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DECLARATION

I, **Khomdram Bijoya Devi**, bearing Registration No. PhD/808 dated 17/08/2009, hereby declare that the subject matter of the thesis entitled "*Studies on DNA barcoding of Ornamental fishes of Manipur*" is the record of work done by me and that the contents of this thesis did not form the basis for award of any degree to me or to anybody else to the best of my knowledge. The thesis has not been submitted in any other University/ Institute.

Place: Assam University, Silchar

Date: February, 2014

Department of Biotechnology

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KHOMDRAM BIJOYA DEVI

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KHOMDRAM BIJOYA DEVI

CONTENTS

SI No.		Description	Page No.
1		Introduction	1-15
1.1		Fishes	2
1.2		Ornamental Fishes	2
1.3		Importance of ornamental fishes	3
1.4		Distribution of ornamental fishes-World	4
	1.4.1	India	5
	1.4.2	Manipur	6
1.5		Problem in species identification	7
1.6		Mitochondrial DNA, special references to COI genome	8
	1.6.1	DNA barcoding	9
1.7		Applications of Barcoding	10
	1.7.1	Integration of Taxonomy and Molecular approaches	11
1.8		Success of DNA barcoding	12
1.9		State of Art of the problem	14
1.10		Aim and Objective of the current research	15
2		Review of literature	16-31
2.1		Ornamental fish inventory in India and Northeast India perspective (morphology related work)	18
2.2		Progress of molecular taxonomy in ichthyodiversity	19
2.3		Application of DNA barcoding for decoding of ornamental fish	25
3		Materials and Methods	32-49
3.1		Materials	33-39
	3.1.1	Selection of sampling site	33
	3.1.2	Sampling, documentation of experimental taxa and accessing the database	34
	3.1.3	Chemicals	34
	3.1.4	Primers	38
	3.1.5	Additional data acquired from databases	38
3.2		Methods	40-49
	3.2.1	Isolation and quantification of DNA	40
		3.2.1.1 Isolation of DNA from different samples	40
		3.2.1.2 Spectrophotometric determination	42
		3.2.1.3 Agarose gel electrophoresis	42
	3.2.2	PCR amplification of <i>COI</i> barcode segment	43
		3.2.2.1 PCR reaction settings	43
		3.2.2.2 PCR cycling condition	44
		3.2.2.3 Purification of PCR products	44
	3.2.3	Sequencing of PCR amplicons	45
	3.2.4	Sequence checking and formatting	45
	3.2.5	Sequence submission in GenBank and BOLD	47
	3.2.6	Similarity search	44
	3.2.7	Sequence alignment	47
	3.2.8	Model selection and sequence analysis	48

4			Results	50-85
4.1.			Morphology based identification of the ornamental fishes	51-59
	4.1.1		Cyprinidae	51
	4.1.2		Siluridae	52
	4.1.3		Sisoridae	53
	4.1.4		Bagridae	53
	4.1.5		Gobiidae	56
	4.1.6		Badidae	56
	4.1.7		Amblycipitidae	56
	4.1.8		Nandidae	56
	4.1.9		Cobitidae	56
	4.1.10		Channidae	58
4.2.			Molecular identification and characterization of the different species of ornamental fishes found in Manipur	60-66
	4.2.1.		Genomic DNA isolation from blood and tissue	60
	4.2.2.		PCR amplification of COI DNA barcode and purification	60
	4.2.3.		Final sequences	61
	4.2.4.		Dataset characteristics	63
	4.2.5.		Submitted sequences in GenBank and BOLD	63
	4.2.6.		DNA barcode based characterization of the ornamental fishes of Manipur	63
	4.2.6.1.		Species identification based on similarity match with database	63
4.3.			Sequence analysis of the DNA barcode region of the ornamental fishes	67-76
	4.3.1.		Disparity index test of pattern homogeneity	67
	4.3.2.		Genetic divergence	67
	4.3.3.		Maximum Likelihood estimate of substitution matrix	68
	4.3.4.		Maximum Likelihood estimate of Transition transversion bias	69
	4.3.5.		Maximum Composite Likelihood estimate of the pattern of Nucleotide substitution	69
	4.3.6.		Nucleotide composition analysis	71
	4.3.7.		Amino acid composition and Codon usage	74
4.4.			Development of Phylogenetic relationship between the different species of ornamental fishes identified	76-83
	4.4.1.		Neighbor Joining tree	76
	4.4.2.		Model selection for analysis of Maximum likelihood based approach	77
	4.4.3.		Phylogenetic analysis based on Maximum Likelihood and Maximum Parsimony approach	79
4.5.			Development of reference barcode library of the ornamental fishes from Manipur	78
5			Discussion	86-93
6			Summary	94-95
7			Bibliography	86-108

LIST OF FIGURES

Figure No.	Description	Page No.
1	Global distribution of ornamental fishes	05
2	Mitochondrial genome showing the different arrangements of genes	08
3	Map of Manipur, India showing the different locations of sample collection	33
4	Few representatives of genomic DNA extracted pictures from blood and tissue samples	60
5	COI DNA barcode PCR amplicons of ornamental fish samples	61
6	Example of sequence editing	62
7	Chart showing genetic divergence within and between species	68
8	Overall nucleotide composition of the 27 sequences under study	71
9	Nucleotide composition in 1 st codon position of the 27 sequences generated	72
10	Nucleotide composition in 2 nd codon position of the 27 sequences generated	72
11	Nucleotide composition in 3 rd codon position of the 27 sequences generated	73
12	Chart showing average amino acid composition for the ornamental fishes under study	75
13	Neighbor Joining tree developed by using K2P distances generated by our generated sequences of ornamental fishes with sequences from GenBank	81
14	Maximum Likelihood tree generated from the ornamental fish sequences by adopting GTR+G+I model	82
15	Maximum Parsimony tree developed from the sequences under study	83
16	DNA barcode of the ornamental fish, SGBK-AUFO35 which represents <i>Cirrhinus mrigala</i> .	85

LIST OF TABLES

Table No.	Description	Page No.
1	Details of GenBank DNA barcode sequences retrieved in the present study for analysis	38
2	Checklist of ornamental fish species collected with their local names in Manipuri and location	59
3	Accession number of the sequences submitted in GenBank with their sample codes and species name	64
4	Sample identification results (homology comparison) based on GenBank and BOLD	65
5	Estimation of substitution index by Maximum Likelihood approach	69
6	Estimation of pattern of nucleotide substitution by maximum Composite Likelihood approach	70
7	Frequency of codons in COI sequences of ornamental fishes under study	76
8	Model test for phylogenetic analysis by Maximum Likelihood, generated by putting the sequences used in the study using MEGA 5.0	78
9	The ornamental fishes under study mentioning their ornamental characters	88

LIST OF PLATES

Plate No.	Description	Page No.
1	Specimens of the ornamental fish species- <i>Labeo bata</i> , <i>Labeo gonius</i> , <i>Labeo calbasu</i> , <i>Puntius sophore</i> , <i>Puntius chola</i> , <i>Cirrhinus mrigala</i> .	54
2	Specimens of the ornamental fish species- <i>Amblyceps mangois</i> , <i>Rasbora daniconius</i> , <i>Channa orientalis</i> , <i>Channa punctatus</i> , <i>Badis badis</i> , <i>Esomus danricus</i> .	55
3	Specimens of the ornamental fish species- <i>Barbonymus gonionotus</i> , <i>Mystus vittatus</i> , <i>Wallagu attu</i> , <i>Sisor raddophorus</i> , <i>Glossogobius giuris</i> , <i>Channa sriata</i> .	57

LIST OF ABBREVIATIONS

µg	:	Microgram
µl	:	Microliter
°C	:	Degree Celsius
A	:	Adenine
AG	:	Adenine- Guanine
AT	:	Adenine- Thymine
BLAST	:	Basic Local Alignment Search Tool
BLASTn	:	Basic Local Alignment Search Tool Identification
BOLD	:	Barcode of Life Data System
BOLD- IDs	:	Barcode of Life Data System Identification
Bp	:	Base pair
C	:	Cytosine
CBOL	:	Consortium of Barcode of Life
<i>COI/ COXI</i>	:	Cytochrome oxidase subunit I
LRnt	:	Near Threatened
LC	:	Least Concern

VU	:	Vulnerable
LRlc	:	Least Concern
EN	:	Endangered
CT	:	Cytosine- Thymine
DNA	:	Deoxy Ribonucleic acid
EDTA	:	Ethylene diamine tetra acetate
EN	:	Endangered
EtBr	:	Ethidium Bromide
FASTA	:	Fast Align Sequences Tag Assembly
G	:	Guanine
GC	:	Guanine- Cytosine
Gm	:	Gram
IUCN	:	International Union for Conservation of Nature and Natural Resources
K2P	:	Kimura 2 Parameter
Lb	:	Pound
MCL	:	Maximum Composite Likelihood
MEGA	:	Molecular Evolutionary Genomic Analysis
mg	:	Milligram
ml	:	Milliliter
ML	:	Maximum Likelihood
Mm	:	Milli molar
mtDNA	:	Mitochondrial DNA
NCBI	:	National Centre for Biotechnological Information
NE	:	North East
Ng	:	Nanogram
NJ	:	Neighbor- Joining
NN	:	Nearest Neighbor
O.D	:	Optical Density
ORF	:	Open Reading Frame
PCR	:	Polymerase Chain Reaction

N	:	North
GPS	:	Global Positioning System