ANTIOXIDANT PROPERTIES OF ACETONIC EXTRACTS OF SEED AND FLESH OF AFRICAN EGG PLANT (*Solanum anguivi*) LAM.

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**Introduction** The medicinal value of plants have assumed a more important dimension in the past few decades owing largely to the discovery that extracts from plants contain not only minerals and primary metabolites but also a diverse array of secondary metabolites with antioxidant potential. *Solanum anguivi* Lam. belongs to the family *Solanaceae*. The fruits are consumed as vegetables in Nigeria, Ghana, Cameroun and Brazil. The present study was conducted to investigate and compare the antioxidant properties of seed and flesh of *Solanum anguivi* fruits.

**Experimental part:** The seeds of *Solanum anguivi* fruit were carefully removed from the flesh (skin) and sun-dried before they were powdered and kept in an airtight container prior to analysis. Total phenol, total flavonoid and vitamin C contents were determined. DPPH free radical scavenging ability, reducing property, iron chelating property and hydroxyl radical scavenging ability as well as the ability to inhibit Fe²⁺ induced lipid peroxidation in rats’ brain were determined in seed and flesh of *Solanum anguivi* fruits.

**Result/Discussion:** The results of the study revealed that the seed has more total phenol and total flavonoid contents than fruit. Both flesh and seed of Solanum anguivi fruit showed considerable DPPH and hydroxyl radical scavenging properties. Incubation of the brain tissues in the presence of 25μM Fe²⁺ caused a significant increase (*p* < 0.05) in malondialdehyde (MDA) production in rat’s brain when compared with the basal. The spice extracts however, significantly inhibited (*P < 0.05*) Fe²⁺ induced MDA production in rats’ brain. The seed showed more potency in this regard than the flesh.

**Conclusion:** These results suggest that *Solanum anguivi* fruit might be used as a nutraceutical to alleviate oxidative-induced diseases and as a natural antioxidant additive in the food industry.

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