



***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 ± 1.02 mg gallic acid equivalent/g. Total flavonoids content (TFC) experimental by using aluminium chloride technique was 0.48 ± 0.04 mg quercetin equivalent/g. Spectrophotometric detection of 2,2- diphenyl-1-picrylhydrazyl (DPPH) scavenging acticity was 28.63 ± 31.56 % and total antioxidant capacity marks 5.4 ± 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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