

**A HYDRANT TONER FROM  
*CENTELLA ASIATICA* EXTRACT**

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## ABSTRACT

### A HYDRANT TONER FROM *CENTELLA ASIATICA* EXTRACT

*Centella asiatica*, also known as Gotu Kola, is a medicinal herb that has been utilized in medicine for hundreds of years in which is a plant that has high amount of antioxidant. *C. asiatica* effective in aids the treatment of minor wounds, hypertrophic wounds, increase the production of collagen, and promotes wound healing. Furthermore, there are few previous research that stated about the antioxidant properties of *C. asiatica*. This study focuses in assessing and screening the antioxidant activities and efficacy in soothing and hydrating skin from *C. asiatica* extract. It is important to analyze antioxidant properties of *C. asiatica* extract to discover a new and suitable green cosmetic product, as an alternative to synthetic chemicals found in most of skincare product worldwide. Discovery of a new skin care product which contain antioxidant properties from *C. asiatica* extract suitable for most people that has dehydrated skin due to hot weather in Malaysia and also potentially reducing redness, itching and scar on skin. Antioxidant properties in *C. asiatica* extract has potential to act as antioxidant agent to soothe and hydrate the skin. *C. asiatica* leaves was extracted using absolute methanol. DPPH and TPC assay were later conducted to screen for antioxidant activities. Analysis of DPPH Scavenging Assay with 30 ( $\mu\text{g/ml}$ ) present the absorbance value 0.232 with 81.35 % inhibition, compared with ascorbic acid that showed 96.13 % inhibition. TPC assay showed the absorbance value for *C. asiatica* extract was 0.73. In this study, *C. asiatica* extract show DPPH inhibition by 50% at a concentration of 23.25  $\mu\text{g/mL}$ , while the IC<sub>50</sub> value for ascorbic acid was 10.01  $\mu\text{g/mL}$  (ascorbic acid was employed as a positive control). Hence, the IC<sub>50</sub> value of *C. asiatica* extract also has higher than ascorbic acid caused by small error. Thus, a new formulation toner from *C. asiatica* extract (20 mg) with additional of water, scented oil and parfum. This formulation dissimilar with basic formulation toner which requires a specific acid such as salicylic acid, glycolic acid and lactic acid that considered as exfoliating toner for remove dead skin cells.

## TABLE OF CONTENTS

	Page
<b>ABSTRACT</b>	iii
<b>ABSTRAK</b>	iv
<b>ACKNOWLEDGMENT</b>	v
<b>TABLE OF CONTENTS</b>	vi
<b>LIST OF TABLES</b>	ix
<b>LIST OF FIGURES</b>	x
<b>LIST OF SYMBOLS</b>	xi
<b>LIST OF ABBREVIATIONS</b>	xii
<b>CHAPTER 1 INTRODUCTION</b>	1
1.1 Background of study	1
1.2 Problem statement	5
1.3 Research objectives	8
1.4 Research hypothesis	8
1.5 Research questions	8
1.6 Significant of study	9
<b>CHAPTER 2 LITERATURE REVIEW</b>	11
2.1 Introduction	11
2.1.1 Skin structure	11
2.1.2 Extracellular matrix	18
2.1.3 <i>Centella Asiatica</i>	20
2.2 Phytochemical	22
2.2.1 Triterpenoid Saponins	25
2.2.2 Flavonoid	31

2.2.3 Phenols	32
2.3 Pharmacological	33
2.3.1 Antioxidant of <i>Centella Asiatica</i>	33
2.3.2 Function of antioxidant towards free radicals	41
<b>CHAPTER 3 METHODOLOGY</b>	45
3.1 Materials and chemicals	45
3.1.1 Plant material collection	45
3.1.2 Chemicals	45
3.2 Methods	46
3.2.1 Sample preparations	46
3.2.2 Bioactive compound contained in <i>C. asiatica</i>	46
3.3 Antioxidant activity of <i>C. asiatica</i>	47
3.3.1 Total Phenolic Content Assay (TPC)	47
3.3.2 DPPH Radical Scavenging Activity Assay	47
3.3.4 Statistical analysis	48
<b>CHAPTER 4 RESULTS AND DISCUSSION</b>	49
4.1 Maceration extraction (ME) method on extraction yield	49
4.2 Antioxidant	50
4.2.1 DPPH Scavenging Assay	50
4.2.2 Total Phenolic Content Assay (TPC)	53
<b>CHAPTER 5 CONCLUSION AND RECOMMENDATION</b>	56
5.1 Conclusion	56
5.2 Recommendation	57