

**EXTRACTION OF CONDENSED TANNIN IN COCOA POWDER BY
USING DIFFERENT RATIO OF SOLVENT (ACETONE:WATER)**

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENT	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATIONS	vii
ABSTRACT	ix
ABSTRAK	x

CHAPTER 1 INTRODUCTION

1.1 Background and problem statement	1
1.2 Significance of study	4
1.3 Objectives of study	4

CHAPTER 2 LITERATURE REVIEW

2.1 Cocoa Powder	5
2.2 Culture and environment for planting cocoa beans	6
2.3 Tannins	7
2.3.1 Condensed Tannin	7
2.4 Methods to determine condensed tannin	9
2.5 Acetone:water act as an extractor	10
2.6 Samples	10
2.7 Hydrolysis of Condensed Tannin	11
2.7.1 UV/VIS spectrophotometer	11

CHAPTER 3 METHODOLOGY

3.1 Materials	12
3.2 Sample preparation	12

ABSTRACT

EXTRACTION OF CONDENSED TANNIN IN COCOA POWDER BY USING DIFFERENT RATIO OF SOLVENT (ACETONE:WATER)

Condensed Tannin (CT) is a water-soluble phenolic compound. CT also known as Proanthocyanidins (PAs) are oligomers and polymers of flavan-3-ol units. This compound comprise from a group of polyhydroxyflavan-3-ol oligomers and polymers linked by carbon-carbon bond between flavanol subunit. The function of CT in foods is as astringency. CT also are able to interact with biological systems or physiological effects, such as antioxidant, anti-allergy, anti-hypertensive, as well as antimicrobial activities. There is a limit of condensed tannin in human body which is not exceeding than 6% of human body weight. If do so, it will cause an anemia and precipitation in body when CT interact with enzyme and iron in body. For this study, acid-butanol method was used for analysis before determining the condensed tannin by using UV/VIS spectrophotometry instrument. For the extraction, two ratio of acetone was used for immersing the cocoa powder for 2 days. The ratio of solvent use is 70% and 80%. There have 3 samples labelled as sample A, sample B and sample C as shown in Appendix E was used for comparison. As results, sample A give the higher amount of CT followed by sample B and sample C. for the comparison of solvent ratio, 70% acetone give the higher extraction of CT compared with 80% acetone.