

***Bellucia grossularioides* (L.) Triana and *B. dichotoma* Cogn. (Melastomataceae):
Two important elements of flora in secondary forest succession of the Central Amazon**

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The aim of the comparative studies in autecology of common secondary forest species carried out at the EMBRAPA / SHIFT experimental site near Manaus, Amazonas is to acquire a better understanding of the mechanisms responsible for the successional pathways in Terra Firme secondary forests.

B. grossularioides and *B. dichotoma* are common tree species in the Central Amazon. They are similar in habit and morphological traits and occupy similar sites. Nevertheless, there are marked differences in their ecological behavior. *B. dichotoma* occurs in an earlier successional stage than *B. grossularioides*. A dense layer of litter on the ground around the trees, consisting of entire leaves of *B. dichotoma*, and the large, dark canopy shade the ground, preventing other species from becoming established under the trees. The delayed decomposition of the leaves might be the main reason for the competitiveness of *B. dichotoma* in secondary forests, leading sometimes to dominance. However, the limited lifespan and height of *B. dichotoma* leads to the death of the trees in later successional stages. *B. grossularioides* grows much taller than *B. dichotoma*, the leaves are much smaller and the canopy is not as dense. The species occurs within a wider geographical range and a wider range of successional stages. In the Manaus region, *B. grossularioides* occurs more frequently than *B. dichotoma*, but never reaches dominance.

In the poster, growth-form type, leaf size, certain morphological and anatomical traits of the leaves and their phenolic content are discussed as characteristics which might be crucial to their ecological behavior (= morpho-physiological traits). Hypotheses are developed as to the importance of these characteristics of *B. grossularioides* and *B. dichotoma* for the spatial and temporal niches occupied in the successional sequence, their competitiveness in these niches and for their frequency and dominance in the plant community.