

Amino acid and Mineral Composition of Yellow and Red Peachpalm Flour (*Bactris gasipaes* Kunth. Var. *Gasipaes* Henderson)

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The present work describes the analysis of amino acid and mineral composition of two types of Peachpalm flour (*Bactris gasipaes*) yellow and red of great interest like food source. The objective of this work was determine amino acid and mineral content of red and yellow peachpalm flours used in biological assays. For this purpose, samples of each flour was taken to analyze amino acid content by HPLC in a reverse fase C18 column (Pico-Tag 3,9 x 150 mm) after acid hydrolysis. The same samples was submitted to nitric acid decomposition in microwave digestion system and analyzed by ICP-OES for mineral content. Results showed that yellow and red flour have respectively (in g/100g): aspartic acid 0,33/0,32; glutamic acid 0,45/0,27; Serin 0,22/0,17; Glicine 0,23/0,21; Histidine 0,11/0,08; Arginine 0,34/0,31; Treonine 0,14/0,11; Alanine 0,29/0,22; Proline 0,19/0,17; Tيروسine 0,16/0,12; Valine 0,24/0,21; Methionine 0,07/0,05; Cystine 0,04/0,03; Isoleucine 0,18/0,14; Leucine 0,30/0,24; Fenylalanine 0,14/0,12 and Lysin 0,21/0,16. PDCAAS determined by correction for true digestibility of protein showed that the first essential limiting amino acid is lysine in both flours. Minerals determined showed in the same order (in g/Kg): P=0,87/0,88; K=5,2/6,2; Ca=0,49/0,72; Mg=0,45/0,43; S=0,87/0,83 and (in mg/Kg) Cu=5,61/5,63; Fe=89,76/50,14; Mn=3,71/2,92; Zn=4,47/2,25. Based on this data we can concluded that yellow and red peachpalm flour are proteins of low biological value with significant limitations of essencial amino acids. Their mineral profile is similar to those of other plant species but in the yellow flour should be noted the high levels of iron and zinc.

Palavras-chave: Peachpalm Flour; PDCAAS; Mineral Content

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