B - 22 DISTRIBUTION OF POTASSIUM AND COMPLEXES OF CALCIUM AND MAGNESIUM IN *HEVEA* LATEX

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Many physiological disorders in plants are associated with localized deficiencies of nutrients such as calcium, which arise because some nutrients are relatively immobile compared to the others. In plants, immobile nutrients could be found as water solubles, fixed to ion exchange sites, organic bound and insolubles.

Nutrient composition of latex from the clone PB 86 was determined. Samples of latex were centrifuged at 12,000 rpm, during which it separated into three phases, rubber-cream, serum and lutoid residue. Fresh weights, dry weights and the nutrient composition of all three phases were determined.

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Latex was then treated with water, dilute acids, oxalates, phosphates and ethylene diamine tetra acetic acid—EDTA, that form complexes with some nutrients, precipitate, or extract some nutrients. It was then centrifuged at 12,000 rpm and the composition of the phases determined.

The results indicate that most of the potassium is water soluble while calcium and magnesium occur as water insoluble complexes in the latex. Moreover, calcium in latex consists of at least three different compounds. Magnesium behaves similarly.