

## Composition of Arbuscular Mycorrhizal Spore Communities in Polycultures

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In two polyculture systems consisting of tropical useful plants *Hevea* spp., *Theobroma grandiflorum*, *Bactris gasipaes* and *Carica papaya* (System 1) and *Hevea* spp., *Theobroma grandiflorum*, *Citrus sinensis*, *Cocos nucifera* and *Schizolobium amazonicum* (System 3) the composition of MA spore community were evaluated with those near primary and secondary vegetation stands. The evaluation was carried out thirty months after planting the useful plants and thirty six months after the slash and burning the area. Overall, twenty one spore types were isolated. After morphological characterisation seven spore types were classified to the genus *Glomus*, four to the genus *Acaulospora* and *Scutellospora*. The genus of six spore types is recently unknown. At least ten spore type were found in each systems. Generally five spore types were dominant, the most frequent belonging to the genus *Glomus*. The exogenic fungus *Glomus etunicatum* inoculated previously in the nursery phase of the plant production, was not recovered at the time. In both plots, control and with inoculation, the dominants spore types were the same. Nevertheless, there was a changing in the proportion between the dominant spore types in those plots. The differences of AM spore communities in the systems, primary and secondary vegetation were very light. Presently, the significance of the AM diversity for the symbiotic effectiveness to the crops is being studied.