

Biomass and aspects of mineral nutrition of trees in the Amazon region

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The biomass production as well as some aspects of mineral nutrition of 45 and 65 months-old *Ceiba pentandra* and *Virola surinamensis* were studied at the experimental field of the CPAA/EMBRAPA in Manaus-AM. The experimental area is characterised by an Afi climate and a yellow clay oxisol.

One tree per species was cut in 1995, 1996 and 1997. They were separated into leaves, branches, stems and roots. Soil solution was collected in one week intervals by means of suction caps. Litter samples were collected monthly from July 1995 until June 1996. Element analyses (P, K, Ca, Mg, S, Al) were carried out by means of ICP-OES.

Higher biomass production was found for *Ceiba pentandra* compared to *Virola surinamensis*. The low P and K-content of the soil solution limits tree growth. The high Al-content of the biomass of *Virola surinamensis* indicates that the plant metabolism of this species is tolerant to this element. Nutrient cycling is improved in plantations of *Ceiba pentandra* compared to plantations of *Virola surinamensis* due to a shorter life cycle of the leaves and a shorter period of the decomposition of the litterfall.

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