Next Up Previous Contents Index

Next: Edgardo I. Garrido-Perez, Gerhard **Up:** Agroforestry and Forest Assessment **Previous:** Andrea Corinna Mayer, Svenja **Contents Index**

Célia Maria Braga Sarmento, Jonas Bastos da Veiga, Silvio Brienza Junior, Osvaldo R. Kato, Ari Pinheiro Camarão:
Development of Trees in Sylvopastoral System in Eastern Brazilian Amazon: Establishment Phase

◇

CÉLIA MARIA BRAGA SARMENTO[1], JONAS BASTOS DA VEIGA[2], SILVIO BRIENZA JUNIOR[2], OSVALDO R. KATO[2], ARI PINHEIRO CAMARÃO[2]
[1]Rural Federal University of Amazon, Brazil
[2]Brazilian Agricultural Research Corporation (EMBRAPA), Brazil

In the Brazilian Eastern Amazon, the productivity of pastures established by slash-and-burn (SB) is reduced with the time, leading to a process of pasture degradation. The sylvopastoral systems (SPS) that integrate pasture and trees can increase the sustainability of that land-use. This study object to evaluate the pasture and four trees performance in SPS in Igarapé-Açu, State of Pará, Brazilian Eastern Amazon (1o 6' S and 47o 31' W). The soil is a sandy Latossolo Amarelo of low fertility. In 2001, a *Brachiaria brizantha+B. humidicola* pasture was established in two areas of 2.4 hectares of a 10-year"=secondary vegetation, with a biomass of [74]tMS ha--1. In one of the areas, the land was prepared by SB method and another by slash"=and-trituration/mulch (STm) method. Both areas have been used in a grazing experiment (18 days of grazing, 36 days of rest, three paddocks). In march 2004, in three paddocks (50 m x 53m) of each method a trial of tree performance in SPS was superimposed. In each paddock seedlings of *Schyzolobium amazonicum*, *Tectona grandis*, *Khaya ivorensis* and *Bertholletia excelsa* were planted, each in one line of 50m, 5m apart. The distance between lines was 8m. From April 2004 to April 2006, the height and the stem base were measured each two months. In this phase establishment, there was no differences due to method of land preparation, possibly due to the long time from imposition of the treatment (two years). For the SB method, in terms of height and stem base, the trees of better performance were *Schyzolobium amazonicum* with 285 12#12 41cm and 5 12#12 1cm, and *Tectona grandis* with 194 12#12 25cm and 5 12#12 0.3cm, respectively. For the STm method, these values were *Schyzolobium amazonicum* with 262 12#12 39cm and 4 12#12 0.7cm, and *Tectona grandis* with 198 12#12 24cm and 5 12#12 0.5cm, respectively. As the trial goes on, it is intended to measured the effect of tree over the pasture, the soil, and the animal comfort.

Keywords: Amazon, height, slash-and-burn, slash-and-trituration, stem base, sylvopastoral system, trees

Footnotes

...P◇

    Contact Address: Célia Maria Braga Sarmento, Rural Federal University of AmazonBelem, Brazil, e-mail: celia_braga05@yahoo.com.br

Next Up Previous Contents Index

Next: Edgardo I. Garrido-Perez, Gerhard **Up:** Agroforestry and Forest Assessment **Previous:** Andrea Corinna Mayer, Svenja **Contents Index**
Andreas Deininger, September 2006