



***IN VITRO* ASSESSMENT OF ANTIOXIDANT AND PHYTOCHEMICAL  
PROPERTIES OF ACETONE EXTRACT LEAVES FROM *Rhodomyrtus*  
*Tomentosa*.**

**By**

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## **DECLARATION**

I, hereby declare that this thesis is based on my original work. I also declare, that this thesis had not previously or concurrently submitted by any other degree students at UiTM or other institutions.

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## ABSTRACT

### ***In Vitro* assessment of antioxidant and phytochemical properties of acetone extract leaves from *Rhodomyrtus Tomentosa*.**

*Rhodomyrtus tomentosa* is an ordinary trees, widespread in regions with accessible ground environments and its provide crucial health advantage due to the medicinal value. In this study, *Rhodomyrtus tomentosa* was evaluated by using 75% acetone extract leaves to determine the phytochemical properties using an in vitro technique that are total phenolic content (TPC) and total flavonoids content (TFC) of acetone extract from *Rhodomyrtus tomentosa* leaves. The antioxidant activity by measuring the total anti oxidant capacity (TAC) and 2,2- diphenyl-1-picrylhydrazyl (DPPH) free radical scavenging activity of acetone extract of *Rhodomyrtus tomentosa* leaves using spectrophotometer. Total phenolic content analyze by using Folin-Ciocalteu and the result was  $6.90 \pm 1.02$  mg gallic acid equivalent/g. Total flavonoids content (TFC) experimental by using aluminium chloride technique was  $0.48 \pm 0.04$  mg quercetin equivalent/g. Spectrophotometric detection of 2,2- diphenyl-1-picrylhydrazyl (DPPH) scavenging acticity was  $28.63 \pm 31.56$  % and total antioxidant capacity marks  $5.4 \pm 41.85$  mg ascorbic acid. The above results revealed antioxidant capacity of 75% acetone extract from *Rhodomyrtus tomentosa* leaves.

### **KEYWORDS:**

*Rhodomyrtus tomentosa*,, Antioxidant activity, Phytochemical properties, 75% Acetone extract, Medicinal plant

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