

## Evaluation of the fertilizing Supply of the by-products of the WWTP of Medea (Algeria)

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### ABSTRACT/RESUME

*Abstract: In Algeria, freshwater resources are scarce and vulnerable, and the availability of drinking water per capita is in worrying decrease. Existing water resources are threatened by pollution due to concentration of urban and industrial wastewater discharges into receiving waters. Reuse of sludge and treated water is a solution to cope with the increasing demand of water resources for irrigation. At the same time, this is one way to reduce impacts on the environment and provide the nutrients that fertilize the soil. This allows an economy of water resources upstream and reduced downstream pollution.*

*The present work aims to characterize sludge and the treated waters of the WWTP of Medea and assess their potential and fitness for agricultural use. The physico-chemical and bacteriological results revealed that for sludge, the C/N found indicates important nitrogen availability. This report is related to the low amount of organic matter it contains. For treated water of the WWTP to the current state are highly charged with fecal coliforms and can not be reused without chlorination and their high salinity limits their reuse for certain crops.*