

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

**J.O. Ogundele<sup>1,2\*</sup>**  
**A.A. Oshodi<sup>2</sup>**  
**I.A. Amoo<sup>2</sup>**

<sup>1</sup>Industrial Chemistry Department  
Federal University Oye Ekiti  
Ekiti State - Nigeria

<sup>2</sup>Chemistry 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