment of the physico-chemical quality
Case study of Souk-Ahras region

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Abstract

In North Africa precisely in Souk Ahras city which is located in the east side of Algeria, the climate is arid to semiarid; the Rainfall is uncertain and irregular. The water as brittle resources is unevenly distributed and less available. Using waters harvested from the houses roofs as a solution among other seems good. The collection areas can have a different quality compared to another, according to industrial and other economic dynamics. Pollution of rainwater produced before being collected has also a decisive role in the quality of these waters.

The goal of this study is to assess the physicochemical quality of the harvested rainwater from houses roofs. Three sampling locations of harvested rainwater in two seasons of the year winter and summer and from various storage tanks (Concrete and plastic) were collected and analysed for different quality parameters: pH, total hardness, overall mineralization, Calcium, Sodium, potassium, chloride, Nitrate) and by the way drawn the more suitable materials for collection of the rainwater according to the Algerian drink water standards.

Keywords: Harvesting water, non conventional water, rainwater quality, Souk Ahras.
References:


