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Integrated agroforestry system for small migrant farmers of shifting cultivation, Presidente Figueiredo-AM., Brazil **Systèmes agroforestiers intégrés pour une agriculture itinérante par de petits fermiers, Présidente Figueiredo-AM, Brésil**

SOUSA Gladys F. de, GUIMARÃES Rosangela dos Reis

EMBRAPA/CPAA. Rodovia AM-010, km 29. Caixa Postal 319. 69011-970, Manaus, Amazonas. Brazil.

The low nutrient content on major Amazonian humid ecosystems soils affects considerably the use of agriculture practices in the region. With the objective to develop alternatives of land use for migrant small farmers of shifting cultivation, two agroforestry systems proposals were conducted in two smallholdings at Presidente Figueiredo, Amazonas State. The systems consisted of crops arrangements in which annuals manioc (*Manihot esculenta* L.), cowpea beans (*Vigna unguiculata* L.) and rice (*Oriza sativa* L.) varieties were interplanted in sequential arrangements in the rows of perennial plants: cupuaçu (*Theobroma grandiflorum* (Willd. ex Spreng.) Schum), pupunha (*Bactris gasipaes* Kunth), ingá (*Inga edulis* Mart.); and semi-perennial: banana (*Musa sp.*). In system I the sequence was manioc, cowpea and manioc, while in system II was rice, cowpea, manioc and cowpea. Three fertilizer treatments were tested: 1. NPK + Organic Matter, 2. P and; 3. P+ leguminous ground cover crop. The results suggested that the productivity of the area with the levels of fertilizers used have been maintained longer than the traditional slash and burn systems. In three years of continuous agroforestry systems in an Oxisol and considering the land use history up to five annual crops were harvested and yielded a total of over 30 t/ha manioc roots, 3.5 t/ha of rice and cowpea grain and 5.3 t/ha banana fruit during 38 month of continuous crop without application of lime in soils with pH 4.9 in average and 40% Al saturation. In traditional agriculture system the possible yield would be one manioc crop, averaging 6 t/ha. The soil samples analysis reinforced the low natural fertility of the soils and the burning of above ground biomass of two years old secondary forest improved slightly the topsoil nutrient content. However, the increase did not promote fruit trees development and annual crops grain production. Fertilizer application had a positive effect on crops yield and topsoil nutrient content. The results indicated the low-input agroforestry systems although not considered stable yet but it looks a good strategy to a more permanent land use system.

Keywords : Agroforestry systems, shifting cultivation, soil fertility, Amazon Region

Mots clés : systèmes agroforestiers, agriculture itinérante, fertilité du sol, Amazonie