MOLECULAR IDENTIFICATION OF WILD MACROFUNGI IN MT. ARAYAT, SAN JUAN BAÑO, ARAYAT, PAMPANGA

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TABLE OF CONTENTS

	PAGE
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF APPENDICES	viii
LIST OF APPENDIX FIGURES	ix
ABSTRACT	xi
INTRODUCTION	1
Background of the Study	1
Objective of the Study	3
Significance of the Study	4
Scope and Limitation of the Study	4
Time and Place of the Study	5
REVIEW OF RELATED LITERATURE	5
Mushrooms	5
Types of Mushrooms	5
Mushroom Diversity	6
Edible Mushrooms	7
Poisonous Mushrooms	8
Molecular Identification of Macrofungi	9
MATERIALS AND METHODS	11
Collection of Samples	11
Mushroom collection	11
DNA Extraction (Modified CTAB Method)	12
DNA Quality Check	12
Polymerase Chain Reaction	13
Analysis of Phylogenetic Relationships	14
Data Gathered	14
RESULTS AND DISCUSSION	15
Collected Samples	15
BLAST Analysis	15

Phylogenetic Relations 18

SUMMARY CONCLUSION AND RECOMMENDATIONS 25

Summary 25
Conclusion 26
Recommendations 26

LITERATURE CITED 27

APPENDICES 32

LIST OF TABLES

TABLE		PAGE
1	PCR protocols used in the first batch and second batch of samples	13
2	Identities of the specimens using BLAST with NCBI Genbank Accesion Number using ITS gene marker	16

LIST OF FIGURES

FIGURES		PAGE
1	Geographic location of the study site. 15.179056, 120.753161, 174 m above sea level	11
2	Photo of the collected sample (A)*Schizophyllum commune*, (B)*Hexagonia tenuis*, (C)*Fulvifomes fastuosus*, (D)*Trametes cubensis*, (E)*Psathyrella cacao*, (F) *Geastrum morganii*, (G)*Ganoderma lucidum*, (H)*Pleurotus djamor*, (I)*Marasmius tricolor*, and (J)*Neonothopanus nambi*	17
3	Phylogenetic tree showing the relationship of mushrooms specimens JRP 1 to 5	19
4	Phylogenetic tree showing the relationship of mushrooms specimens JRP 6 to JRP10	22

LIST OF APPENDICES

APPENDIX		PAGE
A	Mushroom Collection and Collected Samples	33
B	DNA Extraction Process	34
C	PCR Process	36
D	DNA Quality Check	38

LIST OF APPENDIX FIGURES

APPENDIX FIGURES		PAGE
1	Hiking trail in Mt. Arayat where the mushrooms were collected	33
2	111mg of sample mushrooms and grinding process	34
3	Decanting the aqueous phase and spinning using the vortex	34
4	Samples with TE buffer and RNAse being incubated at room temp	35
5	PCR reagents and creation of PCR mastermix	36
6	Addition of DNA samples to PCR mastermix	36
7	Running PCR machine and PCR products	37
8	100ml of TAE, 1.5 grams of agarose powder, and heating the mixture for 3 minutes	38
9	Preparetion of loading dye and ladder	39
10	Mixing amplified PCR products with loading dye and loading into agarose gel	39
11	Gel electrophoresis	43
12	DNA quality check of the first samples collected. From left to right, L= 100bp ladder, negative control, JRP1, JRP2, JRP3, JRP4, JRP5, JRP6, JRP7, JRP8, JRP9	40
13	DNA quality check of the first batch of the second samples collected. From left to right, L= 100bp ladder, JRP10, JRP11, JRP12, JRP13, JRP14, JRP15, JRP16, JRP17, JRP18, and negative control.	41
14	DNA quality check of the second batch of the second samples collected. From left to right, L= 100bp ladder, negative control, JRP19, JRP20, JRP21, JRP22	44
15	DNA quality check of the first samples after undergoing PCR	

using Gotaq® green. From left to right, ladder, negative control, JRP1, JRP2 41

16 DNA quality check of the first samples after undergoing PCR using KAPA taq DNA polymerase. From left to right, ladder, negative control, JRP3, JRP4, JRP5, JRP6, JRP7, JRP8, JRP9, JRP10 42

ABSTRACT

POLICARPIO, JOHN RONALD T., Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines, **JUNE 2019, MOLECULAR IDENTIFICATION OF WILD MACROFUNGI IN MT. ARAYAT, ARAYAT, PAMPANGA**

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The classical way of identifying macrofungi is by using morphological means but because of the similarities in morphology when nearing the genus and species level of classification makes identification through morphological means difficult. In this study the efficiency and accuracy of identification through molecular means is highlighted. The collected wild macrofungi were subjected to DNA extraction using a modified CTAB method and amplified using Internal Transcribed Spacer Region (ITS). The PCR products are then sent to Apical scientific sequencing in Selangor, Malaysia for sequencing and used CLUSTALW in MEGA7 for alignment. BLAST analysis revealed the identity of the samples to be JRP1 (*Schizophyllum commune*) with a 100% identity, JRP2 (*Hexagonia tenuis*) with a 97% identity, JRP3 (*Fulvifomes. fastuosus*) with a 99% identity, JRP4 (*Trametes cubensis*) with a 99% identity, JRP5 (*Psathyella cacao*) with a 97% identity, JRP6 (*Geastrum morganii*) with a 99% identity, JRP7 (*Ganoderma lucidum*) with a 99% identity, JRP8 (*Pleurotus djamor*) with a 99% percent identity, JRP9 (*Marasmius tricolor*) with a 96% identity, and JRP10 (*Neonothopanus nambi*) with a 98% identity with similar species deposited at Genbank.

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