SUMMARY

Three important leguminous plants *Tamarindus indica* L., *Dalbergia sisso* Roxb., *Cassia nodosa* Roxb., their roots and soil samples were screened for their AM fungal association. Percentage of root colonization and spore number of these plants were co related to each other. Higher spore number was recorded in *Cassia nodosa* Ham., during December and April compared to *Tamarindus indica* L., *Dalbergia sisso* Roxb in soil depth between 16-24 cm. On contrast to this percent root colonization significantly increased during April in *Dalbergia sisso* Roxb., *Tamarindus indica* L., followed by *Cassia nodosa* Ham. The results revealed that both root colonization sporulation decline from September to April in the examined tree species.

Key words: Leguminous trees, Per cent root colonization, Spore number, Arbuscular mycorrhizal fungi (AMF)