

Selection of forestry species for the recovery of altered landscape in the Brazilian Amazon

Edinelson J.M. Neves¹, Acilino do C.Canto²

¹Forester, MSc., CPAA/EMBRAPA - Manaus/AM. ,²Agronomist, Dr., CPAA/EMBRAPA

In developing countries, the inadequate use of natural resources, for different purposes, is causing a gradual elimination of tropical forests, with irreversible loss of the genetic variability of some tree species and soil erosion of extensive areas which are left without use due to the loss of the transient fertility. These areas must be recovered either with homogeneous plantings or agroforestry systems. The Agroforestry Research Center for the Western Amazon (CPAA/EMBRAPA) started, since July 1991, some experiments with forestry species aiming to select the most promising for use in the reclamation of these areas. The experiments were set up in the experimental field of the CPAA/EMBRAPA, localized in the km 28 of the highway AM 010, in a dystrophic Yellow Latosol. This paper presents data of 10 species considered as most promising among the 50 species of the experiments: *Acacia mangium*, *Eucalyptus urophylla*, *Sclerolobium paniculatum*, *Ceiba pentandra*, *Jacaranda copaia*, *Peltophorum dubium*, *Dydimopanax morototoni*, *Dypterix odorata*, *Carapa guianensis* and *Enterolobium contortisiliquum*. The species are planted in rows of 10 plants, with 3 m interrows and interplant distances, at full sun. Evaluations are carried out every six months in the first year and after that yearly, for index of survival (%), height (m) and diameter at breast height (DBH, in cm). The survival of the species is considered good. The above referred species present the following performance as to height and DBH respectively: 6 months - *A. mangium* (2,30; 1,80), *E. urophylla* (2,05; 1,47), *Sclerolobium paniculatum* (0,25; -), *Ceiba pentandra* (1,92; 1,54), *Jacaranda copaia* (0,44; -), *Peltophorum dubium* (0,61; ~), *Dydimopanax morototoni* (0,88; -), *Dypterix odorata* (0,80; -), *Carapa guianensis* (0,63; -) and *Enterolobium contortisiliquum* (1,21; -): at 12 months - *A. mangium* (3,85; 6,07), *E. urophylla* (4,43; 4,28), *Sclerolobium paniculatum* (0,78; -), *Ceiba pentandra* (3,20; 6,73), *Jacaranda copaia* (2,25; 5,48), *Peltophorum dubium* (3,58; 4,51), *Dydimopanax morototoni* (1,55; 2,36), *Dypterix odorata* (1,78; 1,15), *Carapa guianensis* (0,97; -) and *Enterolobium contortisiliquum* (3,17; 5,03).