Poster Presentations – Plant Nutrition

76-0

MINERAL COMPOSITION OF LEAVES AND FRUITS OF IRRIGATED MANGO TREES IN RIO GRANDE DO NORTE STATE, BRAZIL

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In order to evaluate mineral concentration in leaves and fruits of mango (Mangifera indica L.), cv. Tommy Atkins, under irrigated growing conditions, in Rio Grande do Norte State, Brazil, leaf samples were collected at four different growth stages: vegetative, pre-flowering, flowering, and fruit ripening. At this last stage, fruit collection was also performed. Soil samples were also collected at 0-20 and 20-40 cm depths. Chemical analyses showed that there were differences in macro and micronutrient concentration in leaves among the three orchards. For almost all macronutrients, the levels decreased with the evolution of plant growth stages, mainly nitrogen and potassium. Except for potassium, the highest nutrient levels were registered in plants from Mossoroense zone orchard, while the lowest levels were registered in plants from Oriental Coast orchard. Except for iron, micronutrients concentrations in leaves varied among the orchards and during the different growth stages. There was a variation in mineral composition of harvested fruits at ripening stage, being potassium and calcium the nutrients at highest concentrations.