

ANTIOXIDANT POTENTIAL OF *GARCINIA KOLA* (LEAF)

Oloyede O.I

Biochemistry Department,
University of Ado-Ekiti,
NIGERIA.

pjmoloyede@yahoo.com

Afolabi A.M

Biochemistry Department,
University of Ado-Ekiti,
NIGERIA.

ABSTRACT

Garcinia kola leaves have long been regarded as pharmacologically potent plant in folk medicine for their medicinal properties in tropical Africa. . In the present study, the ability of ethanolic extract of *Garcinia kola* leaves at concentrations (3.3-40 μ g/ml) to prevent 60 μ M Fe²⁺ induced lipid peroxidation in rat brain and liver homogenate was assessed using Thiobarbituric acid reactive substance assay (TBARS) invitro . Fe²⁺ chelating ability of the extract was a;so determined. (1mM FeSO₄). The inhibitory effect of *Garcinia kola* leaves on lipid peroxidation in both liver and brain homogenate and the iron chelating activity were concentration - dependent exhibiting an antioxidant activity against free radicals. The extract showed its highest inhibition at the same concentration (26.7 μ g/ml) in both liver and brain homogenate with %inhibition of 64.1% and 38.2% respectively. Therefore, the leaves of the plant could be considered to have significant natural antioxidant activity against the initiation of some prevalent diseases.

Key words Lipid peroxidation Thiobarbituric acid reactive species *Garcinia Kola*