

**IN VITRO ANTIOXIDANT ACTIVITIES OF METHANOLIC EXTRACTS OF
Henckelia Incana (VAHL) SPERNG.**

**R. RAKKIMUTHU^{1*}, P. REMYA², P. SATHISHKUMAR¹,
A.M. ANANDAKUMAR¹, D.SOWMIYA¹ and E. SNEHA²**

¹Assistant Professor, PG and Research Department of Botany, NGM College, Pollachi
²M.Sc., Botany Student, PG and Research Department of Botany, NGM College, Pollachi

*Corresponding Author
Email id: biorakki@gmail.com

ABSTRACT

The study focuses on the antioxidant capabilities of an endemic herb *Henckelia incana* (Vahl) Spreng (syn : *Didymocarpus tomentosa* Wight). This is an unexplored plant species belongs to the family Gesneriaceae, collected from Gopalswami hills, Western Ghats of Tamilnadu. The leaves of *H. incana* were dried; powdered and methanolic extract was extracted using soxhlet apparatus. Antioxidant activities of the plant extracts was determined by *in vitro* methods of 1,1-diphenyl-2-picrylhydrazyl (DPPH) radical scavenging activity, Total Antioxidant assay by phosphomolybdenum and Reducing power assay. All assays were carried out by the methanolic extracts of sample dissolved in DMSO. Ascorbic acid was used as standard. DPPH scavenging of leaf extract was significant and the IC₅₀ value was calculated as 43.10±0.073µg/ml. Dose dependent Reducing power and total antioxidant capacity was observed significantly. This study reveals that *H. incana* extracts have a high antioxidant capacity and may be useful for nutritional and therapeutic purposes.

Keywords: *Henckelia incana*, DPPH, Free radicals, Total Antioxidant activity, Reducing power assay