

Fatty Acid Composition of Mbocayá Palm (*Acrocomia totai*) Kernel and Pulp Oils

Sir: The fatty acid data for the kernel and pulp oils of mbocayá palm reported in the literature (1,2,3) are limited to estimations of the saturated fatty acid fraction and oleic and linoleic acids. A more comprehensive report on the composition of these two oils is now presented.

The mbocayá kernels and pulp were separated, and care was taken to avoid contamination of one anatomical section by the other. These were ground and extracted with petroleum ether in a Soxhlet extraction apparatus. The solvent was removed by evaporation under reduced pressure, and the residual oils were stored in the deep freeze under nitrogen.

TABLE I
Component Fatty Acids of Kernel and Pulp Oils
from the Palm Mbocayá (*Acrocomia totai*)^a

Fatty acid	Kernel oil	Pulp oil
Caproic	0.25%	0.29%
Enanthic	Trace	0.04
Caprylic	6.00	0.56
Pelargonic	Trace	
Capric	5.46	0.22
Undecylic	Trace	
Lauric	36.6	0.99
Myristic	7.75	0.66
Palmitic	6.90	16.6
Palmitoleic		3.60
Stearic	3.13	1.10
Oleic	29.1	73.0
Linoleic	4.80	3.10

^a Reported as area percentage of methyl ester of the total mixed esters.

Each oil was saponified, and the fatty acids were recovered by standard techniques. Fatty acid methyl esters were prepared with boron trifluoride-methanol (4). The mixed esters were then subjected to GLC analyses, where the procedure outlined by Pons and Frampton (5) was followed. The identity of the esters eluting from the column was determined from a comparison of the elution times of known standards, which were passed through the GLC column under identical experimental conditions. The percentages given in Table I are for the methyl esters and are reported as area percentage of the total area for the mixed esters, as determined from the GLC curves.

The kernel oil contained 0.37%, and the pulp oil contained 0.55% nonsaponifiable material.

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Capabilities of the du Noüy Tensiometer

Sir: I wish to call the attention of your readers to a defense I made recently of the inelegant, but very satisfactory, du Noüy tensiometer (1). My comments were made in answer to the conclusions reached by Boucher and his co-workers (2), and published previously (3), on the nonreproducibility of the du Noüy method.

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