Isolation and identification of different arbuscular mycorrhizal fungi from pulses growing soils of Palnadu district of Andhra Pradesh

M K A Hussain , M Raveendra Reddy , Bh Sarvani and P Kishore Varma
Department of Microbiology , Acharya N G Ranga Agricultural University,
Agricultural Research Station, Amaravathi, Andhra Pradesh, India

ABSTRACT

Biofertilizers play a vital role in sustainable agriculture by enhancing soil fertility, nutrient availability, and crop productivity while reducing dependence on chemical fertilizers. Biofertilizers are formulations containing beneficial microorganisms such as *Rhizobium*, *Azotobacter*, *Azospirillum*, phosphate-solubilizing bacteria (PSB), potassium solubilizing bacteria (KSB), AM fungi and plant growth-promoting rhizobacteria (PGPR), which enhance nutrient cycling and development of plant. The present study was conducted to isolate and identify different AMF species from pulses-growing soils of the Palnadu District. There were 30 Isolated spores exhibited variations in size, shape, colour, wall structure and surface ornamentation. Methods of isolating spores, staining and clearing root samples and of identifying the fungal structures are discussed.

Key Words: *Arbuscular mycorrhizal fungi, Morphological characterization and Root colonization*