

THE POTENTIAL OF BANJANAS SKIN EXTRACT AS
WOUND HEALING AGENT

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FAKULTI SAINS DAN TEKNOLOGI
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THE POTENTIAL OF BANANA'S SKIN EXTRACT AS WOUND HEALING AGENT

By

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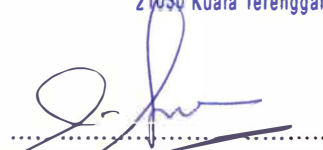


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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	v
LIST OF FIGURES	vi
LIST OF ABBREVIATIONS	vii
LIST OF APPENDICES	viii
ABSTRACT	ix
ABSTRAK	x
CHAPTER 1 INTRODUCTION	1
1.1 Introduction	1
1.2 Importance of study	2
1.3 Objective	2
CHAPTER 2 LITERATURE REVIEW	3
2.1 White rat	3
2.2 Skin	3
2.3 Mechanism of Wound Healing	4
2.4 Wound Healing Studies	4
2.5 Medicinal Plant	5
2.6 Banana	7
2.7 Coconut Oil	8
CHAPTER 3 MATERIAL AND METHODOLOGY	9
3.1 Plant	9
3.1.1 Coconut oil preparation	9
3.1.2 Banana's skin extract preparation	9
3.2 Animal	9
3.3 Experimental Design	10
3.4 White Blood Count	10
3.5 Leishman Stain Preparations	10
3.6 The histological technique	11

3.6.1	Fixation	11
3.6.2	Tissue processing	11
3.6.3	Staining and mounting	11
3.6.4	Histopathology examination	11
CHAPTER 4	RESULTS	12
4.1	Observation on healing progress	12
4.2	Histological Examination	12
4.3	White Blood Cell Count	13
CHAPTER 5	DISCUSSION	16
CHAPTER 6	CONCLUSIONS AND RECOMMENDATIONS	18
REFERENCES		19
APPENDICES		23
CURRICULUM VITAE		34

LIST OF TABLES

Table		Page
3.1	Division of groups according to the treatment received.	10
3.2	The tissue processing steps by using Automatic Tissue Processing Machine.	23
3.3	The reagent used and the duration for complete staining process.	24
4.1	Histological examinations of three groups at day 15 and day 22 compare between the groups. Group C: control (no treatment); Group A: treatment with banana's skin extract and solvent and Group B: treatment with solvent. Hematoxylin and eosin, x40.	15

LIST OF FIGURES

Figure		Page
3.1	Banana that was used in this study: A) Banana tree; B) Banana fruits.	27
3.2	Banana's skin extracts preparation; A) Banana's skin; B) Banana's skin burn until charred; C) Powdery substance of banana's skin after burned; D) Mixture of banana's skin extract in coconut oil.	28
3.3	Figure 3.3 Coconut oil preparation; A) Boiled coconut milk; B) Become oil totally; C) Coconut oil ready to use.	29
3.4	Figure 3.4 Wound created on rat's dorsal; A) Shaving rat's hair; B) Wound created by wound puncture; C) Cut out the skin in wound area; D) Wound on rat; E) Treated with mixture of extract and coconut oil; F) treated with coconut oil; G) Individual rat every cage; H) Fitting.	30
3.5	Figure 3.5 The wound puncture	32
4.1	Observation of two punctured point at the dorsal part of rat at day 5. A) Banana's skin extract and coconut oil treated group; B) Coconut oil treated group; C) untreated group.	14

LIST OF ABBREVIATIONS

%	-	percent
AIDS	-	Acquired Immune Deficiency Syndrome
cm	-	centimeters
gm	-	grams
MDGFs	-	Macrophage Derived Growth Factors
ml	-	milliliter
mm	-	millimeter
RNA	-	Ribonucleic acid
RTPCR	-	Reverse Transcription Polymerase Chain Reaction
α	-	alpha
β	-	Beta
μm	-	micromoles

LIST OF APPENDICES

Appendix		Page
I	Table 3.2 The tissue processing steps by using Automatic Tissue Processing Machine.	23
II	Table 3.3 The reagent used and the duration for complete staining process.	24
III	Coconut oil preparation	25
IV	Banana's skin extracts preparation	26
V	Figure 3.1 Banana that was used in this study: A) Banana tree; B) Banana fruits.	27
VI	Figure 3.2 Banana's skin extracts preparation; A) Banana's skin; B) Banana's skin burn until charred; C) Powdery substance of banana's skin after burned; D) Mixture of banana's skin extract in coconut oil.	28
VII	Figure 3.3 Coconut oil preparation; A) Boiled coconut milk; B) Become oil totally; C) Coconut oil ready to use.	29
VIII	Figure 3.4 Wound created on rat's dorsal; A) Shaving rat's hair; B) Wound created by wound puncture; C) Cut out the skin in wound area; D) Wound on rat; E) Treated with mixture of extract and coconut oil; F) treated with coconut oil; G) Individual rat every cage; H) Fitting.	30
IX	Figure 3.5 The wound puncture	32
X	Skin renewal cycle	33

ABSTRACT

Banana's skin extract and coconut oil mixture were often used to heal scabies by the traditional practices in Malaysia. It was believed that it has a property that can promote wound healing. The objective of this study was to determine the potential skin extract in coconut oil and as well as the coconut oil itself in wound healing process. In this study, banana's skin extract and coconut oil were applied on white rat induced skin injury. There were three groups involved; Group 1 that was treated with banana's skin and coconut oil mixture, Group 2 that was treated with solely coconut oil and Group 3 that was untreated group. Observations on the healing progress were done continuously for 22 days. Euthanizations were conducted to half of number of white rats in each group at day 15 and the other half at day 22. Then, the wounded skin samples on those rats were subjected to histological examination. The result from this study indicated that the group treated with banana's skin and coconut oil recovered earliest compared to the other two groups. It can be concluded that the banana's skin extract contain wound healing agent that speed up the process of wound healing.

POTENSI EKSTRAK KULIT PISANG SEBAGAI AGEN PENYEMBUH LUKA

ABSTRAK

Campuran ekstrak kulit pisang dan minyak kelapa telah digunakan untuk merawat kudis buta oleh pengamal perubatan tradisional di Malaysia. Ia dipercayai bahawa ia ada ciri yang boleh menggalakkan penyembuhan luka. Objektif kajian ini adalah untuk menentukan potensi rawatan dengan ekstrak kulit pisang dalam minyak kelapa adalah lebih baik daripada minyak kelapa sahaja dalam proses penyembuhan luka. Dalam kajian ini, ekstrak kulit pisang dan minyak kelapa disapukan pada kulit tikus putih yang dilakukan. Terdapat tiga kumpulan yang terlibat; kumpulan 1 yang dirawat dengan campuran ekstrak kulit pisang dengan minyak kelapa, kumpulan 2 yang dirawat dengan minyak kelapa sahaja dan kumpulan 3 adalah kumpulan yang tidak dirawat. Pemerhatian pada perkembangan penyembuhan dilakukan berterusan selama 22 hari. Penyembelihan dilakukan pada separuh bilangan tikus dari setiap kumpulan pada hari ke-15 dan yang separuh lagi pada hari ke-22. Kemudian, sampel kulit yang luka pada tikus diambil untuk kajian histologi. Keputusan daripada kajian ini menunjukkan bahawa luka bagi kumpulan yang dirawat dengan ekstrak kulit pisang dan minyak kelapa sembuh lebih awal berbanding dengan dua kumpulan lain. Ia boleh disimpulkan bahawa ekstrak kulit pisang mengandungi agen penyembuhan luka yang mempercepatkan proses penyembuhan luka.