

EFFECT OF DIFFERENCES IN PREVIOUS USE ON THE GROWTH-FORM STRUCTURE OF SPONTANEOUS VEGETATION IN AGRICULTURAL TEST AREAS IN THE CENTRAL AND EASTERN AMAZON, BRAZIL^A

EFEITO DOS DIFERENTES HISTÓRICOS DE USO SOBRE A COMPOSIÇÃO DE HÁBITOS DE CRESCIMENTO DA VEGETAÇÃO ESPONTÂNEA EM ÁREAS AGRÍCOLAS NA AMAZONIA CENTRAL E ORIENTAL, BRASIL^A

Baar, R. ¹, Cordeiro, M. R. ², Coelho, L. F. ³, Denich, M. ⁴, Preisinger, H. ⁵

ENV 25 - 8

Growth-form and life-form spectra of vegetation are important structural traits indicative of site conditions, in particular previous disturbance. Use influences the vegetation primarily as spatio-temporal pattern of disturbance intensity and frequency, and very often has a far greater influence on vegetation form than any other ecological factor. The study compares the secondary vegetation of the following agricultural test areas with regard to growth-form structure: eight areas in the municipality of Igarapé Açu, northeastern Pará, and two near Manaus, Amazonas. The areas differ as to past and current use, and in part also as to soil conditions. The age of the vegetation studied is one year and 7-8 years. Comparisons of such test areas in the Eastern and Central Amazon are of practical interest owing to the different use histories of the regions - approx. 90 years agricultural use in the northeast of Pará and in part only about 10 years in Manaus - since they may yield prognoses for the development of the vegetation of the areas that have been in use for a short time only. The results for all test areas show growth-form spectra which are mainly attributed to past disturbance patterns (previous use). The extent to which the different growth-form spectra of the test areas are due to differences in the land use intensity or the substrate, is discussed.

^a Cooperation between ENV. 23 and ENV. 25

¹ University of Göttingen-EMBRAPA/CPATU

² EMBRAPA/CPATU

³ INPA

⁴ University of Göttingen - EMBRAPA/CPATU

⁵ University of Hamburg - EMBRAPA/CPAA