
**INFLUENCE OF NITROGEN FIXERS ORGANISMS UNDER ARBUSCULAR
MYCORRHIZAL FUNGI IN RHIZOSPHERE OF *Crotalaria juncea***

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Crotalaria juncea is an annual summer legume with very fast and vigorous growth. It is the kind which produces the largest quantity of biomass in less time and, therefore, provides nitrogen in a larger quantity while protecting the soil against erosion effects. The experiment was conducted at the Agricultural Microbiology Laboratory of the Evangelical School of Goianésia. The experimental design used was entirely randomized with four replications arranged in two treatments being one applying diazotrophs (*Rhizobium tropici* and *Azospirillum brasiliense*) and a treatment without application seeding *Crotalaria juncea*. For the laboratory tests were taken 50 cm³ of rhizosphere with root during the flowering period. To determine the percentage of colonization of the roots were clarified and stained with 0.05% Trypan Blue-of lactoglycerol in colonization and evaluation was made in a stereomicroscope, following the procedure of intersection of the quadrants. AMF spores were extracted by wet sieving method followed by centrifugation in 50% sucrose. The identification of the genera of arbuscular mycorrhizal fungi were carried out from the morphological characteristics of spores on slides with pure polyvinyl lacto-glycerol and mixed with Melzer and classified according to the International settings Culture Collection of arbuscular and Vesicular-arbuscular Mycorrhizal Fungi. Inoculation of diazotrophic organisms caused no statistical differences between treatments in spore density ratios and mycorrhizal colonization rate. Gender *Acaulospora* sp. was the only identified in the soil inoculated with diazotrophs. Genres *Diversispora* sp. and *Sclerocystis* sp. were identified in samples without application of nitrogen fixing bacteria. Genres *Claroideglomus* sp., *Scutellospora* sp., *Glomus* sp. and *Gigaspora* spp. were present in both samples.