In vitro Antioxidant, Reducing Power, Free Radical Scavenging and Membrane Stabilizing Activities of seeds of *Syzygium cumini* L.

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SUMMARY. Different extractives of Syzygium cumini seeds were evaluated by free radical (DPPH) scavenging assay, phosphomolybdenum total antioxidant assay and reducing power determination in order to identify promising sources of antioxidants along with its membrane stabilizing activity. The total phenolic content was also determined and expressed in gallic acid equivalent. Here, butylated hydroxytoluene (BHT) and ascorbic acid (ASA) were used as standard antioxidants. The membrane stabilizing activity was assessed by using erythrocytes in hypotonic solution and was compared with acetyl salicylic acid. A positive correlation was observed between total phenolic content and total antioxidant activity as well as reducing power of S. cumini having correlation coefficient (\mathbb{R}^2) values of 0.8177 and 0.9818, respectively. In the present studies, the methanol extract and its aqueous and petroleum ether soluble partitionates demonstrated significant antioxidant potentials.

KEY WORDS: Antioxidant, Membrane stabilizing, Reducing power, Syzygium cumini.

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