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Comparative study of microflora in Rhizospheric soils of Argania spinosa and Acacia raddiana of the arid zone from Oued El Ma (Tindouf)

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Comparative study of microflora in Rhizospheric soils of Argania spinosa and Acacia raddiana of the arid zone from Oued El Ma (Tindouf) Tissouras F1*, Habib S2, Missoum M2, Louacini K.B2 1: Department of Biology, Faculty SNV, University of Mostaganem 2: Institute of Veterinary Science, University of Tiaret *Corresponding autor : Dr F. Tissouras E-mail : tissou31@yahoo.fr

Abstract Desert soils occupy a large area in Algeria (80Moreover, exploitation of the Saharan soil microorganisms has several interests and especially in maintaining the ecological equilibrium of ecosystems. Unfortunately, few of microbiological studies have been conducted so far about the Saharan soil Algerian, with the exception of some work done on the desert soils in the region of Beni Ounif. This work falls within the framework of Project CNEPRU F02320100009. The study focuses on an evaluation of the main germs rhizosphere soils from Argania spinosa and Acacia raddiana of the region of Oued El-ma (wilaya of Tindouf), located in southwest Algeria, followed by physicochemical analysis of some parameters (soil texture, pH, moisture content, organic matter). The results reveal that both rhizosphere soils have a sandy silt texture of alkali pH, with very low water content slightly different. Organic material of the rate varies from 0.2 to 1The type of vegetation influences positively the quantity and the dynamics of microbial population. Indeed, the two soils have an interesting microbial diversity, with densities of azotobacters, fungi, aerobic bacteria and actinomycetes are very high, followed germs ammonifiants, nitrifying and denitrifying. In the presence of Argania spinosa the microbial growth is most important (6.53 $\times$ 107 germs /g soil), compared with Acacia raddiana (3.13 $\times$ 107 germs /g). This shows the stimulating effect of the vegetation on the increase in the rate of these microorganisms in the soil. Well as the strong Fitness of adaptation the microbial biomass to drought. Keywords: Argania spinoza; Acacia raddiana; rhizospheric soil; microbiology evaluation.