NUTRITIONAL BALANCE AND PHYSIOLOGICAL DISORDERS IN MANGO 'TOMMY ATKINS'

Joston Simão de Assis, Davi José Silva and Patrícia Lígia Dantas de Morais.

Embrapa Semi-Arido, C.P. 23, BR 428, km 152, 56300-970, Petrolina, PE, Brazil, joston@cpatsa.embrapa.br

With the objective of evaluating the effect of the nutritional balance on the incidence of physiological disorders in mango cv. Tommy Atkins, grown in the São Francisco River Valley, a trial was carried out with fruits harvested at physiological ripening stage, classified as fruits without and with physiological disorder symptoms. From all of them, skin, flesh and pit were separated and dried in a stove at 65°C. This material was mineralized in order to determine N, K, Ca, Mg and B contents. Before dehydration, part of the flesh was taken for estimation of total soluble solids (TSS) and total titratable acidity (TTA). The results allow to conclude that: 1. high concentrations of Ca and Mg , as well as low ratios N/Ca and K/Ca, both in the flesh and in the skin, were efficient to prevent physiological disorders in mango fruits; 2. the nutrient concentration in the skin may show better the condition of physiological disorders than the nutrient concentration in fruit flesh; 3. TSS values and TSS/TTA ratio in fruits with symptoms were much higher than in fruits without symptoms, due to overripening of flesh tissues.