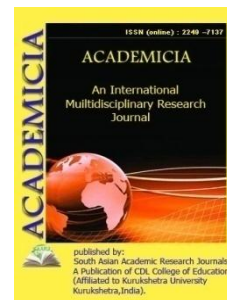


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## **GOMPHERNA GLOBOSA: THE POTENTIAL NATURAL FOOD GRADE BETACYANIN**

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### **ABSTRACT**

*Betalain are natural pigments and highly water soluble nitrogenous compounds which are commonly found in the order Caryophyllales and in some fungi species. Considering the significance of natural colourants in the food industry, the present study aimed to bring the benefits and potentiality of Gompherna globosa into limelight as a food dye. The pigment has been extracted using aqueous solution as a solvent and they are quantified by Spectroscopic method and HPLC method and the extracts were characterized for higher Anti-oxidant, Anti-microbial. The storage effects of different temperature and light intensities on the Gompherna extract were measured where maximum degradation was observed when the pigment was stored under room temperature and under light on 14<sup>th</sup> and 7<sup>th</sup> day of storage. On concerning the stability of Gompherna extract, the lyophilized extract was used as a dye by incorporating in Ice-cream and the dried flower was used for making tea. The betalain flavoured ice-cream and Gompherna tea were preferred more by the active respondents compared to the plain vanilla Ice-cream and black tea for the appealing colour, Texture, Taste and palatability.*

**KEYWORDS:** *Gompherna Globosa, Quantification, Anti-Oxidant, Anti-Microbial, Stability and Food Dye.*

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