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## Variations of Natural Soil Salinity in an Arid Environment Using Underground Watertable Effects on Salinization of Soils in Irrigated Perimeters in South Tunisia

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### Author(s)

Ajmi Boulbaba, Lazzez Marzouk, Ramla ben Rabah, Shimi Najet

### ABSTRACT

In arid and semi-arid regions, salinity is a serious and chronic problem for agriculture. The aim of this study is to evaluate the hydromorphical and salinity risks, and to evaluate the relationship and the possible interfering between the water table and the soil on the oasis of Gabes. The topic is very important, especially for nations around the oceans in arid and semi-arid regions. The effect of the gypsum alkalinity in the soil salinity has investigated. The chemical characteristic of used water irrigation (salinity saturation) and their impact factor in the productivity area. Moreover, in this study the program of examination need to put fifteen piesometres by CRAD (Regional Commissariat of Agriculture Development) in the city of Gabes to controlling the variation of water levels in the superficial water table and their change chemical quality. The experimental measure of this program needs a yearly observation and investigation during April and May to evaluate the hydromorphical and salinity risks on the oasis of Gabes. The relationship and the possible interfering between the water table and the soil has evaluate in such condition.

### KEYWORDS

Oasis; Irrigation Water; Superficial Water Table; Salinity; Drainage; Tunisia

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