CHARACTERIZATION OF EPIPHYTIC BACTERIA ISOLATED ON THREE SPECIES OF BROMELIACEAE THAT OCCURRED ON THE IRONSTONE OUTCROPS (BANCADA LATERÍTICA) OF MORRARIA DO URUCUM, CORUMBÁ, MATO GROSSO DO SUL

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Epiphytic bacteria plant growth promoters (BPGP) has an important role in nutrient cycle contributing, in this way, for the plant nutrition, besides to act as biological control agents of plant diseases. The present work aimed characterize morphological and physiologically epiphytic bacteria on root in the following species of Bromeliaceae: *Deuterocohnia meziana*, *Dyckia excelsa* and *Dyckia leptostachya.* The epiphytic bacteria were, primarily, isolated in solid and liquid DIG medium. Fifty three (53) epiphytic bacterial isolates were characterized through morphological analysis of the colony in DIG medium using the criteria of form, elevation, margin, color ,size and physiologically, through test Gram staining and catalase activity tests of these isolates. In relation of the colony morphology was observed that 51% of the epiphytic bacterial isolates they presented irregularly form, and 49% circular form; 58,5% presented plan character and 41% present another characteristics referred to the elevation , 57% presented undulated margin and 43,5% presented another characteristics referred to the margin; 100% presented cream coloration; 85% presented small while 1,5% presented another characteristics referred to the size. In the Gram coloration test it could be observed that 75,5% of the isolates presented themselves as gram-negative and 24,5% presented themselves as gram-positive. In relation of the catalyze activity the vast majority (77%), of the isolates presented this property. The studies already realized show that although it refers to epiphytic bacteria of the isolated roots of Bromeliaceae of different species, in general, the bacteria show slightly different results in relation of their morphological and physiological characteristics. Future biochemical studies will help in the more precise characterization and identification of this isolates.

Keywords: morphology, physiology, gram coloration, catalysis

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