Production of cupuaçu (*Theobroma grandiflorum*) in different polyculture systems

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Agroforestry is expected to be a good alternative for sustainable agriculture in the Amazon basin. Among the species used in this agroforestry system, the cupuaçu (*Theobroma grandiflorum* (Willd. ex Spreng. Schum.) is considered the most promising one for commercial exploitation. In this work, we evaluated the comportment of cupuaçu plants in following three agroforestry systems:

1. rubber, cupuaçu, peach palm, papaya;

2. cupuaçu, peach palm, brazil nut, urucum, manioc;

3. rubber, cupuaçu, coconut, orange, lemon, mahogany, louro pirarucu, jacareúba, manioc, beans, maize.

All systems were treated by application of 30% or 100% of the recommended fertilizer dose combined with inoculation or not of the seedlings with VA-mycorrhizal fungi. The production was evaluated in terms of number of harvested fruits per tree and fresh weight of fruits. Every single cupuaçu plant was monitored from March 1996 until June 1997. A statistical analysis of the production data shows no significant difference between the fertilization treatments of each system. However, the production of cupuaçu plants are higher in system 1 than in the other systems. The inoculation with VAMF did not show any effect on the production of the cupuaçu.