

VA-mycorrhizal association in arjuna and jamun trees in forest of Bhandara region, Maharashtra, India

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SUMMARY

A field study for VA- mycorrhizal association in about 20 years old Arjuna (*Terminalia arjuna* Roxb.) and Jamun (*Syzygium cumini* Skeels), the tasar food plants, was undertaken in the natural forest of Khapa, Bhandara (Maharashtra) during November –2007. Soil was laterite with acidic pH, ranged between 5.39 to 5.46. All the plants of Arjuna and Jamun were found associated with Mycorrhizal fungi. Root colonization percentage was higher in Jamun (62.45%) than Arjuna (57.20%). However, VAM fungal spores density was more in Arjuna (230/20g dried soil) than Jamun (175/20g dried soil). Root surface was found with appressorium and running external hyphae, some times attached with spores. Different types of fungal spores belonging to genus *Glomus*, *Acaulospora*, *Gigaspora* and *Sclerocysts* were observed in the soil samples, of which *Glomus* species was found dominant in both host plants. Cortical region of the roots possessed arbuscules, vesicles or both in various intensity.

Key words : Vesicular arbuscular mycorrhiza, Arjuna, Jamun.