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CERTIFICATE

This is to certify that the thesis entitled **"Study of anti-hyperglycemic property of traditionally used medicinal plants of Kokrajhar district, Assam"** submitted by Manita Daimari (Date of Registration, 21st February, 2018, Regd. No-FINAL/ZOO/0002) for the award of PhD (Zoology) in Bodoland University is the result of her original research work completed under my supervision and guidance.

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SELF-DECLARATION CERTIFICATE

I, Manita Daimari, hereby declare that the thesis entitled **"Study of anti-hyperglycemic property of traditionally used medicinal plants of Kokrajhar district, Assam"** is an original work and has been submitted by me for the award of Doctor of Philosophy in Bodoland University under the supervision of Dr. Ananta Swargiary. Further, I also declare that the thesis, or any part embodied in this thesis has not formed the basis for the award of any degree in this University or any other University.

Manita Daimari

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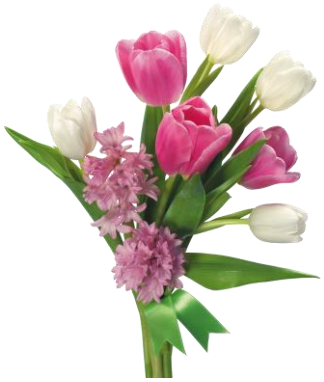

- *"Dedicated to my loving mother who instilled in me the virtues of perseverance and commitment and fuelled my determination to see this thesis through"*

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Manita Daimari

Ph.D. Research Scholar

ABBREVIATIONS

µg	Micro gram
AAE	Ascorbic acid equivalent
AAS	Atomic Absorption Spectrometry
ABTS	2,2- Azino-bis-3-ethylbenzothiazoline-6-sulphonic acid assay
ADA	American Diabetes Association
$AlCl_3$	Aluminium Chloride
ALP	Alkaline Phosphatase
ALT	Alanine Transaminase
AOT	Acute Oral Toxicity
AST	Aspartate Transaminase
BSA	Bovine Serum Albumin
bw	Body weight
Cd	Cadmium
CDB	Community Development Blocks
CDNB	1-Chloro, 2-4-Dinitrobenzene
Conc.	Concentrated
CPSEA	Committee for the purpose of Control and Supervision of Experiments on Animals
Cr	Chromium
CR-I	Castelli Index -I
CR-II	Castelli Index -II

CR-III	Castelli Index -III
Cu	Copper
DD	Double diabetes
dH_20	Distilled water
DKA	Diabetic Ketoacidosis
dL	Decilitre
DM	Diabetes Mellitus
DMSO	Dimethyl sulfoxide
DNS	Dinitro Salicylic Acid
DPP-4	Dipeptidyl peptidase-IV inhibitors
DPPH	2,2-Diphenyl-1-Picrylhydrazyl
EDTA	Ethylenediamine Tetra acetic acid
FC	Frequency of citation
$FeCl_3$	Ferric Chloride
$FeSO_4$	Ferrous Sulphate
FIV	Family Importance Value
FRAP	Ferric Reducing Antioxidant Power
FRDF	*Ficus racemosa* diethyl ether fraction
GDM	Gestational Diabetes
GSH	Reduced Glutathione
GST	Glutathione-S-transferase
H_2O_2	Hydrogen Peroxide
H_2SO_4	Sulphuric acid
HCl	Hydrochloride
HDL	High Density Lipoprotein
HNO_3	Nitric acid

IDF	International Diabetes Federation
LDL	Low Density Lipoprotein
M	Mole
MDA	Malondialdehyde
mg	milligram
min	minute
mL	milliliter
mM	millimole
Mn	Manganese
Na_2CO_3	Sodium Carbonate
NaOH	Sodium Hydroxide
Ni	Nickel
nm	Nanometer
O.D.	Optical Density
OECD	Organisation for Economic Co-operation and Development
OGTT	Oral Glucose Tolerance Test
Pb	Lead
pNPG	p-Nitrophenyl-α-D-glucopyranoside
QE	Quercetin equivalent
RFC	Relative Frequency of Citation
ROS	Reactive Oxygen Species
rpm	Revolutions per minute
SDS	Sodium Dodecyl Sulfate
SGLT-2	Sodium-Glucose cotransporter-2
STZ	Streptozotocin

T1DM	Type-I Diabetes Mellitus
TAC	Total Antioxidant Capacity
TBA	Thiobarbituric acid
TBARS	Thiobarbituric Acid Reactive Substances
TC	Total Cholesterol
TCA	Trichloroacetic acid
TFC	Total Flavonoid Content
TIIDM	Type-II Diabetes Mellitus
TPC	Total Phenolic content
TPTZ	2,4,6-Tripyridyl-S-Triazine
UV-Vis	Ultraviolet-Visible
VLDL	Very Low-Density Lipoprotein
WHO	World Health Organisation
Zn	Zinc

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