PLANTING OF FAST GROWING TREES IN SHIFTING CULTIVATION SYSTEMS TO SHORTEN THE FALLOW PERIOD

UTILIZAÇÃO DE ESPÉCIES ARBÓREAS DE RÁPIDO CRESCIMENTO EM SISTEMAS DE AGRICULTURA MIGRATÓRIA PARA ENCURTAR O PERÍODO DE POUSIO

Brienza Júnior, S.¹, Denich, M.², Oliveira, R. P.³, Vlek, P. L.G.⁴

ENV 25-21

In some developing areas of the Brazilian Amazon, the fallow period of the local slash and burn system is becoming shorter due to a high demographic pressure. This is causing an increasing degradation of the fallow vegetation resulting in low food production and high pressure on available primary forests. Nowadays, there is a tendency in recommending agroforestry systems as an agrotechnically sustainable alternative to the traditional land use systems for tropical region, although only a few practicable technologies are offered until now. The objective of this study is to evaluate the performance of fast growing trees associated with annual crops (maize and cassava) in a slash and burn area, in order to shorten the fallow period by means of accelerated biomass accumulation and soil improvement for the next cropping season. A small farmer's piece of land located in Igarape-Acu (State of Para) was chosen on which the following tree species are being tested: Erythrina poeppigiana, Acacia angustissima, Acacia mangium, Clitoria racemosa, Sclerolobium paniculatum, (all of them leguminous trees) and Cecropia palmata (Cecropiaceae). The trees were planted at three densities: 1m x 1m, 2m x 1m and 2m x 2m. The experimental plot size is 10m x 8m and the treatments will be tested in randomized blocks and five replications. Silvicultural parameters, soil physical and chemical aspects, as well as crop production are evaluated. The experimental approach will be presented.

¹EMBRAPA/CPATU

² University of Göttingen-EMBRAPA/CPATU

³EMBRAPA/CPATU

⁴ University of Göttingen