



## CRYOPRESERVATION OF SPORES OF ARBUSCULAR MYCORRHIZAL FUNGI

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Arbuscular mycorrhizal fungi are considered the most common symbionts of terrestrial plants and contribute significantly to the growth of several important agricultural and forest crops. The preservation of AMF species in germoplasm collections is laborious due the fact that these fungi are obligatory biotrophic, requiring periodic multiplication with a host plant. The preservation of soil-inoculum and storage in refrigerator condition only ensures viability for few years. In this sense, the search for preservation methods capable to ensure viability of these fungi for long periods of time has been sought. This work tested cryopreservation techniques for dry soil-inoculum containing propagules of AMF in liquid nitrogen (NL) and in ultra freezer (-80°C) compared to room temperature, refrigerator and freezer at -20°C, the samples were imposed on the treatments approximately 48 hour. The species tested were *Gigaspora margarita* CNPMS 20 and *Glomus clarum* CNPMS10. The species tested had different behavior in relation to the cryopreservation treatments. *Glomus* had the highest germination rate after freezing in NL while *Gigaspora* in ultra freezer at -80°C. These results differ from previously published techniques indicating that careful tests are necessary for each AMF strains.

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