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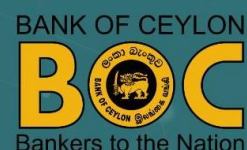
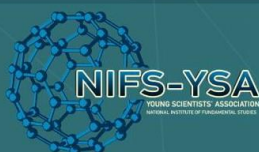
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## Cytotoxicity and free radical scavenging capacity of aqueous fruit extract of *Dillenia retusa*

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The *Dillenia retusa* (Dilleniaceae), "Godapara", is an endemic plant to Sri Lanka. According to the literature this plant is extensively used in traditional medicines against an array of human ailments and diseases. In this work, a hot aqueous extract of the fruit of *D. retusa* was evaluated for its cytotoxicity and free radical scavenging capacity. The extract was evaluated for its potential free radical scavenging capacity using two different in vitro methods: DPPH (2,2-diphenyl-1-picrylhydrazil) assay in which the antioxidant activity is reported as percentage inhibition of DPPH, total phenolic content was determined with Folin-ciocalteu method. Cytotoxicity was screened against brine shrimp (*Artemia salina*). The extract showed 74% antioxidant activity at 500 mg l<sup>-1</sup> and the IC<sub>50</sub> was 180.0 ± 5.3 mg l<sup>-1</sup> while it showed weak cytotoxicity (LC<sub>50</sub> = 735.94 ± 8.7 mg l<sup>-1</sup>). Total phenolic content turned out to be 39 mg g<sup>-1</sup> gallic acid equivalent (GAE) g<sup>-1</sup>. The results indicate the presence of free radical scavenging principles with *D. retusa*. Further, low cytotoxicity warrants the use of such extracts in prophylaxis.

**Keywords:** Cytotoxicity, gallic acid standard curve, pharmacology, radical scavenging capacity