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Studies on AM fungal association with *Vigna radiata* (L.) R. Wilczek from Telangana, India

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AM fungi are the plant root obligate symbiotic associates with greater ability of soil exploration and increasing nutritional uptake and phosphorus. 70-80% of crop plants naturally associated with AM fungi in phosphorus deficient crop soils. AM fungi are known to increase plant growth, yield, tolerate abiotic, biotic stress besides increasing immunity of plant. AM fungi are present in rhizosphere soil in abundance and produce external and internal hyphae, vesicles and arbuscules inside the root cortex, besides hydrophobic glycoprotein and glomalin. AM fungi increases soil binding capacity and acts as a bio fertilizer. Legumes relatively have "P" requirement for nodule development and nitrogen fixation. *Vigna* crop is grown throughout the country. Therefore, AM fungi have been isolated from non-rhizosphere and rhizosphere soil supporting *Vigna* plantation. Data on AM fungal spore count morpho-taxonomy of AM fungi, percentage, root colonization, impact of pH, orgnic carbon and phosphorous are evaluated. The data also has indicated that *Acaulospora bireticulata , Acaulospora elegans, Acaulospora foveata, Acaulospora laevis, Acaulospora nicolsonii, Acaulospora spinosa, Entrophospora infrequens, Rhizophagus fasciculatus, Funneliformis caledonium, Gigaspora rosea, Glomus macrocarpum, Glomus botryoides, Scutellospora arenicola, Scutellospora minuta, Zygosporium rostratum* are the AM fungi associated with *Vigna radiata.*

Key words: AM fungi, arbuscules, hyphae, soil, rhizosphere, *Vigna*