



Biodiversity of Arbuscular Mycorrhizal (AM) Fungi in Agroecosystems of Semi-Arid Region Jaipur, India

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Abstract: The microorganisms are the most abundant member of the soil biota and in agro-ecosystems. Arbuscular mycorrhizal (AM) fungus show a symbiotic relationship with more than 70% plants occurring worldwide in almost all type soil, forming the dominant type of mycorrhiza. The helpful effects of Arbuscular mycorrhizal (AM) fungi on plant growth and soil health are vital for the sustainable management of agricultural ecosystems. In this present study collected rhizosphere soil samples to find out the diversity and abundance of specific species of AM fungi. A total of four genera with 14 species of AM fungi were reported from Jaipur region. Among them, 7 species belonged to *Glomus*, 4 species belonged to *Gigaspora*, 2 species *Acaulospora* and one species belonged to *Scutellospora* genera and out of them four AM fungal sps. first time reported in Jaipur district. Also, a total number of spore density was carried out in 50g soil samples showed a variable range from 29 to 113 AM fungal spores. The aspects of AM fungal ecology emphasizing past and present importance of the global ecosystem function.

Keywords: Arbuscular Mycorrhizal (AM) Fungi, Agroecosystems, Biodiversity, Ecosystem
