

## POPULARIZATION OF ARBUSCULAR MYCORRHIZAL (AM) INOCULUM PRODUCTION AND APPLICATION ON-FARM

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**Abstract:**

Beneficial effects of AM fungi as efficient scavengers of nutrients and as bio-control agents have been well established in horticultural crop production. However, the utilization of these fungi is limited by the lack of availability of inoculum in large quantity. This has been a bottle neck in popularization of the fungi for large scale application. Efforts have been made at the Indian Institute of Horticultural Research, Bangalore to increase the use of this fungus in horticultural crop production at the farmers level, by introducing a system of practices. On-farm inoculum production and application methods were demonstrated in several villages close to Bangalore: Mallasandra, Tiptur, Avadesh Halli, Kesture, Srinivasapura, Veerapura, Anabe, Malur, Kithanahalli and Jettipalya. Demonstrations were carried out in three steps. First, solarisation of the soil was done by covering the soil for three weeks with plastic sheets. Starter culture of AM (*Glomus mosseae*) was applied in closely spaced rows followed by sowing of ragi (*Eleusine coracana* L.), a popular millet. Earlier studies, carried out by us, showed that ragi was a very good host for AM inoculum production. After twelve weeks, the shoots were harvested and used as the fodder. The root and the soil, dug to a depth of nine inches, were used as the inoculum. More than 3 tons of inoculum was produced in 25 square meter area. Utilisation of the inoculum in crops like banana and papaya cultivation was demonstrated to four farmers in two villages.. The farmers in all these villages were convinced about the usefulness of AM inoculum application and are training others in the production technique.