

Influence of NaCl on *Brachiaria humidicola* inoculated or not with *Glomus etunicatum*

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Abstract

An experiment was carried out to investigate the effects of different levels of NaCl on the growth of the grass *Brachiaria humidicola* inoculated or not with the arbuscular mycorrhizal fungus (AMF) *Glomus etunicatum*. The concentrations of NaCl utilized were 0, 0.22, 1.09, 1.96 and 2.84 g kg⁻¹ of soil; corresponding to electrical conductivities of 2.22, 4.00, 8.13, 12.53 and 16.50 dS m⁻¹. The salinity ratio of the soil reduced the dry matter in different parts of the plant when the electrical conductivity was above 8 dS m⁻¹. Leaf area ratio and succulence increased at high salinity levels of the soil. The percentage of root colonization and the number of AMF spores in the rhizosphere were not affected by the increasing doses of NaCl added to the soil.