Development of Castanha do Brasil (*Bertholletia excelsa* H.B.R.) in a polyculture system

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The Amazon has more than 40 million hectares of deforested areas, where the soil is poor with a high level of acidity. The inclusion of these areas in the productive process implicates the necessity to develop systems and handling techniques not only to restore its potential, but also to protect and maintain the primary basic resources. As part of the agroforestry concept as a possible alternative for the Amazon, the introduction of forest trees as a structural element was suggested. Castanha do Brasil associated with urucum (*Bixa orellana*), cupuaçu (*Theobroma grandiflorum*) and pupunha (*Bactris gasipaes*) was estabilished with two levels of fertilization (30% and 100%), with and without FMVA inoculation of the plants. The initial results, after 3 years, revealed that Castanha do Brasil presented 200% gain in height growth at the recommended fertilizer application of 30%, compared with pure cultivation without fertilizer application and FMVA. The fertilizer x FMVA interaction did not present any significant effect in the development of the associated system. New studies with fertilizer application and FMVA must be implemented, attending the nutritional needs of Castanha do Brasil, for a further evaluation of mixed plantations of polyculture systems.