

**MICROBIOLOGICAL ASSESSMENT AND CHARACTERIZATION OF
MICROORGANISMS ASSOCIATED WITH DAIRY
CARABAO'S MILK-BASED MACAROONS**

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TABLE OF CONTENTS

	PAGE
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF APPENDICES	x
LIST OF APPENDIX TABLES	xi
LIST OF APPENDIX FIGURES	xii
ABSTRACT	xiii
INTRODUCTION	1
Background of the Study	1
Objectives of the Study	2
Significance of the Study	3
Scope and Limitation of the Study	3
Time and Place of the Study	4
REVIEW OF RELATED LITERATURE	5
Buffalo's Milk	5
Coconut	6
Conventional Method	7
3M™ Petrifilm™ Method	7
MATERIALS AND METHODS	10
Sample Collection	10
Assessment of Abiotic Factors of Display Area	10
Physical Assessment	10
Dilution Blank Preparation and Serial Dilution	11
Conventional Plating Method	11
Plating of Sample	11
Counting of Colonies for Aerobic Plate Count (APC)	12
Counting of Colonies for Yeast and Mold Count (YMC)	12
Computation of Colony Forming Unit	13
3M™ Petrifilm™ Method	15
Plating of Sample	15
Petrifilm™ Aerobic Count Plate	15

Petrifilm™ Yeast and Mold Count Plate	16
Isolation and Purification Technique	16
Cultural Characteristic	17
Morphological Characteristic	17
Fresh Mounting Procedure	17
Gram Staining Procedure	18
Data Gathered	18
RESULTS AND DISCUSSIONS	19
SUMMARY, CONCLUSIONS, AND RECOMMENDATION	27
Summary	27
Conclusion	27
Recommendation	28
APPENDICES	33

LIST OF TABLES

TABLE		PAGE
1	Quality assessment of dairy carabao's milk-based macaroons two samplings using organoleptic test	20
2	Aerobic plate count of dairy carabao's milk-based macaroons using conventional method and 3M™ Petrifilm™ throughout two samplings.	21
3	Yeast and mold count of dairy carabao's milk-based macaroons using conventional method and 3M™ Petrifilm™ throughout two samplings.	22
4	Cultural and morphological characteristics of the bacteria isolated from dairy carabao's milk-based macaroons	24

LIST OF FIGURES

FIGURE		PAGE
1	Cultural and morphological characteristics of bacterial isolate 1	24
2	Cultural and morphological characteristics of bacterial isolate 2	25
3	Cultural and morphological characteristics of bacterial isolate 3	26

LIST OF APPENDICES

APPENDIX		PAGE
A	Raw Data of Results	34
B	Experimental Procedure	36
C	Media Preparation	43

LIST OF APPENDIX TABLES

APPENDIX TABLE		PAGE
1	Aerobic plate count of dairy carabao's milk-based macaroons during the 1st sampling	34
2	Aerobic plate count of dairy carabao's milk-based macaroons during the 2nd sampling	34
3	Petrifilm™ aerobic plate count of dairy carabao's milk-based macaroons during the 1st sampling	34
4	Petrifilm™ aerobic plate count of dairy carabao's milk-based macaroons during the 2nd sampling	34
5	Yeast and mold count of dairy carabao's milk-based macaroons during the 1st sampling	35
6	Yeast and mold count of dairy carabao's milk-based macaroons during the 2nd sampling	35
7	Petrifilm™ yeast and mold count of dairy carabao's milk-based macaroons during the 1st sampling.	35
8	Petrifilm™ yeast and mold count of dairy carabao's milk-based macaroons during the 2nd sampling	35

LIST OF APPENDIX FIGURES

APPENDIX FIGURE		PAGE
1	Dairy carabao's milk-based macaroons	36
2	Assessment of abiotic factors of display area	36
3	Physical assessment	37
4	Reading of petrifilm and plates	37
5	Aerobic plate count results of first sampling using conventional method.	38
6	Aerobic plate count results of first sampling using petrifilm	38
7	Yeast and mold count results of first sampling using conventional method	39
8	Yeast and mold count results of first sampling using petrifilm.	39
9	Aerobic plate count results of second sampling using conventional method	40
10	Aerobic plate count results of second sampling using petrifilm.	40
11	Yeast and mold count results of second sampling	41
12	Yeast and mold count results of first sampling using petrifilm.	41
13	Growth of the bacterial isolates in NA slant	42

ABSTRACT

LADERAS, JADEN EZRA D., Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines, **JUNE 2019, MICROBIOLOGICAL ASSESSMENT AND CHARACTERIZATION OF MICROORGANISMS ASSOCIATED WITH DAIRY CARABAO'S MILK-BASED MACAROONS**

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This study was conducted to assess and characterize the microorganism present in the dairy carabao's milk-based macaroons from a local dairy cooperative. Physical assessment was done. Microbiological assessments were done using conventional and 3M™ Petrifilm method while characterization of bacteria was done by determining its cultural and morphological characters.

No objectionable result on color, appearance, odor and taste was observed in the sample. Aerobic plate count fell under "good" category for ready-to-eat foods and yeast and mold count exhibited 'acceptable' category for the microbial limits of ready to eat foods. Results of aerobic plate count and yeast and mold count also satisfied the FDA standard for microbiological quality of processed foods.

A total of three distinct bacteria were successfully isolated. Results showed that all bacterial isolates were motile, gram negative bacteria. Two bacterial isolates were facultative anaerobes and one bacterial isolate is obligate aerobe.

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