

containing these fungi, the spores of the AMF and the anamorphic fructification bodies of the DSE in the feces, are the fungal structures that make up the dispersed inoculum. The presence of sporocarps of AMF and DSE in the diet of mara in the Park is reported for the first time; confirming with their presence the field observations of the consumption of soil and roots by this endemic rodent.

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## **Sección: Microbiología Ambiental y del Suelo**

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### **DIVERSITY OF ARBUSCULAR MYCORRHIZAL FUNGI IN THE CALDENAL, SAN LUIS (ARGENTINA)**

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Arbuscular mycorrhizal fungi (AMF) are biotrophic mutualistic symbionts of the 80% of the terrestrial plants; they increase the growth of their hosts through the contribution in the absorption of water and nutrients by means of its extensive network of mycelium in the soil. This hyphal network also contributes to the soil aggregation, prevents erosion and interconnects plants, redistributing resources in the community. Also, these fungi benefit their hosts by increasing the host resistance to drought and pathogens attacks. AMF mycelium and spores are common components of soil microorganisms communities in diverse ecosystems. In worldwide arid areas, mycorrhizal associations have been registered with species of the genus *Prosopis* (Fabaceae). Ecosystem services are the direct benefits to society obtained by the functioning of an ecosystem. Thus, the HMA constitute a key functional group in the soil with an important role as ecosystem services providers through the increase of plant productivity, soil formation and improvement of the soil conditions, the prevention against biotic and abiotic stress. Despite playing a key role in ecosystems, a gap in the knowledge of the diversity of the AMF in Argentina exists. Particularly, in the Caldenal, Fitogeographical Province of the Espinal, there are no records of the AMF diversity. Taking into account that the “Caldén” forests (*Prosopis caldenia* Burkart, Fabaceae) are suffering a constant reduction in their distribution area, driven mainly by the advance of the agricultural-livestock border, the knowledge of the AMF diversity as a basic service ecosystem and as an indicator of the general health of the soil is of vital importance for the preparation of an adequate management plans for the forest and the microorganisms diversity conservation in the soil and for the maintenance and/or conservation of soil quality. The objective of this work was to determine the diversity of the AMF in the Northern limit of the “Caldén” Forest natural distribution. The sampling sites were four forest in Villa Mercedes, San Luis; soil samples extraction and AMF diversity analysis were done with classic technics. The morphospecies were determined by observing the spores and sporocarps in the optical microscope. Ten morphospecies belonging to the genera were found preliminarily: *Acaulospora*, *Claroideoglosum*, *Diversispora*, *Entrophospora*, *Funneliformis*, *Gigaspora*, *Glomus*, *Rhizophagus*, *Sclerocystis* and *Scutellospora*; showing a variation in the frequency of appearance of each taxa in the different plots. This work will serve as a starting point for