

Phosphorus and aluminium in soil, leaves and litter of *Ceiba pentandra* (L.) Gaertn and *Virola surinamensis* (Rol.) Warb *

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Four trees of 55 month-old *Ceiba pentandra* and *Virola surinamensis* were sampled at the experimental field of the CPAA/EMBRAPA in Manaus-AM. They were separated into leaves, stems, branches and roots. Soil was collected at 0-10cm, 10-30cm and 30-60cm depth in the same period. Litter was collected monthly during a year. The contents of phosphorus (P) and aluminium (Al) of the soil samples were analysed. Available P in the soil was extracted with HCl 0.5 N + H₂SO₄ 0.025 N and exchangeable Al was extracted with KCl 1 N. The element contents of leaves and litter were determined by means of ICP-OES analyses.

Soil analysis showed low contents of available P in *Ceiba pentandra* and *Virola surinamensis* plots as well, whereas the contents of exchangeable Al were between 0.9-1.6 cmol_c/dm³ for *Ceiba pentandra* and 0.3-1.4 cmol_c/dm³ for *Virola surinamensis*. The concentrations of P and Al in leaves revealed that *Virola surinamensis* is more demanding in P and more tolerant in Al than *Ceiba pentandra*. However, higher values of P and Al were found in litter samples of *Ceiba pentandra*. This shows that nutrient cycling is improved in *Ceiba pentandra* compared to *Virola surinamensis*.

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