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Declaration

I, Shri Pradosh Mahadani, bearing registration No. Ph.D/809/2009 dated 17/08/2009 hereby declare that the subject matter of the thesis entitled *“Development of DNA passport for species level identification of important medicinal plants with special reference to Apocynaceae from Southern Assam”* is the record of the work done by me and that the content of the thesis did not form the basis for the award of any degree to me or anybody else to the best of my knowledge. This thesis has not been submitted in any other University/Institution.

Place: Silchar

Date: 26th April, 2013

(Pradosh Mahadani)

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List of Abbreviations

Abbreviation	Word
A	: Adenine
AG	: Adenine-Guanine
AT	: Adenine-Thymine
BLAST	: Basic Local Alignment Search Tool
BOLD	: Barcode of Life Database
bp	: Base pair
C	: Cytosine
CBOL	: Consortium for the Barcode of Life
CBD	: Convention on Biological Diversity
<i>COI</i>	: <i>Cytochrome c Oxidase Subunit I</i>
cpDNA	: Chloroplast DNA
CT	: Cytosine-Thymine
EDTA	: Ethylene diamine tetra acetate
EtBr	: Ethidium Bromide
FAO	: Food and Agricultural Organisation
FASTA	: Fast Align Sequence Tag Assembly
G	: Guanine
GC	: Guanine-Cytosine
indel	: insertion and deletion
<i>ITS</i>	: <i>internal transcribed spacer</i>
K2P	: Kimura 2- Parameter
M	: Molar
<i>matK</i>	: <i>Maturase K</i>
MEGA	: Molecular Evolutionary Genetics Analysis
mM	: Milli molar
mtDNA	: Mitochondrial DNA

Abbreviation	Word
NCBI	: National Centre for Biotechnology Information
NEB	: Nuclease Enzyme of Bio lab
Ng	: Nanogram
NJ	: Neighbor-joining
O.D.	: Optical Density
ORF	: Open Reading Frame
PCR	: Polymerase Chain Reaction
pmol	: Pico molar
<i>psbA</i>	: photosystem-II
QV	: Quality Value
<i>rbcL</i>	: <i>Ribulose 1, 5-diphosphate carboxylase/oxygenase</i>
<i>rpo</i>	: <i>RNA polymerase</i>
SDS	: Sodium Dodecyl Sulfate
SMS	: Sequence Manipulation Suite
rRNAs	: Ribosomal Ribonucleic acids
T	: Thymine
T _m	: Melting Temperature
tRNA	: Transfer RNA
tRNA Tyr	: Transfer RNA Tyrosine
UV	: Ultra Violet
WHO	: World Health Organisation
WTO	: World Trade Organisation
μg	: Micro gram
μl	: Micro litre
β -ME	: β-mercaptoethanol