

Fatty acid composition and mineral profile of some gourds: *Lagenaria Siceraria* and *Citrullus Species melon* (egusi) seeds

J.O. Ogundele^{1,2*}
A.A. Oshodi²
I.A. Amoo²

¹Industrial Chemistry Department
Federal University Oye Ekiti
Ekiti State - Nigeria

²Chemistry Department
Federal University of Technology
Akure, Ondo State - Nigeria

Plant sources of alpha-linolenic acid (ALA), which is converted into omega-3 fatty acids in the body, are very essential to man. Oil samples from *Citrullus colocynthis*, *Citrullus vulgaris*, *Lagenaria siceraria* I (African Wine Kettle gourd), *Lagenaria siceraria* II (Basket Ball gourd) and *Lagenaria siceraria* III (Bushel Giant Gourd) melon (egusi) seeds were analysed for fatty acids content using gas chromatography. Oleic acid is the main mono unsaturated fatty acid of *Lagenaria siceraria* and *Citrullus sps.* with values ranging from 8.85% (*L.siceraria* III) to 18.46% (*C.vulgaris*) respectively. The total unsaturated fatty acid value of the gourd seeds ranges from 77.05% (*L.siceraria* III) to 80.71% (*L.siceraria* II). Iron content of the varieties of gourd seeds varies from 213.04 mg/kg (*Citrullus vulgaris*) to 412.19 mg/kg (*Lagenaria siceraria* II).

Keyword: *Lagenaria siceraria*, *Citrullus sp.*, fatty acid, micronutrients, melon, egusi

(*) CORRESPONDING AUTHOR:
J.O. Ogundele
Industrial Chemistry Department
Federal University Oye Ekiti
Ekiti State - Nigeria
E-mail: o.ogundele@yahoo.co.uk
E-mail: joan.ogundele@fuoye.edu.ng