

**Evaluation of Antioxidant and Anti-Tyrosinase Activities of Surfactant and Alcohol Extracted *Combretum Indicum* Leaves**

**Tanesha Thanaseelan, Nurul Hidayu, D., Nurul Sahirah and Rajaletchumy, V.K\***

<sup>a</sup>Faculty of Chemical and Process Engineering Technology, Universiti Malaysia Pahang, 26300, Kuantan, Pahang, Malaysia

\*Corresponding author: vrajaletchumy@ump.edu.my

***Abstract***

Antioxidant activity of surfactant (Triton X-100 and Vitamin E TPGS) and alcohol (acetone, methanol, and ethanol) extracted *Combretum Indicum* (CI) leaves have been tested using Total Phenolic Content (TPC) and 2,2-diphenyl-1-picrylhydrazyl (DPPH). The anti-tyrosinase activity was performed by using a mushroom tyrosinase inhibition assay. Prior to analysis, CI leaves had been extracted through maceration and freeze-dried for further analysis. The study proved that Ethanol 50% is the best solvent for its excellent antioxidant and anti-tyrosinase activity. Hence, CI extracts that generate outstanding results can give credence as local cosmetic usage to overcome oxidative stress and hyperpigmentation issues.

**Keywords:** Antioxidant; Anti-tyrosinase; *Combretum indicum*; Maceration.