

ANATOMICAL FEATURES OF LEAVES OF SECONDARY VEGETATION COMPONENTS,
IN NORTHEASTERN PARÁ, BRAZIL: STOMATAL DENSITY AND PATTERNS

CARACTERÍSTICAS ANATOMICAS DAS FOLHAS DE COMPONENTES DA VEGETAÇÃO
SECUNDÁRIA DO NORDESTE PARAENSE, BRASIL: DENSIDADE E PADRÃO DE
ESTÔMATOS

Weber Neto, O.¹, Sá, T. D. A.²

ENV 25 - 18

Stomatal function plays a key role in the water economy of plants. Therefore, for a better understanding of the performance of plants under different successional stages and environmental conditions, it is advisable to measure anatomical attributes of stomata. To assist an ongoing ecophysiological study in Igarapé-Açu, northeastern Pará State, Brazil, involving seasonal monitoring of leaf gas exchange in components of three secondary vegetation chronosequences (*i.e.* 2 to 3 year-old, 4 to 5 year-old, and 10-11 year-old “fallows”), anatomical features of leaves (stomatal pattern and density in both, adaxial and abaxial surfaces) are being determined through scanning electron micrography (JSM-5400 LV/Scanning microscope- JOEL, using Polaroid film 667/FP4-120). The study is being carried out for the four species common to those three secondary vegetations (*Phenakospermum guianense* Endl., *Davilla rugosa* Poir., *Lacistema pubescens* Mart., and *Vismia guianensis* (Aubl.)Choisy) and of three other most widely found in the two younger vegetations (*Banara guianensis* Aubl., *Myrcia bracteata* (Rich.)DC, and *Cecropia palmata* Willd.), Leaves are being sampled at different vertical levels in the secondary vegetations, to assess the acclimatisation pattern that occurs across these environmental gradients. In order to explore the variation of anatomic stomatal features associated to phenology and to plant water economy, sampling is being repeated seasonally (*i.e.* wet and dry seasons).

¹ EMBRAPA/CPATU-CNPq

² EMBRAPA/CPATU