

KRUPANIDHI COLLEGE OF PHARMACY



AICTE, PCI, RGUHS approved, NAAC "A" and ISO certified

1.3.3 Percentage of students undertaking project work/field work/internship

Master of Pharmacy - Pharmacology

Project

(Final Year Students)

For the Year

2020-2021

SI NO	NAME OF THE STUDENTS	LINK THE RELEVANT DOCUMENT
1	AJMAL SHA S	Click here
2	AL AMEEN AHMED	Click here
3	DEEPA JYOTHI KHALITA	Click here
4	DEEMANJIT SHARMA	Click here
5	FANCO GOHAIN	Click here
6	HIRAK JYOTI BARMAN	Click here
7	KANGKAN JOTHI SAUD	Click here
8	MEDICHERLA SAI PRATHIMA	Click here
9	NAMITHA NOBLE PN	Click here
10	PRATHIKSHYA JOSHI	Click here
11	SUBHAM MODAK	Click here

THE PROTECTIVE ACTIVITY OF KAEMPFEROL GLYCOSIDES FROM SOYA LEAF EXTRACT FOR EXPERIMENTALLY INDUCED NON ALCOHOLIC FATTY LIVER DISEASE IN WISTAR RATS

By

Ajmal Sha S

Registration Number: 19PP155

Dissertation Submitted to the Rajiv Gandhi University of Health Sciences Karnataka, Bangalore



In partial fulfillment of the requirements for the degree of

MASTERS OF PHARMACY

IN

PHARMACOLOGY

Under the Guidance of Mrs. Jyothi Y. Associate Professor Department of Pharmacology



DEPARTMENT OF PHARMACOLOGY KRUPANIDHI COLLEGE OF PHARMACY Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

AUGUST 2021

Krupanidhi College of Pharmacy Chikkabeilandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 035





Recognized by the Govt. of Karnataka | Approved by Pharmacy Council of India | AICTE, New Delhi & Affiliated to Rajiv Gandhi University of Health Sciences | An ISO 9001 : 2023 Certified Institution | NAAC 'A' Grade accredited

Fef. No.

Date:

ENDORSEMENT BY THE H.O.D

This is to certify that Ajmal Sha S has satisfactorily completed the dissertation entitled as "THE PROTECTIVE ACTIVITY OF KAEMPFEROL GLYCOSIDES FROM SOYA LEAF EXTRACT FOR EXPERIMENTALLY INDUCED NON ALCOHOLIC FATTY LIVER DISEASE IN WISTAR RATS" prescribed by the Pharmacy Council of India and Rajiv Gandhi University of Health Sciences, Bangalore for Masters in Pharmacology program during the academic year 2020-2021, under the guidance of Mrs. Jyothi Y., Associate Professor, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore. This work has not been submitted earlier to any university either in part or in full for the award of any degree.

Date: 25/08/21

Place: Bangalore

Dr. Rajendra S.V.

M. Pharm, Ph.D.

Professor and H.O.D of pharmacology

Krupanidhi College of pharmacy

Bangalore

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 035





Recognized by the Govt. of Kamataka | Approved by Pharmacy Council of India | AICTE, New Delhi & Affiliated to Rajiv Gandhi University of Health Sciences | An ISO 9001 : 2023 Certified Institution | NAAC 'A' Grade accredited

FE No.

Date

ENDORSEMENT BY THE PRINCIPAL

This is to certify that Ajmal Sha S has satisfactorily completed the dissertation entitled as "THE PROTECTIVE ACTIVITY OF KAEMPFEROL GLYCOSIDES FROM SOYA LEAF EXTRACT FOR EXPERIMENTALLY INDUCED NON ALCOHOLIC FATTY LIVER DISEASE IN WISTAR RATS" prescribed by the Pharmacy Council of India and Rajiv Gandhi University of Health Sciences, Bangalore for Masters in Pharmacology program during the academic year 2020-2021, under the guidance of Mrs. Jyothi Y., Associate Professor, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore. This work has not been submitted earlier to any university either in part or in full for the award of any degree.

Date:06/08/21

Place: Bangalore

College Organia (College Organia (Colleg

Dr. Rajendra S.V.

M. Pharm, Ph.D.

Professor and Principal

Krupanidhi College of pharmacy

Bangalore

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 035



By

AL-AMEEN AHMED

Registration number: 19PP156

Dissertation Submitted to the Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore



In partial fulfillment of the requirements for the degree of

MASTER OF PHARMACY IN PHARMACOLOGY

Under the guidance of Mrs. Kesarla Bhavani, Assistant Professor Department of Pharmacology



DEPARTMENT OF PHARMACOLOGY
KRUPANIDHI COLLEGE OF PHARMACY

Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

AUGUST 2021

RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES BANGALORE,

KARNATAKA - 560041



DECLARATION BY THE CANDIDATE

I hereby declare that this dissertation entitled "NEUROPROTECTIVE POTENTIAL OF METHANOLIC EXTRACT OF Nelumbo nucifera LEAVES IN VARIOUS MODELS OF INDUCED PARKINSON'S DISEASE IN ALBINO RATS" is a bonafide and genuine research work carried out by me under the guidance of Mrs. Kesarla Bhavani, Asst. professor, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 09-08-2021 Place: Bangalore Candidate: Al-ameen Ahmed (19PP156)

RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES BANGALORE, KARNATAKA – 560041



COPYRIGHT

I hereby declare that the Rajiv Gandhi University of Health Sciences, Karnataka shall have the rights to preserve, use and disseminate this dissertation / thesis in print or electronic format for academic / research purpose.

Date:

Place: Bangalore

Al-ameen Ahmed

(19PP156)



nized by the Govt. of Karnataka | Approved by Pharmacy Council of India | AICTE, New Delhi & Affiliated to Rajiv Gandhi University of Health Sciences | An ISO 9001 : 2023 Certified Institution | NAAC 'A' Grade accredited

Ref. No.

Date:

INSTITUTIONAL ANIMAL ETHICS COMMITTEE (Certificate of Approval on Animal Experimentation)

Date: 09/05/2020 Ref No:

Registration Number: 378/01/ab/CPCSEA Approval No: KCP/IAEC/PCOL/45/2020

APPROVAL CERTIFICATE

This is to certify that research topic entitled "NEUROPROTECTIVE POTENTIAL OF METHANOLIC EXTRACT OF Nelumbo nucifera LEAVES IN VARIOUS MODELS OF INDUCED PARKINSON'S DISEASE IN ALBINO RATS" and the related experimental work will be carried out by Mr Al-ameen Ahmed on animals will as per guidelines set by Animals Welfare Division, Ministry of Environment, Govt. of India. The guidelines set for the use of the animals (CPCSEA) shall be followed during experiments as per disclosure in Form-B of investigator and were approved by Institutional Animal Ethics Committee (IAEC), Krupanidhi College of Pharmacy, Bengaluru-560035, for using Rats.

(Chairman IAEC/Principal)

Member Secretary
PRINCIPAL

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post,

Varthur Hobli, Bangalore - 560 035

Members:-

:Chairman-IAEC 1. Dr. Amit Kumar Das

:Main Nominee-CPCSEA 2. Dr. R.G.Prakash

:Scientist from outside the Institute 3. Dr. Shivlinge Gowda KP

:Socially Aware Nominee 4. Mr.Nanjappaiah

:Biological Scientist 5. Prof. Ranganath MK

:Member Secretary and Scientist from different biological discipline 6. Dr. SV.Rajendra :Veterinarian

7. Dr. Yashas R Kumar :Scientist In charge of Animal House Facility 8. Mrs. Jyothi.Y





Ref. No.:

Date:

ENDORSEMENT BY THE PRINCIPAL.

This is to certify that the dissertation entitled "Neuroprotective potential of methanolic extract of Nelumbo nucifera leaves in various models of induced Parkinson's disease in albino rats" is a bonafide research work done by Al-ameen Ahmed under the guidance of Mrs. Kesarla Bhavani, Asst. Professor Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Dr. Rajendra S.V.

Dr. Rajendra S.V.

M. Pharm, Ph.D.
Professor and Principal
Krupanidhi College of Pharmacy

Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035

Date: 09/08/2021 Date: 09/08/2021

Place: Bangalore Place: Bangalore



Recognized by the Govt. of Karnataka | Approved by Pharmacy Council of India | AICTE, New Delhi & Affiliated to Rajiv Gandhi University of Health Sciences | An ISO 9001 : 2023 Certified Institution | NAAC 'A' Grade accredited

Ref. No.:

Date:

ENDORSEMENT BY THE HOD.

This is to certify that the dissertation entitled "Neuroprotective potential of methanolic extract of Nelumbo nucifera leaves in various models of induced Parkinson's disease in albino rats" is a bonafide research work done by Al-ameen Ahmed under the guidance of Mrs. Kesarla Bhavani, Asst. Professor Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Str.

Dr. Rajendra S.V.

Dr. Rajendra S.V.

M. Pharm, Ph.D.

Professor and Principal

Krupanidhi College of Pharmacy

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035

Date: 09/08/2021

Date: 09/08/2021

Place: Bangalore

Place: Bangalore





ACKNOWLEDGEMENT

It gives me immense pleasure to acknowledge, the help rendered to me by a host of people to whom I owe gratitude in completion of my project work, all those who have encouraged and supported me throughout the project work. The work cited in this dissertation would not have been possible without the blessings of almighty. I would like to express my gratitude to my family for their endless support and love without which it would not have been possible for me to complete the work.

I take this golden opportunity to express my humble gratitude and respect to my research Guide Mrs. Kesarla Bhavani and Principal Dr. Rajendra S.V, H.O.D, Department of pharmacology, Krupanidhi College of Pharmacy, for their invaluable guidance and constant motivation throughout my project work without which it would have been an unachievable task.

I am profoundly grateful to **Dr. Suresh Nagpal**, Chairman, Krupanidhi Group of Institutions for providing the infrastructure and all the other essential facilities.

I express my heartiest thanks to all teaching staff especially Mrs. Kesarla Bhavani, Mrs. Jyothi.Y for their timely help. I am pleased to thank our librarian Mr. Paramanna Gogi for helping me to refer books and journals in our library.

I wish to especially thank to the non-teaching staff specially Mrs. Manjula, Mr. Subramani, Mrs Anjali, Mr. Manjunath M., Mr. Madhu, Mr. Manjunath M.S. and Mr. Chandrashekar for their support throughout my work.

I also express my heart full and special thanks to all my classmates for their unconditional help and support in my work. I extend my sincere thanks to my very dear seniors and juniors for their valuable suggestions, to carry out my work smoothly.

Date: 09/08/2021

Place:BANGALORE

Al-ameen Ahmed



Recognized by the Govt. of Karnataka | Approved by Pharmacy Council of India | AICTE, New Delhi & Affiliated to Rajiv Gandhi University of Health Sciences | An ISO 9001 : 2023 Certified Institution | NAAC 'A' Grade accredited

Ref. No.:

Date:

CERTIFICATE BY THE GUIDE

This is to certify that the dissertation entitled "Neuroprotective potential of methanolic extract of Nelumbo nucifera leaves in various models of induced Parkinson's disease in albino rats" is a bonafide research work done by Alameen Ahmed in partial fulfillment of the requirement for the degree of Masters in Pharmacology.

Date: 09-08-2021 Place: Bangalore Mrs. Kesarla Bhavani Asst. professor Department of Pharmacology Krupanidhi College of Pharmacy

K. Blanni

lies do

"ANTI-OSTEOPOROTIC ACTIVITY OF HYDROALCOHOLIC EXTRACT OF LYCOPERSICON ESCULENTUM LEAVES IN CHEMICALS INDUCED OSTEOPOROSIS IN FEMALE WISTAR RATS"

By

DEEPJYOTI KALITA

Reg. number: 19PP160

Dissertation Submitted to the Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore



In partial fulfillment of the requirements for the degree of

MASTER OF PHARMACY

IN

PHARMACOLOGY

Under the guidance of

Dr RAJENDRA S.V, Professor and PrincipalDepartment of Pharmacology





DEPARTMENT OF PHARMACOLOGY KRUPANIDHI COLLEGE OF PHARMACY

Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

March 2022

Krupanidhi College Pharmacy Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 03



Recognized by the Govt. of Karnataka | Approved by Pharmacy Council of India | AICTE, Delhi and Affiliated to Rajiv Gandhi University of Health Science | (An ISO 9001 : 2008 Certified Institution | NAAC Accredited A Grade)

Ref. No.:

Date:

ENDORSEMENT BY THE H.O.D

This is to certify that the dissertation "ANTI-OSTEOPOROTIC ACTIVITY OF HYDROALCOHOLIC EXTRACT OF LYCOPERSICON ESCULENTUM LEAVES IN CHEMICALS INDUCED OSTEOPOROSIS IN FEMALE WISTAR RATS" is a bonafide research work done by DEEPJYOTI KALITA under the guidance of Dr. RAJENDRA S.V, Professor and H.O.D, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 16-03-2022

Place: Bangalore

ollege o

angalore

Dr. Rajendra S.V. M. Pharm, Ph.D. Professor and HOD Krupanidhi College of Pharmacy

Bangalore

PROF / HOD

Dept. of Pharmacology KRUPANIDHI COLLEGE OF PHARMACT

Chikkabelandur, Carmelarum Pow BANGALORE - 560 74 5

Krupanidhi College of ghamacy Chikkabellandur, Carmelaram Post,

No.12/1, Chikkylarkhuur, Carmelaram 9 +91 99000 88465 irmelaram Post, Varthur Hobli, Bangalore - 560035. Ph: +91 99000 88457 Fax: 080-2553 5751 Admission Helpline: +91 7848 000 123 Email:info@krupanidhi.edu.in www.krupanidhi.edu.in



Recognized by the Govt. of Kornataka | Approved by Pharmacy Council of India | AICTE, Delhi and Affiliated to Rajiv Gondhi University of Health Science | (An ISO 9001 : 2008 Certified Institution | NAAC Accredited A Grade)

Ref. No .:

Date:

ENDORSEMENT BY THE PRINCIPAL

This is to certify that the dissertation entitled "ANTI-OSTEOPOROTIC ACTIVITY OF HYDROALCOHOLIC EXTRACT OF LYCOPERSICON ESCULENTUM LEAVES IN CHEMICALS INDUCED OSTEOPOROSIS IN FEMALE WISTAR RATS" is a bonafide research work done by DEEPJYOTI KALITA under the guidance of Dr. RAJENDRA S.V, Professor and H.O.D, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 16-03-2022

Place: Bangalore

Dr. Rajendra S.V. M. Pharm, Ph.D. Professor and Principal Krupanidhi College of Pharmacy

Bangalore



Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Past, Varthur Hobil, Bangalara : 566 835

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 035

No.12/1, Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560035.

Ph: +91 99000 88457 Fax: 080-2553 5751 Admission Helpline: +91 7848 000 123

Email:info@krupanidhi.edu.in www.krupanidhi.edu.in

"EVALUATION OF ESTROGENIC ACTIVITY OF ETHANOLIC EXTRACT OF PUNICA GRANATUM LEAVES IN WISTAR RATS"

By

Dhimanjit Sarma

Reg. number: 19PP161

Dissertation Submitted to the

Rajiv Gandhi University of Health Sciences



In partial fulfillment of the requirements for the degree of

MASTER OF PHARMACY

PHARMACOLOGY

Under the guidance of

Mr. Qumre Alam

Asst. Professor Department of Pharmacology



DEPARTMENT OF PHARMACOLOGY KRUPANIDHI COLLEGE OF PHARMACY

Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

MARCH 2022

Krupanidhi College of Pha m Post, Chikkabellandur, Carmelara 560 03°





Recognized by the Govt. of Karnatoka | Approved by Pharmacy Council of India | AlCTE, Delhi and Affiliated to Rajiv Gandhi University of Health Science | (An ISO 9001 : 2008 Certified Institution | NAAC Accredited A Grade)

Ref. No.:

Date:

ENDORSEMENT BY THE H.O.D

This is to certify that the dissertation "EVALUATION OF ESTROGENIC ACTIVITYOF ETHANOLIC EXTRACT OF PUNICA GRANATUM LEAVES IN WISTAR RATS" is a bonafide research work done by DHIMANJIT SARMA under the guidance of Dr. Rajendra S.V, HOD and Principal, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 16-03-2022

Place: Bangalore

Dr. Rajendra S. V

M. Pharm, PhD

Principal and HOD

Krupanidhi College of Pharmacy

PR Bangalore

Dept. of Pharmacology

CHIPANIDHI COLLEGE OF PHARMACY

Chikkabelandur, Carmelaram Popul

BANGALORE - 560 025



Krupanidhi College of Sharmacy Chikkabellandur, Carmelaram Post, Chikkabellandur, Bangaiore - 560 035

No.12/1, Chikkabellandur, Carmelaram Po**varthuu** Hobii, Bangaiore - 560 035.

Ph: +91 99000 88457 Fax: 080-2553 5751 Admission Helpline: +91 7848 000 123

Email:info@krupanidhi.edu.in www.krupanidhi.edu.in



Recognized by the Govt. of Karnataka | Approved by Pharmacy Council of India | AICTE, Delhi and Affiliated to Rajiv Gandhi University of Health Science | (An ISO 9001 : 2008 Certified Institution | NAAC Accredited A Grade)

Bef. No.:

Date:

ENDORSEMENT BY THE PRINCIPAL

This is to certify that the dissertation "EVALUATION OF ESTROGENIC ACTIVITYOF ETHANOLIC EXTRACT OF PUNICA GRANATUM LEAVES IN WISTAR RATS" is a bonafide research work done by DHIMANJIT SARMA under the guidance of Dr. Rajendra S.V, HOD and Principal, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 16-03-2022

Place: Bangalore

Dr. Rajendra S. V

M. Pharm, PhD

Principal and HOD

Krupanidhi College of Pharmacy

Bangalore

PRINCIPAL

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post,

Varthur Hobli,

Bangalo



ANTI-RHEUMATOID ARTHRITIC ACTIVITY OF ETHANOLIC EXTRACT OF Equisetum arvense in FREUND's COMPLETE ADJUVANT-ARTHRITIS IN WISTAR RATS

By

FRANCO GOHAIN

Registration number: 19PP162

Dissertation Submitted to the Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore



In partial fulfillment
Of the requirements for the degree of

MASTER OF PHARMACY IN PHARMACOLOGY

Under the guidance of Mrs. Jyothi Y, Associate Professor Department of Pharmacology



DEPARTMENT OF PHARMACOLOGY KRUPANIDHI COLLEGE OF PHARMACY Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

AUGUST 2021

RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES BANGALORE,

KARNATAKA - 560041



DECLARATION BY THE CANDIDATE

I hereby declare that this dissertation entitled "ANTI-RHEUMATOID ARTHRITIC ACTIVITY OF ETHANOLIC EXTRACT OF Equisetum arvense in FREUND's COMPLETE ADJUVANT-ARTHRITIS IN WISTAR RATS" is a bonafide and genuine research work carried out by me under the guidance of Mrs. Jyothi Y, Associate Professor, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 06. 08. 2021

Place: Bangalore

Franco

Candidate: Franco Gohain

(19PP162)

Ref. No.:

Date:

CERTIFICATE BY THE GUIDE

This is to certify that the dissertation entitled "ANTI-RHEUMATOID ARTHRITIC ACTIVITY OF ETHANOLIC EXTRACT OF Equisetum arvense in FREUND's COMPLETE ADJUVANT-ARTHRITIS IN WISTAR RATS" is a bonafide research work done by Franco Gohain in partial fulfillment of the requirement for the degree of Masters in Pharmacology.

Date: 09.08, 2021

Place: Bangalore

Associate Professor

Department of Pharmacology

Krupanidhi College of Pharmacy

Carmelaram Post,



Recognized by the Govt: of Karnataka I Approved by Pharmacy Council of India 1 AICTE, Delhi and Affiliated to Rajiv Gondhi University of Health Science 1 (An ISO 9001 : 2008 Certified Institution 1 NAAC Accredited A Grade)

Ref. No.:

Date:

ENDORSEMENT BY THE PRINCIPAL

This is to certify that the dissertation entitled "ANTI-RHEUMATOID ARTHRITIC ACTIVITY OF ETHANOLIC EXTRACT OF Equisetum arvense in FREUND's COMPLETE ADJUVANT-ARTHRITIS IN WISTAR RATS" is a bonafide research work done by Franco Gohain under the guidance of Mrs. Jyothi Y, Associate Professor, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

DATE: 06/08/21

Place: Bangalore

Dr. Rajendra S.V.

M.Pharm,Ph.D.
Professor and Principal
Krupanidhi College of Pharmacy
Bangalore

PRINCIPAL

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobli Bangalore - 560 035



Krupanidhi Gollege of Phannacy

Recognized by the Govt. of Karnataka I Approved by Pharmacy Council of India 1 AICTE, Delhi and Affiliated to Rajin Gandhi University of Health Science 1 (An ISO 9001 : 2008 Certified Institution 1 NAAC Accredited A Grade)

Ref. No.:

Date:

ENDORSEMENT BY THE HEAD OF THE DEPARTMENT

This "ANTI-RHEUMATOID ARTHRITIC ACTIVITY OF ETHANOLIC EXTRACT OF Equisetum arvense in FREUND's COMPLETE ADJUVANT-ARTHRITIS IN WISTAR RATS" is a bonafide research work done by Franco Gohain under the guidance of Mrs. Jyothi Y, Assosiciate Professor, Department of Pharmacology Department of Pharmacology, Krupanidhi College of Pharmacy, and Bangalore.

DATE: 06,08,2021

Place: Bangalore

Dr. Rajendra S.V.

M.Pharm,Ph.D.
Professor and H.O.D
Krupanidhi College of Pharmacy
Bangalore
PROF / HOD
Dept. of Pharmacology
CRUPANIDHI COLLEGE OF PHARMACY

Chikkabelandur, Carmelaram Post BANGALORE - 560 025

COPYRIGHT



I hereby declare that the Rajiv Gandhi University of Health Sciences, Karnataka will have the right to preserve, use and disseminate this dissertation in print or electronic form for academic/research purpose.

Date: 06.08,2021

Place: Bengaluru

Fuance

FRANCO GOHAIN

© Rajiv Gandhi University of Health Sciences, Karnataka

"ANTI -CHOLELITHIASIS ACTIVITY OF SAINDHAVA LAVANA IN COMBINATION WITH COW'S URINE IN CHOLESTEROL INDUCED CHOLELITHIASIS IN ALBINO WISTAR RATS"

By

HIRAKJYOTI BARMAN

Reg. number: 19PP164

Dissertation Submitted to the Rajiv Gandhi University of Health Sciences Karnataka, Bangalore



In partial fulfillment of the requirements for the degree of

MASTER OF PHARMACY

IN

PHARMACOLOGY

Under the guidance of
Mr. Qumre Alam
Asst. Professor Department of Pharmacology





Krupanidhi College of Pharma Chikkabeilandur, Carmelaram Post, Varthur Hobil, Bangalore - 560 035

DEPARTMENT OF PHARMACOLOGY KRUPANIDHI COLLEGE OF PHARMACY Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

MARCH 2022



Recognized by the Govi. of Karnatoka | Approved by Pharmacy Council of India | AICTE, Delhi and Affiliated to Rajiv Gandhi University of Health Science | [An ISO 9001 : 2008 Certified Institution | NAAC Accredited A Grade]

Ref. No.:

Date:

ENDORSEMENT BY THE PRINCIPAL

This is to certify that the dissertation entitled "ANTI -CHOLELITHIASIS ACTIVITY OF SAINDHAVA LAVANA IN COMBINATION WITH COW'S URINE IN CHOLESTEROL INDUCED CHOLELITHIASIS IN ALBINO WISTAR RATS" is a bonafide research work done by HIRAKJYOTI BARMAN under the guidance of Mr. QUMRE ALAM, Asst. Professor, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 26-10-2021

Place: Bangalore

Dr. Rajendra S.V M. Pharm, Ph.D. Professor and HOD

> the byhor

Krupanidhi College of Pharmacy
Bangalore

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035



Krupanidh College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobil, Bangalore - 560 035

PROTECTIVE EFFECT OF Ficus carica FRUIT IN ALLOXAN INDUCED DIABETIC NEPHROPATHY IN WISTAR ALBINO RATS

By KANGKAN JYOTI SAUD

Registration number: 19PP165

Dissertation Submitted to the Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore



In partial fulfillment
Of the requirements for the degree of

MASTER OF PHARMACY IN PHARMACOLOGY

Under the guidance of
Mr. QUMRE ALAM, Assistant Professor
Department of Pharmacology



DEPARTMENT OF PHARMACOLOGY KRUPANIDHI COLLEGE OF PHARMACY Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

AUGUST 2021

Krupanidhi College Pepharmacy
Chikkabellandur, Carmelaram Post,
Chikkabellandur, Bangalore - 560 035





Recognized by the Gov), of Karnataka I Approved by Pharmacy Council of India 1 AICTE, Delhi and Affiliated to Raily Gondhi University of Health Science 1 (An ISO 9001): 2008 Certified Institution 1 NAAC Accredited A Grade)

Ref. No.:

Date:

ENDORSEMENT BY THE HEAD OF THE DEPARTMENT

This "PROTECTIVE EFFECT OF Ficus carica FRUIT IN ALLOXAN INDUCED DIABETIC NEPHROPATHY IN WISTAR ALBINO RATS" is a bonafide research work done by Kangkan Jyoti Saud under the guidance of Mr. Qumre Alam, Assistant Professor, Department of Pharmacology Department of Pharmacology, Krupanidhi College of Pharmacy, and Bangalore.

DATE: 06/08/21

Place: Bangalore

Dr. Rajendra S.V.

M.Pharm,Ph.D.
Professor and H.O.D
Krupanidhi College of Pharmacy
Bangalore

College of Old Tollows College of Old Tollows

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 035



(nupanidhi Ballege oi Phannac

Recognized by the Govt, of Karnataka I Approved by Pharmacy Council of India 1 AICTE, Delhi and Affiliated to Rojiv Gandhi University of Health Science 1 (An ISO 900) : 2008 Certified Institution 1 NAAC Accredited A Grade)

Bef. No.:

Date:

ENDORSEMENT BY THE PRINCIPAL

This is to certify that the dissertation entitled "PROTECTIVE EFFECT OF Ficus carica FRUIT IN ALLOXAN INDUCED DIABETIC NEPHROPATHY IN WISTAR ALBINO RATS" is a bonafide research work done by Kangkan Jyoti Saud under the guidance of Mr.Qumre ALam, Assistant Professor, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

DATE: 06/08/21

Place: Bangalore

Bangalo

Dr. Rajendra S.V.

M.Pharm,Ph.D. Professor and Principal Krupanidhi College of Pharmacy Bangalore

Varthur Hobli,

THE ANTIMUTAGENICACTIVITY OF ETHANOLIC EXTRACT OF THE FRUITS OF MANILKARA ZAPOTA.LINN. IN SWISS ALBINO MICE

Ву

MEDICHERLA SAI PRATHIMA

Registration number:19PP223

Dissertation Submitted to the Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore



In partial fulfilment of the requirements for the degree of

MASTER OF PHARMACY
IN
PHARMACOLOGY

Under the guidance of Mrs. KESERLA BHAVANI Assistant Professor Department of Pharmacology





Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

AUGUST 2021

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 038





Recognized by the Govt. of Karnataka i Approved by Pharmacy Council of India 1 AICTE, Delhi and Alfiliated to Rairy Gandhi University of Health Science 1 (An ISO 9007 / 2008 Certified Institution 1 NAAC Accredited A Grade)

Ref. No.:

Date:

ENDORSEMENT BY THE H.O.D

This is to certify that the dissertation "THE ANTIMUTAGENIC ACTIVITY OF ETHANOLIC EXTRACT OF THE FRUITS OF Manilkara zapota.Linn. IN SWISS ALBINO MICE" is a bonafide research work done by Medicherla Sai Prathima under the guidance of Keserla Bhavani ,Assistant Professor ,Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 9/8/21

Place: Bangalore

Dr. Rajendra S.V. M. Pharm, Ph.D. Professor and HOD Krupanidhi College of Pharmacy

Bangalore



PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035 4



Krupanidhi Collaga of Pharnac

Recognized by the Goot, of Komandia I Approved by Fharmony Council of India 1 AICTE, Delhi and Alfiliated to Bajiy Candhi University of Mealth Science 1 (An ISC) 9001 - 2008 Certified Institution 1 NAAC Accredited A Grade)

Fef. No.:

Date:

ENDORSEMENT BY THE PRINCIPAL

This is to certify that the dissertation entitled "THE ANTIMUTAGENIC ACTIVITY OF ETHANOLIC EXTRACT OF THE FRUITS OF Manilkara zapota.Linn. IN SWISS ALBINO MICE" is a bonafide research work done by Medicherla Sai Prathima under the guidance of Dr.RAJENDRA S.V, Professor and H.O.D, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 9/8/21

Place: Bangalore

Dr. Rajendra S.V. M. Pharm, Ph.D. Professor and Principal Krupanidhi College of Pharmacy

Bangalore



Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 03° "ANTI-UROLITHIASIS AND AMELIORATION OF ALLOPURINOL INDUCED LIVER DAMAGE WITH COMBINATION OF "EMBELIN" & "MANGIFERIN" IN ETHYLENE GLYCOL INDUCED UROLITHIASIS IN ALBINO WISTAR RATS"

By

NAMITHA NOBLE P N

Reg. number: 19PP166

Dissertation Submitted to the
Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore



In partial fulfillment of the requirements for the degree of

MASTER OF PHARMACY IN PHARMACOLOGY

Under the guidance of

Dr RAJENDRA S.V, Professor and Principal

Department of Pharmacology



DEPARTMENT OF PHARMACOLOGY
KRUPANIDHI COLLEGE OF PHARMACY
Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

AUGUST 2021

"ANTI-UROLITHIASIS AND AMELIORATION OF ALLOPURINOL INDUCED LIVER DAMAGE WITH COMBINATION OF "EMBELIN" & "MANGIFERIN" IN ETHYLENE GLYCOL INDUCED UROLITHIASIS IN ALBINO WISTAR RATS"

By

NAMITHA NOBLE P N

Reg. number: 19PP166

Dissertation Submitted to the Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore



In partial fulfillment of the requirements for the degree of

MASTER OF PHARMACY IN PHARMACOLOGY

Under the guidance of
Dr RAJENDRA S.V, Professor and Principal
Department of Pharmacology



DEPARTMENT OF PHARMACOLOGY KRUPANIDHI COLLEGE OF PHARMACY

KALL TALL STREET



DECLARATION BY THE CANDIDATE

AMELIORATION OF ALLOPURINOL INDUCED LIVER DAMAGE WITH COMBINATION OF "EMBELIN" & "MANGIFERIN" INETHYLENE GLYCOL INDUCED UROLITHIASIS IN ALBINO WISTAR RATS" is a bonafide and genuine research work carried out by me under the guidance of Dr. RAJENDRA S.V, Professor and H.O.D., Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 16-08-2021

Candidate: Namitha Noble P N

Place: Bangalore

(19PP166)

CERTIFICATE BY THE GLIDE

This is to certify that the dissertation emitted "ANTI-UROLITHIASIS AND AMELBORATION OF ALLOPURINOL INDUCED LIVER DAMAGE WITH COMBINATION OF *EMBELIN" & "MANGIFERIN" INETHYLENE GLYCOL INDUCED UROLITHIASIS IN ALBINO WISTAR.

RATS" is a bonafide research work done by NAMITHA NOBLE P N in partial fulfillment of the requirement for the degree of "Masters of pharmacy in Pharmacology" of the Rajin Gandhi University of Health Sciences, Karmataka.

Date: 16-08-2021

Place: Bangalore

Dr. Rajendra S.V

Professor and H.O.D Department of Pharmacology

Krupanidhi College of Pharmacy Bangalore

ENDORSEMENT BY THE H.O.D.

This is to certify that the dissertation "ANTI-UROLITHIASIS AND AMELIORATION OF ALLOPURINOL INDUCED LIVER DAMAGE WITH COMBINATION OF "MANGIFERIN" IN ETHYLENE GLYCOL INDUCED "EMBELIN" UROLITHIASIS IN ALBINO WISTAR RATS" is a bonafide research work done by NAMITHA NOBLE P N under the guidance of Dr. RAJENDRA S.V., Professor and H.O.D, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 16-08-2021

Place: Bangalore

Dr. Rajendra S.V. M. Pharm, Ph.D. Professor and HOD Krupanidhi College of Pharmacy

Bangalore

No.12/1, Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore- 5600 35. Ph: +91 99000 88457 | Fax: 080-25535751 | Admission Helpline: +91 7848 000 123 Email ld: info@krupanidhi.edu.in | www.krupanidhi.edu.in



ENDORSEMENT BY THE PRINCIPAL

This is to certify that the dissertation entitled "ANTI-UROLITHIASIS AND AMELIORATION OF ALLOPURINOL INDUCED LIVER DAMAGE WITH COMBINATION OF "EMBELIN" & "MANGIFERIN" IN ETHYLENE GLYCOL INDUCED UROLITHIASIS IN ALBINO WISTAR RATS" is a bonafide research work done by NAMITHA NOBLE P N under the guidance of Dr. RAJENDRA S.V., Professor and H.O.D, Department of Pharmacology, Krupanidhi College of Pharmacy. Bangalore.

Date: 16-08-2021

Place: Bangalore

Dr. Rajendra S.V. M. Pharm, Ph.D. Professor and Principal Krupanidhi College of Pharmacy

Bangalore

W GANDHI UNIVERSITY OF HEALTH SCIENCES BANGALORE, KARNATAKA – 560041



COPYRIGHT

ereby declare that the Rajiv Gandhi University of Health Sciences, Karnataka shall have the hts to preserve, use and disseminate this dissertation / thesis in print or electronic format for ademic / research purpose.

Date: 16-08-2021 Place: Bangalore Namitha Noble P N (19PP166)

COMBINED EFFICACY OF CHRYSANTHEMUM INDICUM L. AND ALLOPURINOL ON POTASSIUM OXONATE INDUCED GOUTY ARTHRITIS IN WISTAR ALBINO RATS

Ву

PRATIKSHYA JOSHI

Reg. number: 19PP167

Dissertation Submitted to the Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore



In partial fulfillment of the requirements for the degree of

MASTER OF PHARMACY IN PHARMACOLOGY

Under the guidance of

MR. QUMRE ALAM, Associate Professor Professor Department of Pharmacology



DEPARTMENT OF PHARMACOLOGY
KRUPANIDHI COLLEGE OF PHARMACY
Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

AUGUST 2021

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobil, Bangalore - 560 035





Kruosmon Galege of Pharmac

Recognized by the Govt, of Karnataka I Approved by Pharmacy Council of India 1 AICTE, Delhi and Affiliated to Rajiv Gandhi University of Health Science 1 (An ISO 900): 2008 Certified Institution 1 NAAC Accredited A Grade)

Ref. No.:

Date:

ENDORSEMENT BY HEAD OF THE DEPARTMENT

This is to certify that Pratikshya Joshi has satisfactorily completed the dissertation entitled as "COMBINED EFFICACY OF CHRYSANTHEMUM INDICUM L. AND ALLOPURINOL ON POTASSIUM OXONATE INDUCED GOUTY ARTHRITIS IN WISTAR ALBINO RATS" Prescribed by the Pharmacy Council of India and Rajiv Gandhi University of Health Sciences, Bengaluru for Masters of Pharmacy in Pharmacology program during the academic year 2020-2021, under my guidance. This work has not been submitted earlier to any university either in part or in full for the award of any degree.

Date: 06-08-2011

Place: Bengaluru

Dr. S.V. Rajendra

Professor and H.O.D of pharmacology Krupanidhi College of Pharmacy

Bengaluru



PRINCIPAL

Krupanidhi Coilege of Pharmacy

Chikkabellandur, Carmelaram Post,

Varthur Hobli, Bangalore - 560 035

iv



Krypanidhi Gallaga oi Phannacy

Recognized by the Govi, of Kornatoka i Approved by Pharmacy Council of India 1 AICTE, Delhi and Affiliated to Rajiv Condhi University of Health Science | Jan ISC 9001 : 2008 Certified Institution | NAAC Accredited A Grade)

Ref. No .:

Date:

ENDORSEMENT BY PRINCIPAL

This is to certify that Pratikshya Joshi has satisfactorily completed the dissertation entitled as "COMBINED EFFICACY OF CHRYSANTHEMUM INDICUM L. AND ALLOPURINOL ON POTASSIUM OXONATE INDUCED GOUTY ARTHRITIS IN WISTAR ALBINO RATS" prescribed by the Pharmacy Council of India and Rajiv Gandhi University of Health Sciences, Bengaluru under the guidance of, Mr. Qumre Alam, assistant Professor, Dept. of Pharmacology, Krupanidhi College of Pharmacy, Bengaluru. This work has not been submitted earlier to any university either in part or in full for the award of any degree.

Date: 06-08-2021

Place: Bengaluru

Dr. S.V. Rajendra

Professor and principal
Krupanidhi College of Pharmacy

Bengaluru



Krupanidhi Gollege of Pharmacy
Chikkabellandur, Carmelaram Post,
Chikkabellandur, Bangalore - 560 035
Varthur Hobil, Bangalore - 560 035

V

"EFFECT OF MORINGA CONCANENSIS LEAF EXTRACT ON DENA INDUCED HEPATOCELLULAR CARCINOMA IN ALBINO WISTAR RATS"

Ву

SUBHAM MODAK

Reg. number: 19PP168

Dissertation Submitted to the

Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore



In partial fulfillment of the requirements for the degree of

MASTER OF PHARMACY
IN
PHARMACOLOGY

Under the guidance of Dr RAJENDRA S.V, Professor and Principal Department of Pharmacology



PRINCIPAL
Krupanidhi Ceriege of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 50 03:

DEPARTMENT OF PHARMACOLOGY KRUPANIDHI COLLEGE OF PHARMACY Carmelaram Post, Varthur Hobli, Bangalore, Karnataka

MARCH 2022





Recognized by the Gavt. of Karnataka | Approved by Pharmacy Council of India | AICTE, Delhi and Affiliated to Rajiv Gandhi University of Health Science | (An ISO 9001 : 2008 Certified Institution | NAAC Accredited A Grade)

Ref. No.:

Date:

ENDORSEMENT BY THE H.O.D

This is to certify that the dissertation "EFFECT OF MORINGA CONCANENSIS LEAF EXTRACT ON DENA INDUCED HEPATOCELLULAR CARCINOMA IN ALBINO WISTAR RATS" is a bonafide research work done by SUBHAM MODAK under the guidance of Dr. RAJENDRA S.V, Professor and H.O.D, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 16-0 3 202 2

Place: Bangalore

Dr. Rajendra S.V.

M. Pharm, Ph.D.

Professor and HOD

Krupanidhi College of Pharmacy

Bangalore

PROF | HOD

Dept. of Pharmacology

CRUPANIDHI COLLEGE OF PHARMACY

Chikkabelandur, Carmelaram Post

BANGALORE - 560 Chi

College or TQAC Date:

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobii, Bangalore - 560 035



Recognized by the Govt. of Karnatako | Approved by Pharmacy Council of India | AICTE, Delhi and Affiliated to Rajiv Gandhi University of Health Science | (An ISO 9001 : 2008 Certified Institution | NAAC Accredited A Grade)

Ref. No .:

Date:

ENDORSEMENT BY THE PRINCIPAL

This is to certify that the dissertation entitled "EFFECT OF MORINGA CONCANENSIS LEAF EXTRACT ON DENA INDUCED HEPATOCELLULAR CARCINOMA IN ALBINO WISTAR RATS" is a bonafide research work done by SUBHAM MODAK under the guidance of Dr. RAJENDRA S.V, Professor and H.O.D, Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore.

Date: 16-03 2022

Place: Bangalore

Dr. Rajendra S.V.

46 Bloom

M. Pharm, Ph.D.

Professor and Principal

Krupanidhi College of Pharmacy

Bangalore

Mrupanidhi College of Pharmacy Enikkabeliandur, Carmelaram Post, Varthur Hobil, Bangalore - 560 035



PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035

No.12/1, Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560035.

Ph: +91 99000 88457 Fax: 080-2553 5751 Admission Helpline: +91 7848 000 123

Email:info@krupanidhi.edu.in www.krupanidhi.edu.in