



In vitro ANTIOXIDANT ACTIVITY OF METHANOL EXTRACTION OF
Rhodomyrtus tomentosa (Aiton) Hassk. LEAVES

By

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DECLARATION

I hereby declare that this thesis is my original work and has not been submitted previously or currently for any other degree at UiTM or any other institutions.

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ABSTRACT

***In vitro* ANTIOXIDANT ACTIVITY OF METHANOL EXTRACTION OF *Rhodomyrtus tomentosa* (Aiton) Hassk. LEAVES**

This study aims to estimate *in vitro* antioxidant activity in 80 % methanolic extraction of *Rhodomyrtus tomentosa* leaves. The leaves were collected from Kelantan, grinded and sequentially extracted with methanol. Phytochemical properties of the *Rhodomyrtus tomentosa* leaves was estimated by using Follin Ciocalteu method and Total Flavonoids Content (TFC) by Aluminium Chloride Colorimetric Assay, Total Antioxidant Capacity (TAC) and (DPPH) Radical Scavenging Assay represent for antioxidant capacity of *Rhodomyrtus tomentosa* leaves. The result obtained shows phenolic content was 30.03 ± 0.411 mg GAE/g while flavonoids content was 3.9 ± 0.703 mg QE/g respectively. The antioxidant capacity was 30.315 ± 0.791 mg GAE/g and for DPPH was 94.86 ± 29.851 % inhibition. Based on above result, revealed that 80% methanolic extract of *Rhodomyrtus tomentosa* leaves contains high antioxidant capacity due to *Rhodomyrtus tomentosa* total antioxidant capacity phytochemical properties. In conclusion, it is proven that 80 % methanolic extract of *Rhodomyrtus tomentosa* leaves possesses a high antioxidant capacity, in which can be used as alternative medicine against free radical for *Rhodomyrtus tomentosa*. It is recommended that further *in vivo* study been explored potential as anti-oxidant agent.

Keywords: *Rhodomyrtus tomentosa*, antioxidant, methanol, phytochemical properties, solvent