

COMPARATIVE ACCOUNT ON THE SOAP PREPARED BY AZADIRACHTA INDICA AND ALOE VERA

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : ALEENA. E.M. REG NO: CRAUSBOOOL

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

2020-2023

Assistant Professor Department of Botany K.K.T.M. Govt. College Pullut, Kodungallur-680663

CEETHU ELIZABATH THOMAS Assistant Protessor Department of Botany St. Thomas College Thrissur - 680 001

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2,

PG AND RESEARCH DEPARTMENT OF BOTANY

Carmel College, Mala

(Affiliated to the University of Calicut) 6880732

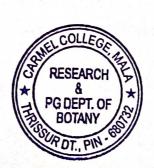


CERTIFICATE

This is to certify that the dissertation entitled "Comparative account on the soap prepared by *Azadirachta indica* and *Aloe vera*" is a record of bonafide project work successfully completed by Aleena E.M.with Reg. No: CRAUSBO001, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Sinjumol Thomas, Assistant Professor in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of science in Botany.

Research Guide

DR.SINJUMOL THOMAS Assistant Professor & Research Guide Department of Botany Carmel College Mala Thrissur - 680732, India



Dr. Biadhu KB Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

I hereby declare that the dissertation entitled "Comparative account on the soap prepared by *Azadirachta indica* and *Aloe vera*" submitted to Calicut University in partial fulfilment of the requirement for the award of Bachelor of science in Botany has been originally carried out under the guidance of Dr. Sinjumol Thomas, Assistant Professor, PG and Research Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any degree, diploma, Associateship or other title of any University or Institution.

Aleena E.M

Place :Mala Date :30-03-2023



PREPARATION OF HERBAL TOOTH POWDER AND IT'S ANTI- BACTERIAL PROPERTIES

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : ASHLI BALAN C REG NO: CRAUSBODIS

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE,MALA 2020-2023 PG AND RESEARCH DEPARTMENT OF BOTANY

Carmel College, Mala

(Affiliated to the university of Calicut) 6880732



CERTIFICATE

This is to certify that the dissertation entitled "**Preparation of herbal toothpowder and its anti-bacterial properties**" is a record of bonafide project work successfully completed by **Ashli Balan C** with Reg. No: **CRAUSBO015**, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Bindhu KB, Associate Professor and Head of the Department in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of science in Botany.

Research Guide



GEETHU ELIZABATH THOMAS Assistant Professor Department of Botany St. Thomas College Thrissur - 680 001

Dr. Bindhy KB

Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

2.

I hereby declare that the dissertation entitled "**Preparation of herbal tooth powder and it's anti- bacterial properties**" submitted to Calicut University in partial fulfilment of the requirement for the award of Bachelor of science in Botany has been originally carried out under the guidance of Dr. Bindhu K B , Associate Professor and Head of the Department, PG & Research Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any degree, diploma, Associateship or other title of any University or Institution.

Place : Mala Date : 31 03 2023



PREPARATION OF HERBAL TOOTH POWDER AND IT'S ANTI- BACTERIAL PROPERTIES

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : ATHULYA JOSEPH REG NO: CRAUSBOOLT

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY

Carmel College, Mala

(Affiliated to the university of Calicut) 6880732



CERTIFICATE

This is to certify that the dissertation entitled "**Preparation of herbal toothpowder and its anti-bacterial properties**" is a record of bonafide project work successfully completed by **Athulya Joseph** with Reg. No: **CRAUSBO017**, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Bindhu KB, Associate Professor and Head of the Department in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of science in Botany.

Research Guide

2



Dr. Binghay KB Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

We hereby declare that the dissertation entitled "Preparation of herbal tooth powder and it's anti- bacterial properties" submitted to Calicut University in partial fulfilment of the requirement for the award of Bachelor of science in Botany has been originally carried out under the guidance of Dr. Bindhu K B , Associate Professor and Head of the Department, PG & Research Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any degree, diploma, Associateship or other title of any University or Institution.

Place: Mala Date: 3 03 (2023

Athulya Joseph



PRELIMINARY PHYTOCHEMICAL ANALYSIS AND ANTICOAGUALANT PROPERTY OF *Tridax procumbens L*.

DISSERTATION SUBMITTED

To the Calicut University in Partial Fulfillment of

B.Sc. Programme in Botany

BY

FEMI WILSON

CRAUSBO018

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS) 2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA(AUTONOMOUS)



CERTIFICATE

This is to certify that the dissertation entitled "**Preliminary phytochemical analysis and anticoagulant property of** *Tridax procumbens L*." is a record of bonafide project work successfully completed by **FEMI WILSON** with Reg. No. **CRAUSBO018**, Department of Botany, Carmel College Mala, under the supervision and guidance of Dr. Dhanya Thomas TT, Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of Science in Botany.

Dr. Dhanya Thomas T T

Supervisor

Dr. Dhanya Thomas T.T Assistant Professor Department of Botany Carmel College, Mala, Thrissur

Examiner 1:



Head of the Department Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

Examiner 2

w. Dr. Binehu K B

I hereby declare that the dissertation entitled "**Preliminary phytochemical analysis and anticoagulant property of** *Tridax procumbens L.*" submitted to Calicut University in partial fulfillment of the requirement for the award of Bachelor of Science in Botany has been originally carried out under the guidance of Dr. Dhanya Thomas T.T., Assistant Professor, PG and Research Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any Degree, Diploma, Associateship or other title of any University or Institution.

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Place: Mala

Date : 31-03-2023



PRELIMINARY PHYTOCHEMICAL ANALYSIS AND ANTICOAGULANT PROPERTY OF Tridax procumbens L.

DISSERTATION SUBMITTED

To the Calicut University in Partial Fulfillment of

B.Sc. Programme in Botany

BY

GAYATHRI S JAYARAM CRAUSBO019

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS) 2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA(AUTONOMOUS)



This is to certify that the dissertation entitled "Preliminary phytochemical analysis and anticoagulant property of *Tridax procumbens L*." is a record of bonafide project work successfully completed by GAYATHRI S JAYARAM with Reg. No. CRAUSBO019, Department of Botany, Carmel College Mala, under the supervision and guidance of Dr. Dhanya Thomas TT, Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of Science in Botany.

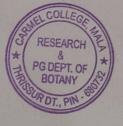
Dr. Dhanya Thomas T T

Supervisor

Dr. Dhanya Thomas T.T Assistant Professor Department of Botany Carmel College, Mala, Thrissur

Examiner 1:

Examiner 2: (



Andh

Dr. Bindhu K B

Head of the Department Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

T

I hereby declare that the dissertation entitled "Preliminary phytochemical analysis and anticoagulant property of *Tridax procumbens L.*" submitted to Calicut University in partial fulfillment of the requirement for the award of Bachelor of Science in Botany has been originally carried out under the guidance of Dr. Dhanya Thomas T.T., Assistant Professor, PG and Research Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any Degree, Diploma, Associateship or other title of any University or Institution.

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Gayathri S Jayaram

Place: Mala Date : 31 03 2023



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PROJECT

PHYTOCHEMICAL ANALYSIS AND PRELIMINARY ANTICOAGUALANT PROPERTY OF Tridax procumbens L.

DISSERTATION SUBMITTED

To the Calicut University in Partial Fulfillment of

B.Sc. Programme in Botany

BY

KRISHNENDU A G

CRAUSBO020

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS) 2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA(AUTONOMOUS)



CERTIFICATE

This is to certify that the dissertation entitled "Preliminary phytochemical analysis and anticoagulant property of *Tridax procumbens L*." is a record of bonafide project work successfully completed by KRISHNENDU A G with Reg. No. CRAUSBO020, Department of Botany, Carmel College Mala, under the supervision and guidance of Dr. Dhanya Thomas TT, Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of Science in Botany.



Dr. Dhanya Thomas T T

Supervisor

Dr. Dhanya Thomas T.T Assistant Professor Department of Botany Carmel College, Mala, Thrissur



Dr. Bindhu

Head of the Department

Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

Examiner 1:

Examiner 2:

I hereby declare that the dissertation entitled "**Preliminary phytochemical analysis and anticoagulant property of** *Tridax procumbens L.*" submitted to Calicut University in partial fulfillment of the requirement for the award of Bachelor of Science in Botany has been originally carried out under the guidance of Dr. Dhanya Thomas T.T., Assistant Professor, PG and Research Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any Degree, Diploma, Associateship or other title of any University or Institution.

2

Krishnendu A G

Place: Mala

Date: 31/03/2023



PRELIMINARY PHYTOCHEMICAL ANALYSIS AND ANTICOAGUALANT PROPERTY OF *Tridax procumbens L*.

DISSERTATION SUBMITTED

To the Calicut University in Partial Fulfillment of

B.Sc. Programme in Botany

BY

LINSA JOSE

CRAUSBO021

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS) 2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA(AUTONOMOUS)



CERTIFICATE

This is to certify that the dissertation entitled "Preliminary phytochemical analysis and anticoagulant property of *Tridax procumbens L*." is a record of bonafide project work successfully completed by LINSA JOSE with Reg. No. CRAUSBO021, Department of Botany, Carmel College Mala, under the supervision and guidance of Dr. Dhanya Thomas TT, Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of Science in Botany.

Dr. Dhanya Thomas T T

Supervisor

Dr. Dhanya Thomas T.T Assistant Professor Department of Botany Carmel College, Mala, Thrissur

Examiner 1:

Examiner 2:



Dr. Binehu K B

Head of the Department

Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

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Linsa Jose

Place: Mala

Date : 31-03-2023



PRELIMINARY PHYTOCHEMICAL ANALYSIS AND ANTICOAGULANT PROPERTY OF Tridax procumbens L.

DISSERTATION SUBMITTED

To the Calicut University in Partial Fulfillment of

B.Sc. Programme in Botany

BY MEGHA SAJI CRAUSBO022

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS) 2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS)



CERTIFICATE

This is to certify that the dissertation entitled "Preliminary phytochemical analysis and anticoagulant property of *Tridax procumbens L*." is a record of bonafide project work successfully completed by MEGHA SAJI with Reg. No. CRAUSBO022, Department of Botany, Carmel College Mala, under the supervision and guidance of Dr. Dhanya Thomas TT, Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of Science in Botany.

Dr. Dhanya Thomas T T

Supervisor

Dr. Dhanya Thomas T.T Assistant Professor Department of Botany Carmel College, Mala, Thrissur

Examiner 1:



Dr. Bindhu K B

Head of the Department Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

Examiner 2

I hereby declare that the dissertation entitled "Preliminary phytochemical analysis and anticoagulant property of *Tridax procumbens L*." submitted to Calicut University in partial fulfillment of the requirement for the award of Bachelor of Science in Botany has been originally carried out under the guidance of Dr. Dhanya Thomas T.T., Assistant Professor, PG and Research Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any Degree, Diploma, Associateship or other title of any University or Institution.

Megha Saji

Place: Mala

Date: 81-3-2023



SEED VIABILITY AND GERMINATION STUDIES IN FLACOURTIA JANGOMAS: A POTENTIAL MEDICINAL PLANT

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : MANDANA C. REG NO: CRAUSBO024

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE (AUTONOMOUS), MALA



CERTIFICATE

This is to certify that the dissertation entitled "Seed Viability and Germination studies in Flacourtia Jangomas: a Potential Medicinal Plant" is a record of bonafide project work successfully completed by NANDANA C. with Reg. No. CRAUSBO024, Department of Botany, Carmel College (Autonomous) Mala, under the supervision and guidance of Dr. Sr. Kochuthressia K. P., Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of Science in Botany.

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Dr. Sr. Kochuthre ia K. P. Supervisor Dr. Sr. Kochuthressia. K.P. Assistant Professor Department of Botany Carmel College Mala Examiner 1: OLLE RESEARCH PG DEPT. OF BOTANY PDT. P Examiner 2

Dr. Bindhur K. B.

Head of the Department Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

I hereby declare that the dissertation entitled "Seed Viability and Germination Studies in *Flacourtia Jangomas*: A Potential Medicinal Plant" submitted to Calicut University in partial fulfillment of the requirement for the award of Bachelor of Science in Botany has been originally carried out under the guidance of Dr. Sr. Kochuthressia K P. Assistant professor, PG and Reasearch Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any degree, Diploma, Associateship or other title of any University or Institution.

Nandana C

Place: Mala Date: 31-03-2023



SEED VIABILITY AND GERMINATION STUDIES IN FLACOURTIA JANGOMAS: A POTENTIAL MEDICINAL PLANT

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : ALANDAND.P.S.

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA 2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE (AUTONOMOUS), MALA



CERTIFICATE

This is to certify that the dissertation entitled "Seed Viability and Germination studies in *Flacourtia Jangomas*: a Potential Medicinal Plant" is a record of bonafide project work successfully completed by NANDANA P S. with Reg. No. CRAUSBO025, Department of Botany, Carmel College (Autonomous) Mala, under the supervision and guidance of Dr. Sr. Kochuthressia K. P., Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of Science in Botany.

Dr. Sr. Kochuthressia K. P.

Supervisor

Examiner 1:

Dr. Binthu K. B.

Head of the Department Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

Examiner 2:



I hereby declare that the dissertation entitled "Seed Viability and Germination Studies in *Flacourtia Jangomas*: A Potential Medicinal Plant" submitted to Calicut University in partial fulfillment of the requirement for the award of Bachelor of Science in Botany has been originally carried out under the guidance of Dr. Sr. Kochuthressia K P. Assistant professor, PG and Reasearch Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any degree, Diploma, Associateship or other title of any University or Institution.

Nandana P S

Place: Mala

Date:



SEED VIABILITY AND GERMINATION STUDIES IN FLACOURTIA JANGOMAS: A POTENTIAL MEDICINAL PLANT

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : NAYANA.SILPHA MT REG NO: CRAUSBO026

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE (AUTONOMOUS), MALA



CERTIFICATE

This is to certify that the dissertation entitled "Seed Viability and Germination studies in *FlacourtiaJangomas*: a Potential Medicinal Plant" is a record of bonafide project work successfully completed by NAYANA SILPHA M T. with Reg. No. CRAUSBO026, Department of Botany, Carmel College (Autonomous) Mala, under the supervision and guidance of Dr. Sr. Kochuthressia K. P., Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of Science in Botany.

Dr. Sr. Kochuthressia K. P.

Supervisor

Dr. Sr. Kechuthressia, K.P. Assistant Professor Department of Botany Carmei College Mala

Examiner 1:



Dr. Bindhu K. B.

Head of the Department

Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

Examiner 2:



I hereby declare that the dissertation entitled "Seed Viability and Germination Studies in *Flacourtia Jangomas*: A Potential Medicinal Plant" submitted to Calicut University in partial fulfillment of the requirement for the award of Bachelor of Science in Botany has been originally carried out under the guidance of Dr. Sr. Kochuthressia K P. Assistant professor, PG and Reasearch Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any degree, Diploma, Associateship or other title of any University or Institution.

Nayana Silpha M T

Place: Mala

Date:



SEED VIABILITY AND GERMINATION STUDIES IN FLACOURTIA JANGOMAS: A POTENTIAL MEDICINAL PLANT

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

ΒY

NAME : NIKHITHAT.S REG NO: CRAUSBON27

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

2020-2023

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(OTFON

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE (AUTONOMOUS), MALA



CERTIFICATE

This is to certify that the dissertation entitled "Seed Viability and Germination studies in *Flacourtia Jangomas*: a Potential Medicinal Plant" is a record of bonafide project work successfully completed by NIKITHA T S. with Reg. No. CRAUSBO027, Department of Botany, Carmel College (Autonomous) Mala, under the supervision and guidance of Dr. Sr. Kochuthressia K. P., Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of Science in Botany.

Dr. Sr. Kochuthressia K. P.

Supervisor

Dr. Sr. Kochuthressia, K.P. Assistant Professor Department of Botany Carma, College Mala

Examiner 1:

Dr. Bindhu K. B.

Head of the Department Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

Examiner 2:



I hereby declare that the dissertation entitled "Seed Viability and Germination Studies in *Flacourtia Jangomas*: A Potential Medicinal Plant" submitted to Calicut University in partial fulfillment of the requirement for the award of Bachelor of Science in Botany has been originally carried out under the guidance of Dr. Sr. Kochuthressia K P. Assistant professor, PG and Reasearch Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any degree, Diploma, Associateship or other title of any University or Institution.

Nikhitha T S

Place: Mala Date:

TON ODDO



ASSESSMENT OF FLORA DIVERSITY OF

CARMEL COLLEGE CAMPUS

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : POURNAMI. V REG NO: CRIAUSBO. O. 2.8

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA(AUTONOMOUS)



CERTIFICATE

This is to certify that the dissertation entitled "ASSESSMENT OF FLORA DIVERSITY OF CARMEL COLLEGE CAMPUS" is a record of bonafide project work successfully completed by POURNAMI V with Reg. No. **CRAUSBO028**, Department of Botany, Carmel College Mala, under the supervision and guidance of Dr. ROBI T J, Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of Science in Botany.

Dr.ROBY T J

Supervisor

Dr. Roby T. J. Assistant Professor Research & Postgraduate Department of Botany Carmel College Mala, Thrissur - 680 732, Kerala E-mail : roby@carmelcollegemala.ac.in

Examiner 1:

Examiner 2



Dr. Bindhu K B

Head of the Department Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

I hereby declare that the dissertation entitled "ASSESSMENT OF FLORAL DIVERSITY OF CARMEL COLLEGE CAMPUS" submitted to Calicut University in partial fulfillment of the requirement of the award of Master of Science in Botany has been originally carried out under the guidance of Dr. Roby T. J, Assistant professor in Postgraduate and Research Department of Botany, Carmel College (autonomous), Mala. No part of this dissertation has formed the basis for the award of any degree, diploma, associate ship or other similar title of any university or institution.

Place: MALA Date: 11/04/2023 Signature of the candidate

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PROJECT

ASSESSMENT OF FLORA DIVERSITY OF

CARMEL COLLEGE CAMPUS

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : Sabeeha Barbeer REG NO: CRAUSBOD29...

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE,MALA 2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA(AUTONOMOUS)



CERTIFICATE

This is to certify that the dissertation entitled "ASSESSMENT OF FLORA DIVERSITY OF CARMEL COLLEGE CAMPUS" is a record of bonafide project work successfully completed by SABEEHA BASHEER with Reg. No. **CRAUSBO029**, Department of Botany, Carmel College Mala, under the supervision and guidance of Dr.ROBY T J, Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of Science in Botany.

Dr. ROBY T J

Supervisor

Dr. Roby T. J. Assistant Professor Research & Postgraduate Department of Botany Carmel College Mala, Thrissur - 680 732, Kerala E-mail : roby@carmelcollegemala.ac.in Examiner 1: Examiner 2



Head of the Department

Head Departmeness Botany Carmel College, Mala Thrissur, Kerala - 680732



I hereby declare that the dissertation entitled "ASSESSMENT OF FLORAL DIVERSITY OF CARMEL COLLEGE CAMPUS" submitted to Calicut University in partial fulfillment of the requirement of the award of Master of Science in Botany has been originally carried out under the guidance of Dr. Roby T. J, Assistant professor in Postgraduate and Research Department of Botany, Carmel College (autonomous), Mala. No part of this dissertation has formed the basis for the award of any degree, diploma, associate ship or other similar title of any university or institution.

Place: 11-04-2023 Date: Mala Signature of the candidate



ASSESSMENT OF FLORA DIVERSITY OF

CARMEL COLLEGE CAMPUS

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME SREELAKSHMISANTHOSH REG NO: CRAUSBO 030

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA

2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA(AUTONOMOUS)



CERTIFICATE

This is to certify that the dissertation entitled "ASSESSMENT OF FLORA DIVERSITY OF CARMEL COLLEGE CAMPUS" is a record of bonafide project work successfully completed by SREELAKSHMI SANTHOSH with Reg. No. CRAUSBO030, Department of Botany, Carmel College Mala, under the supervision and guidance of Dr.ROBY T J, Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of Science in Botany.

Dr. ROBY T J

Supervisor

Examiner 2:

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C

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Dr. Roby T. J. Assistant Professor Research & Postgraduate Department of Botany Carmel College Mala, Thrissur - 680 732, Kerala E-mail : roby@carmelcollegemala.ac.in Examiner 1:



VIN Dr. Bindhul

Head of the Department Head Department of Boilerry Carmel College, Maia Thrissur, Kerala - 680732

I hereby declare that the dissertation entitled "ASSESSMENT OF FLORAL DIVERSITY OF CARMEL COLLEGE CAMPUS" submitted to Calicut University in partial fulfillment of the requirement of the award of Master of Science in Botany has been originally carried out under the guidance of Dr. Roby T. J, Assistant professor in Postgraduate and Research Department of Botany, Carmel College (autonomous), Mala. No part of this dissertation has formed the basis for the award of any degree, diploma, associate ship or other similar title of any university or institution.

Place: MALA

Date: 11-04-2023

Signature of the candidate

Arten Hireling



ASSESSMENT OF FLORA DIVERSITY OF

CARMEL COLLEGE CAMPUS

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME .T.N. SREELEKSHMI

REG NO: CRAUSBO.Q.3.1.

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA(AUTONOMOUS)



tion entitled "ASSESSMENT

This is to certify that the dissertation entitled "ASSESSMENT OF FLORA DIVERSITY OF CARMEL COLLEGE CAMPUS" is a record of bonafide project work successfully completed by T V SREELAKSHMI with Reg. No. CRAUSBO031, Department of Botany, Carmel College Mala, under the supervision and guidance of Dr. ROBY T J Assistant professor in Post Graduate and Research Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of Science in Botany.

Dr. ROBY T J

Supervisor

Dr. Roby T. J. Assistant Professor Research & Postgraduate Department of Botany Carmel College Mala, Thrissur - 680 732, Kerala E-mail: roby@carmelcollegemals.ac.in

Examiner 1:

Examiner 2:

Dr. Bindhu K B

Head of the Department

Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732



I hereby declare that the dissertation entitled "ASSESSMENT OF FLORAL DIVERSITY OF CARMEL COLLEGE CAMPUS" submitted to Calicut University in partial fulfillment of the requirement of the award of Master of Science in Botany has been originally carried out under the guidance of Dr. Roby T. J. Assistant professor in Postgraduate and Research Department of Botany, Carmel College (autonomous), Mala. No part of this dissertation has formed the basis for the award of any degree, diploma, associate ship or other similar title of any university or institution.

Signature of the candidate

Place: Mala Date: 11/04/2023

Another



COMPARATIVE ACCOUNT ON THE SOAP PREPARED BY AZADIRACHTA **INDICA AND ALOE VERA**

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME ANAGHA JOHN REG NO: CRAUSBODD

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA Assistant of Botany



Assistant Protessor U-Department of Botany V V T M Grut College Uepartment or Botany Uepartment or Botany K.K.T.M. Govt. Pullut, Kodungallur 680663

GEETHU ELIZABATH THOMAS Assistant Professor Department of Botany St. Thomas College Thrissur - 680 001

PG AND RESEARCH DEPARTMENT OF BOTANY

Carmel College, Mala

(Affiliated to the University of Calicut) 6880732



CERTIFICATE

This is to certify that the dissertation entitled "Comparative account on the soap prepared by *Azadirachta indica* and *Aloe vera*" is a record of bonafide project work successfully completed by Anagha John with Reg. No: CRAUSBO002, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Sinjumol Thomas, Assistant Professor in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of science in Botany.

Research Guide

DR.SINJUMOL THOMAS Assistant Professor & Research Guide Department of Botany Carmel College Mala Thrissur - 680732, India



Dr. Bindhu KB Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

I hereby declare that the dissertation entitled " Comparative account on the soap prepared by *Azadirachta indica* and *Aloe vera*" submitted to Calicut University in partial fulfilment of the requirement for the award of Bachelor of science in Botany has been originally carried out under the guidance of Dr. Sinjumol Thomas, Assistant Professor, PG and Research Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any degree, diploma, Associateship or other title of any University or Institution.

Sand Store of Station Control Contexpression and Anagha john

Place :Mala Date :30-03-2023



COMPARATIVE ACCOUNT ON THE SOAP PREPARED BY AZADIRACHTA INDICA AND ALOE VERA

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : ANAGHA V.S REG NO: CRAUSBOOD3

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

2020-2023

Raga R Assistant Professor Department of Botany K.K.T.M. Govt. College Pullut, Kodungallur-680603

GEETHULLISZ RAPH HIOMAS Associate contrology Department of the tany St. chamae college The ssur-cod col

telyps

PG AND RESEARCH DEPARTMENT OF BOTANY

Carmel College, Mala

(Affiliated to the University of Calicut) 6880732



CERTIFICATE

This is to certify that the dissertation entitled "Comparative account on the soap prepared by *Azadirachta indica* and *Aloe vera*" is a record of bonafide project work successfully completed by Anagha V. S. with Reg. No: CRAUSBO003, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Sinjumol Thomas, Assistant Professor in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of science in Botany.

Research Guide

DR.SINJUMOL THOMAS Assistant Professor & Research Guide Department of Botany Carmel College Mala Thrissur - 680732, India



00m

Dr. Bindhu KB Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

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and

Anagha V.S

Place :Mala Date :30-03-2023



COMPARATIVE ACCOUNT ON THE SOAP PREPARED BY AZADIRACHTA INDICA AND ALOE VERA

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : ANJALI SHATI REG NO: CRAUSBO004

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

2020-2023

Raga R Assistant Professor Department of Botany K.K.T.M. Govt. College Pullut, Kodungallur-680663

GEETHU FLIZ ABATH THOMAS Assistant Professor Department of Botany St. Thomas College Thrissur - 680 001

PG AND RESEARCH DEPARTMENT OF BOTANY

Carmel College, Mala

(Affiliated to the university of Calicut) 6880732



CERTIFICATE

This is to certify that the dissertation entitled "**Comparative account on the soap prepared by** *Azadirachta indica* **and** *Aloe vera*" is a record of bonafide project work successfully completed by **Anjali Shaji** with Reg. No: **CRAUSBO004**, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Sinjumol Thomas, Assistant Professor in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of science in Botany.

Research Guide

DR.SINJUMOL THOMAS Assistant Professor & Research Guide Department of Botany Carmel College Mala Thrissur - 680732, India



Dr. Bindhu KB Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

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Place :Mala Date :30-03-2023



COMPARATIVE ACCOUNT ON THE SOAP PREPARED BY AZADIRACHTA INDICA AND ALOE VERA

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

ΒY

NAME : Arathi P.N REG NO: CRAUSBOOD5

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

Raga R Assistant Professor



GEETHU ELIZABATH THOMAS Assistant Professor Department of Botany St. Thomas College Thrissur - 680 001

PG AND RESEARCH DEPARTMENT OF BOTANY

Carmel College, Mala

(Affiliated to the university of Calicut) 6880732

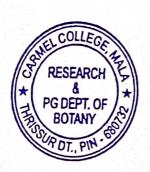


CERTIFICATE

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Research Guide

DR.SINJUMOL THOMAS Assistant Professor & Research Guide Department of Botany Carmel College Mala Thrissur - 680732, India



Dr. Bindhu KB Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

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Anothi Arathi P.N

Place :Mala Date :30-03-2023



PRELIMINARY PHYTOCHEMICAL ANALYSIS AND ANTIBACTERIAL ACTIVITY OF Arachis glabrata Benth.

DISSERTATION SUBMITTED

To the Calicut University in the Partial Fulfillment of B.Sc. Programme in Botany

BY

JESMY K J

CRAUSBO006

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE (AUTONOMOUS), MALA

2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS)



CERTIFICATE

This is to certify that the dissertation entitled "Preliminary Phytochemical Analysis and Antibacterial Activity of Arachis glabrata Benth." is a record of bonafide project work successfully completed by JESMY K J with Reg. No: CRAUSBO006, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Geo Joseph, Assistant Professor, Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of science in Botany.

Dr. Geo Joseph

DI. Geo Joseph

Research guide

Examiner 1



Examiner 2

Raga R Assistant Professor Department of Botany K.K.T.M. Govt. College Pullut, Kodungallur-680663

CO

EETHU ELIZABATH THOMAS Assistant Professor Department of Botany St Hiomas College Thrissur - 680 001

Dr. Bindhu KB Head of the department

Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

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Jesmy K J

Place : Mala Date : 31/3/2023



PRELIMINARY PHYTOCHEMICAL ANALYSIS AND ANTIBACTERIAL ACTIVITY OF *Arachis glabrata* Benth.

DISSERTATION SUBMITTED

To the Calicut University in the Partial Fulfillment of B.Sc. Programme in Botany

BY

JYOTHIKA SIDHARTHAN

CRAUSBO007

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE (AUTONOMOUS), MALA 2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS)



CERTIFICATE

This is to certify that the dissertation entitled "Preliminary Phytochemical Analysis and Antibacterial Activity of Arachis glabrata Benth." is a record of bonafide project work successfully completed by JYOTHIKA SIDHARTHAN with Reg. No: CRAUSBO007, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Geo Joseph, Assistant Professor, Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of science in Botany.

De Geo Joseph

Research guide

Examiner 1



RESEARCH A PG DEPT. OF BOTANY SOLR DT. PM

Raga R Assistant Professor Department of Botany KKTM. Govt. College Pullut, Kodungallur-680663

Examiner 2

EETHU ILIZABATH THOMAS Assistant C) dessor Department of Bolany Si Thomas College Thrussur - 650 001

Dr. Bindhu KB

Head of the department

Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

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Eltothike

Jyothika Sidharthan

Place : Mala Date : 31 03 23



PRELIMINARY PHYTOCHEMICAL ANALYSIS AND ANTIBACTERIAL ACTIVITY OF Arachis glabrata Benth.

DISSERTATION SUBMITTED

To the Calicut University in the Partial Fulfillment of B.Sc. Programme in Botany

BY

PRATHEEKSHA T

CRAUSBO008

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE (AUTONOMOUS), MALA

2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS)



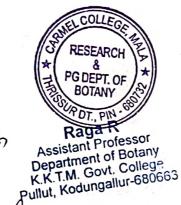
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02 Dr. Geo Joseph

Research guide

Examiner 1



Examiner 2

Dr. Bindhu KB

Head of the department

Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

GEETHU EL ARATH THOMAS Assistant l'intessor Department of Botany St. Thomas College Thrissur - 680 001

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Pratheeksha T

Place : Mala Date : 31 03 2023



PRELIMINARY PHYTOCHEMICAL ANALYSIS AND ANTIBACTERIAL ACTIVITY OF Arachis glabrata Benth.

DISSERTATION SUBMITTED

To the Calicut University in the Partial Fulfillment of B.Sc. Programme in Botany

BY

ROSHNI C VENU

CRAUSBO009

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE (AUTONOMOUS), MALA

2020-2023

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS)



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In Geo Joseph

Research guide

Examiner 1



Dr. Bindhu KB

Head of the department

Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

Examiner 2

Pila

GEETHU ELIZABATH THOMAS Assistant Professor Department of Botany St. Thomas College Thrissur - 680 001

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Roshni C Venu

Place : Mala Date : 31 03 2023



PRELIMINARY PHYTOCHEMICAL ANALYSIS AND ANTIBACTERIAL ACTIVITY OF Arachis glabrata Benth.

DISSERTATION SUBMITTED

To the Calicut University in the Partial Fulfillment of B.Sc. Programme in Botany

BY

SONA VIJAY

CRAUSBO010

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE (AUTONOMOUS), MALA

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA (AUTONOMOUS)



This is to certify that the dissertation entitled "Preliminary Phytochemical Analysis and Antibacterial Activity of Arachis glabrata Benth." is a record of bonafide project work successfully completed by SONA VIJAY with Reg. No: CRAUSBO0010, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Geo Joseph, Assistant Professor, Department of Botany, for the partial fulfillment of requirement for the award of the degree of Bachelor of science in Botany.

Dr. Geo Joseph

Research guide

Examiner 1



RESEARCH PG DEPT. OF BOTANY PGT. PIN-660

Raga R Assistant Professor Department of Botany K.K.T.M. Govt. College Pullut, Kodungallur-680663

Examiner 2

ABATH THOMAS 11-050 001

Dr. Bindhu KB

Head of the department Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

I hereby declare that the dissertation entitled "Preliminary Phytochemical Analysis and Antibacterial Activity of Arachis glabrata Benth." submitted to Calicut University in partial fulfilment of the requirement for the award of Bachelor of science in Botany has been originally carried out under the guidance of Dr. Geo Joseph, Assistant Professor, Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any Degree, Diploma, Associateship or other title of any University or Institution.

Place : Mala Date : 31/03/2023

Sona Vijay ----



PREPARATION OF HERBAL TOOTH POWDER AND IT'S ANTI- BACTERIAL PROPERTIES

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : SUREMYA P.S. REG NO: CRAUSBOO11

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

PG AND RESEARCH DEPARTMENT OF BOTANY

Carmel College, Mala

(Affiliated to the university of Calicut) 6880732



CERTIFICATE

This is to certify that the dissertation entitled "**Preparation of herbal toothpowder and its anti-bacterial properties**" is a record of bonafide project work successfully completed by **Suremya P S** with Reg. No: **CRAUSBO011**, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Bindhu KB, Associate Professor and Head of the Department in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of science in Botany.

Research Guide

COLLA RESEARCH 8 G DEPT. OF BOTANY DT. PIN Raga R Assistant Professor Department of Botany K.K.T.M. Govt. College Pullut, Kodungallur-680663

GEETHU ELIZABATH THOMAS Assistant Protessor Department of Botany St. Thomas College Thrissur - 680 001

Dr. Bindhu KB Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

I hereby declare that the dissertation entitled "**Preparation of herbal tooth powder and it's anti- bacterial properties**" submitted to Calicut University in partial fulfilment of the requirement for the award of Bachelor of science in Botany has been originally carried out under the guidance of Dr. Bindhu K B, Associate Professor and Head of the Department, PG & Research Department of Botany, Carmel College, Mala. Any part of this dissertation has formed the basis for the award of any degree, diploma, Associateship or other title of any University or Institution.

Suremya P S

Place : Mala Date : 31/03/2023



PREPARATION OF HERBAL TOOTH POWDER AND IT'S ANTI- BACTERIAL PROPERTIES

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : AJISHA SANCTHOSH REG NO: CRALLS BOALS

PG AND RESEARCH DEPARTMENT OF BOTANY CARMEL COLLEGE, MALA

PG AND RESEARCH DEPARTMENT OF BOTANY

Carmel College, Mala

(Affiliated to the university of Calicut) 6880732



CERTIFICATE

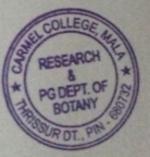
This is to certify that the dissertation entitled " **Preparation of herbal toothpowder and its anti-bacterial properties**" is a record of bonafide project work successfully completed by **Ajisha Santhosh** with Reg. No: **CRAUSBO013**, Department of Botany, Carmel College, Mala under the supervision and guidance of Dr. Bindhu KB, Associate Professor and Head of the Department in Post Graduate and Research Department of Botany, for the partial fulfilment of requirement for the award of the degree of Bachelor of science in Botany.

Research Guide

1.

2.

EETHU ELIZABATH THOMAS Assistant Professor Department of Botany 54 Thomas College Thrissur - 680 001



Dr. BindhuKB

Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

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tich

Ajisha Santhosh

Place: Mala Date : 31/3/2023



PREPARATION OF HERBAL TOOTH POWDER AND IT'S ANTI- BACTERIAL PROPERTIES

DISSERTATION SUBMITTED

To the Calicut University in the partial fulfilment of B.Sc. Programme in Botany

BY

NAME : APARNA P.P. REG NO: CRAUSBOO 14

PG AND RESEARCH DEPARTMENT OF BOTANY

CARMEL COLLEGE, MALA

PG AND RESEARCH DEPARTMENT OF BOTANY

Carmel College, Mala

(Affiliated to the university of Calicut) 6880732



CERTIFICATE

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OLLEGA RESEARCH Research Guide 8 PG DEPT. OF BOTANY Raga R SSUR DT. Assistant Professor ŀ Department of Botany K.K.T.M. Govt. College Pullut, Kodungallur-680663 ي. THOMAS Many St. Thomas College

Thrissur - 680 001

Dr. Bindhu KB Head Department of Botany Carmel College, Mala Thrissur, Kerala - 680732

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Aparna D. D.

Place : Mala Date : **31 - 3 - 2023**