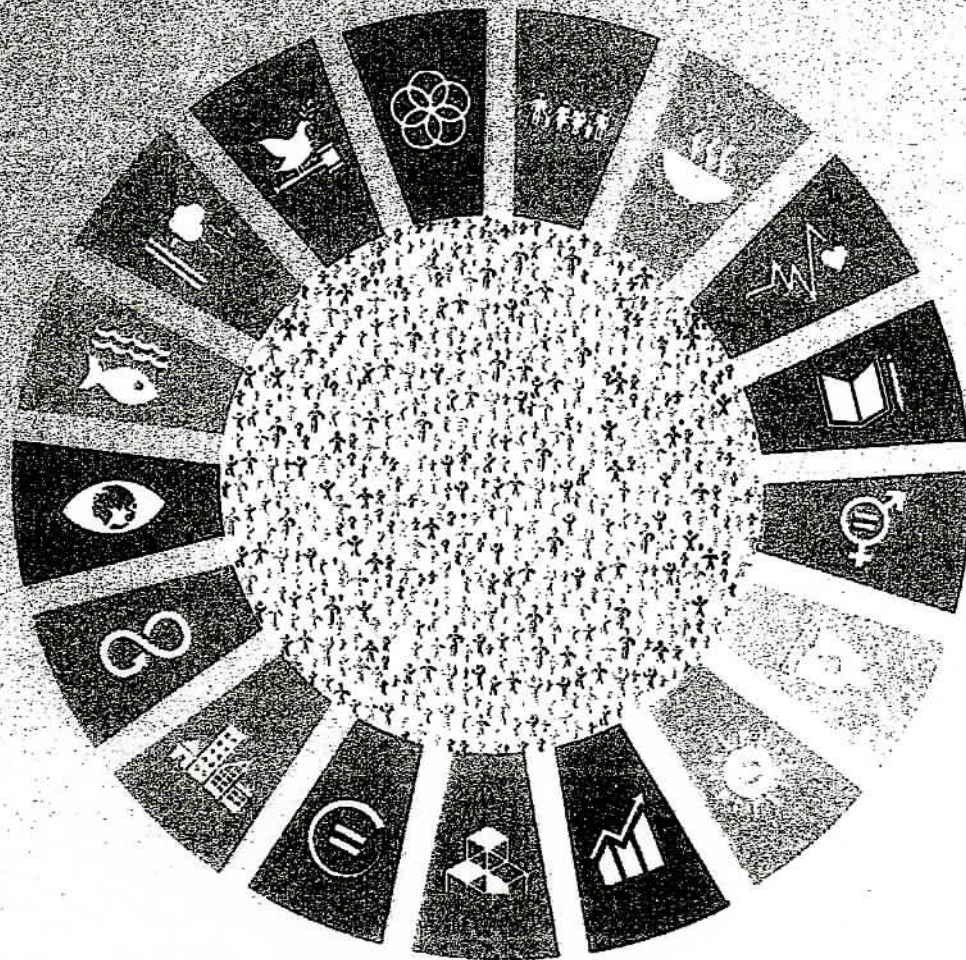


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ABSTRACTS



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Antioxidant Activity in Aqueous Extracts of Leaf of *Gymnema Sylvestrae* Stored For Six Months at Room Temperature and at 4 ° C Using 1, 1- Diphenyl-2-Picrylhydrazyl (Dpph) Assay

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Abstract — *Gymnema sylvestrae* is an herb native to the tropical forests of southern and central India and Sri Lanka. It has been used to treat the Diabetes mellitus for nearly two-millennia. It possesses Insulinotropic activity of Human islets of Langerhans. Aim of the present study is to evaluate antioxidant activity of the leaf of *Gymnema sylvestrae*. It is one of the ingredients of preparation of several anti diabetic preparations used by Siddha, Ayurvedha and Unani medicine. Leaves were dried to constant weight, powdered and sieved. TAC was estimated by using the method described by Blois (1958). The initial TAC of cold and hot water extracts was 2632.7, 2277.9 µg/ml dry weights respectively. When the powder was stored at room temperature for a month and the TAC was analysed, the cold and hot water extracts contained 2931.4, 2474.4 µg/ml dry weight respectively. When the leaf of the *Gymnema sylvestrae* powder was stored at room temperature for 6 months, TAC of cold and hot water extracts was 11632.6, 10337 µg/ml dry weights respectively while the TAC of cold and hot water extracts of the *Gymnema sylvestrae* powder stored at 4°C for six months respectively was 10303.2, 8751.6 µg/ml dry weight. Extraction of antioxidant activity was better with hot water than with cold water. TAC of the *Gymnema sylvestrae* powder decreased when stored both at room temperature and at 4°C. At 3 months the decline in TAC of the powder stored at Room temperature is higher than that stored at 4°C. In the Siddha Medicine the lifespan of 'Chooranam' which is prepared from herbs is used for 3 months. However freshly prepared powder is recommended for the preparation of 'Chooranam'.

Keywords — Antioxidant activity, DPPH radical scavenging activity, *Gymnema sylvestrae*, Siddha medicine