

ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ದಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Alfiliated to Bengaluru City University Approved by Government of Karnataka, Approved by AICTE, New Deine Recognized by UGC under 2f & 12B of UGC act 1956

#### CERTIFICATE

This is to certify that this dissertation entitled "Effects of pro-anti inflammatory signals on wound healing and Exosomes enriched with factors promoting wound healing" Submitted by Mr. Raj Karmakar in partial fulfilment of the requirements for the DEGREE OF MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore university is based on the work carried out by them under the guidance and supervision. It is also certified that this project or any part of thereof has not been submitted elsewhere for any other degree.

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Mukthart 1, alio123 Guide and supervisor

KLAD.

Head of the Department

Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

> M S Ramaiah Nagar MSRIT Post Bangatore 560 054 F +91 80 2360 6213

+9180 2360 6905

1 +9180 2360 0966/8597 | E principal misrcasco gmail.com W www.msrcasc.edu.m

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#### CERTIFICATE

This is to certify that this dissertation entitled, "Antioxidant and Antimicrobial and Anti-cancer activities of ethanol and aqueous extracts of *Linum usitatissimum* and *Trigonella foenum-graecum*" submitted by Nivedha A in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bengaluru City University is based on the work carried out by her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date: 19 10 2023

Guide and supervisor: Korsh gy

Khar.

Head of the department: Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054

T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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#### CERTIFICATE

This is to certify that this dissertation entitled, "Antioxidant and Antimicrobial and Anti-cancer activities of ethanol and aqueous extracts of *Linum usitatissimum* and *Trigonella foenum-graecum*" submitted by Masula Chaitanya Venkata Sai in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bengaluru City University is based on the work carried out by him/her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date: 19 10 2023

Guide and supervisor:

Masher the department: M.S. Ramaiah College of Arta, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





ಎದ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ. ವಿಚ್ಚಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramalah College of Arts, Science and Commerce Reaccredied A by NAAC, Permanently Affated to Benative Cry University Approved by Government of Karnataka Approved by AICTE New Dethi-Becognized by UGC under 21 & 128 of UGC act 1956

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This is to certify that this dissertation entitled, "Antioxidant and Antimicrobial and Anti-cancer activities of ethanol and aqueous extracts of *Linum usitatissimum* and *Trigonella foenum-graecum*" submitted by S Aarthi in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN **BIOTECHNOLOGY** to Bengaluru City University is based on the work carried out by her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date: 19 10 2023

Guide and supervisor: Jorobly

Head of the department:

Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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This is to certify that this dissertation entitled, "Antioxidant and Antimicrobial and Anti-cancer activities of ethanol and aqueous extracts of *Linum usitatissimum* and *Trigonella foenum-graecum*" submitted by Neha C in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN **BIOTECHNOLOGY** to Bengaluru City University is based on the work carried out by her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date: 19 10 2023

Guide and supervisor: Soubly

Upper.

Head of the department: Department of Blotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054

T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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# CERTIFICATE

This is to certify that this dissertation entitled, "BIOETHANOL PRODUCTION FROM FRUIT BIOMASS OF POPULUS SPECIES (POPLAR) USING FERMENTATIVE MICROBES (*SACCHAROMYCES CEREVESIAE*) submitted by Mr. RANJITH K R (P18EV21S0033) in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore City University is based on the work carried out by his/her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date: 20-10-2023

Daupshree

Guide and supervisor

: Kh AN

M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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Date: 20-10-2023

Bayashee

Guide and supervisor

1 ch no

Head of the department Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054

T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru Central University Approved by Government of Karnataka, Approved by AICTE, New Delhi, Recognized by UGC under 2F & 128 of UGC act 1956

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This is to certify that this dissertation entitled, "AVENUE TREE, A POTENTIAL BIORESOURSE FOR THE PRODUCTION OF BIOGAS, IN SINGLE AND MIXED FOLIAGE USING SACCHAROMYCES CEREVISIAE AS AN SUBSTRATE submitted by MS. SAKSHI SHARMA (P18EV21S0116) in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore City University is based on the work carried out by his/her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date: 19/10/2023

Dayasturae Guide and supervisor:

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KAD.

Head of the department: Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

> M S Ramaiah Nagar MSRIT Post Bangalore 560 054

T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru Central University Approved by Government of Karnataka, Approved by AICTE, New Delhi, Recognized by UGC under 2F & 128 of UGC act 1956

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Date: 19/10/23

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Guide and supervisor:

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Head of the department: Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054

T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru Central University. Approved by Government of Karnataka. Approved by AICTE, New Delhi, Recognized by UGC under 2F & 128 of UGC act 1956

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Date: 19/10/23

Dapswee Guide and supervisor:

Khw.

Head of the department:

 M.S. Ramaiah College of Arts, Science & Commerce

> M S Ramaiah Nagar MSRIT Post Bangalore 560 054

T +91 80 2360 0966/8597
 +91 80 2360 6905
 F +91 80 2360 6213





ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಚ್ಚಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAAC. Permanently Affiliated to Bengaluru City University. Approved by Government of Karnataka. Approved by AICTE, New Deihi. Recognized by UGC under 21 & 128 of UGC act 1956

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Date: 20-10-2023

Harpshee

Guide and supervisor

Head of the department Oppartment of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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## CERTIFICATE

This is to certify that this dissertation entitled, "Acute ethanol exposure on early embryonic development of zebrafish- Experimental method" and "Identifying the gene interactions for FASD (fetal alcohol spectrum disorder)- In-silico method"submitted by Ms.ANANYA B G (P18EV21S0067) in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore City University is based on the work carried out by her under the guidance and supervision. It is also certified that this dissertation or any part there of has not submitted elsewhere for any other degree.

Date: 10/10/2023

Muktha, H19/10/23 Guide and supervisor

p.s.

Head of the department Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 F +91 80 2360 6213

T +91 80 2360 0966/8597 +91 80 2360 6905





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#### CERTIFICATE

This is to certify that this dissertation entitled, TITLE: : EGG SHELL-BASED CATALYSTS FOR BIODIESEL:A CANTEEN WASTE RECYCLING INITIATIVE TO CLEAN ENERGY submitted Sushma S M in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore City University is based on the work carried out by his/her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date: 18/10/2023.

The Guide and supervisor:

: KLAD.

Head of the department chnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 F +91 80 2360 6213

T +91 80 2360 0966/8597 | +91 80 2360 6905

E principal.msrcasc@gmail.com W www.msrcasc.edu.in

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M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru Central University. Approved by Government of Karnataka, Approved by AICTE, New Delhi, Recognized by UGC under 2F & 12B of UGC act 1956

## CERTIFICATE

This is to certify that this dissertation entitled, "AVENUE TREE, A POTENTIAL **BIORESOURSE FOR THE PRODUCTION OF BIOGAS, IN SINGLE AND MIXED** FOLIAGE USING SACCHAROMYCES CEREVISIAE AS AN SUBSTRATE submitted by Mr. ADARSH M (P18EV21S0041) in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore City University is based on the work carried out by his/her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date: 19/10 (2023

Darpebree Guide and supervisor

> 1 (I. HW.

Head of the department:

Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 | F +91 80 2360 6213

T +91 80 2360 0966/8597 +91 80 2360 6905





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# **CERTIFICATE**

This is to certify that this dissertation entitles" Advance Purification Strategies for Recombinant Monoclonal Antibodies in Therapeutic Development "Submitted by Ms. UNNATHI U SHETTY (P18EV21S0114) in partial fulfilment of the requirements for the DEGREE OF MASTER OF SCIENCE IN BIOTECHNOLOGY" to Bangalore City university is based on the work carried out by them under the guidance and supervision. It is also certified that this project or any part of these has not been submitted elsewhere for any other degree.

Date: 19/10/2023.

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Guide and supervisor

Ch W.

Head of the department Department of Biotechnology M.S. Ramaiah College 81 Arts, Science & Commarce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +918023600966/8597 +918023606905 F +918023606213





ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAAC. Permanently Affiliated to Bengaluru City University. Approved by Government of Karnataka, Approved by AICTE. New Delbi, Recognized by UGC under 21 & 12B of UGC act 1956

### CERTIFICATE

This is to certify that this dissertation entitled, "INCREASING THE SYNTHESIS OF ANTHOCYANINS, A FLAVONOID IN BLACK RICE (ORYZA SATIVA) CULTIVARS BY THE APPLICATION OF *PONGAMIA* **BIOFERTILIZER** submitted by **M POOJA** (P18EV21S0107), in partial fulfilment of the requirements for the degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** to Bangalore City University is based on the work carried out by his/her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date: 19 10 2023

Guide and Co-Guide

> Kh Mu.

OepUrehehthedepartment M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597
 +91 80 2360 6905
 F +91 80 2360 6213





ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ. ವಿಚ್ಚಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramalah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru City University Approved by Government of Karnataka, Approved by AICTE, New Delhi, Recognized by UGC under 21 & 12B of UGC act 1956

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Date:

19/10/2023

Guide and Co-Guide

; ICh AN.

Head of the department Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054

1 +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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#### CERTIFICATE

This is to certify that this dissertation entitled "Effects of pro-anti inflammatory signals on wound healing and Exosomes enriched with factors promoting wound healing" Submitted by Ms.Neha Deka in partial fulfilment of the requirements for the DEGREE OF MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore university is based on the work carried out by them under the guidance and supervision. It is also certified that this project or any part of thereof has not been submitted elsewhere for any other degree.

Date:

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Muktha Higholzs Guide and supervisor

- KAN

Head of the Department

Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

> M S Ramaiah Nagar 1 +91 80 2360 0966/8597 | E principal msrcascio gmail.com MSRIT POST +91 80 2360 6905 Bangatore 560 054 F +91 80 2360 6215

W www.msrcasc.edu.in

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ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru City University. Approved by Government of Karnataka, Approved by AICTE, New Delhi, Recognized by UGC under 21 & 12B of UGC act 1956

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Date: 18/10/2023

Mukthe H19/10/23 Guide and supervisor

ILM

Head of the Department Uepartment of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 +91 80 2360 0966/8597
 +91 80 2360 6905
 F +91 80 2360 6213





ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ. ವಿಚ್ಚಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramalah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Alfilated to Bengaburu City University, Approved by Government of Karnataka, Approved by AICTE, New Delta, Recognized by USC under 21 A 128 of USC act 1956

#### CERTIFICATE

This is to certify that this dissertation entitled, "Assaying Antibacterial Activity of Extracts from Clove, Cinnamon and Lico rice on Distinct Bacteria Isolated from Polycystic Ovary Syndrome (PCOS) Vaginal Swab Samples" submitted by ROOPINI K in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore City University is based on the work carried out by his/her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Thomas lay P-

Date:

18/10/2023

Guide and supervisor:

IL MM.

Head of the department:

Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerco

 M S Ramaiah Nagar
 T
 +91 80 2360 0966/8597

 MSRIT Post
 +91 80 2360 6905

 Bangalore 560 054
 F
 +91 80 2360 6213





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Date:

Muktha, H 19/10/23 Guide and supervisor

KhN.

Head of the Department

Department of Blotechnology M.S. Ramaiah College of Arts. Science & Commerce

MSRIT Post

+918023606905 Bangalore 560 054 + 91 80 2360 6213

M S Remaiah Nagar 1 1 +9180 2360 0966/8597 E principal marcase @gmail.com W. www.msrcasc.edu.in







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This is to certify that this dissertation entitled,"Acute ethanol exposure on early embryonic development of zebrafish- Experimental method" and "Identifying the gene interactions for FASD (fetal alcohol spectrum disorder)- In-silico method"submitted by Ms. SANJANA A K (P18EV21S0066) in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore City University is based on the work carried out by her under the guidance and supervision. It is also certified that this dissertation or any part there of has not submitted elsewhere for any other degree.

Date: 19 10 2023

Muktha. H19/10/23 Guide and supervisor

Cha

Head of the department

Vepartment of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

> M S Ramaiah Nagar MSRIT Post

+91 80 2360 6905 Bangalore 560 054 F +91 80 2360 6213

\*91 80 2360 0966/8597 E principal.msrcasc@gmail.com www.msrcasc.edu.in





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## CERTIFICATE

This is to certify that this dissertation entitled, "QUANTIFICATION AND CHARACTERIZATION OF BETA CAROTENE FROM VARIOUS FLORAL COROLLA" submitted by Ms. BHOOMI DESAI (P18EV21S0060) in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore City University is based on the work carried out by her under my guidance and supervision. It is also certified that this dissertation or any part has not been submitted elsewhere for any other degree.

Date: 19/10/2023

Bayashree Guide and supervisor

(L N.

Head of the department Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





M S Ramalah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaiuru Central University. Approved by Government of Karnataka, Approved by AICTE, New Delbi, Recognized by UGC under 2F & 128 of UGC act 1956

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Date: 19/10/2023

Guide and supervisor



M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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Date: 18 10 2023

Muktha H 19/10/23 Guide and supervisor

· KANO.

Head of the Department

Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

MSRIT Post Bangalore 560 054 E +91 80 2360 6213

+91 80 2360 6905

M S Ramaiah Nagar T +91 80 2360 0966/8597 E principal msrcase g gmail com W. www.msrcasc.edu.in







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Head of the Department Oepartment of Biotechnology M.S. Ramaiah College of Arta, Science & Commerce

M S Ramatah Nagar MSRIT Post Bangalore 560 054 T +918023600966/8597 +918023606905 F +918023606213





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Date: 19.10-2013

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Dt. LAKSHMIKANTH R N

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Head of the Department Department of Biotechnology 🐒 🎊 🖏 Namaiah Coilaga of Arts, Science & Commerce

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Date: 19.10.2023 Dr. SOWBHAGY

Guide and supervisor:

NI

Dr. LAKSHMIKANTH R N

Head of the department: Uepartment of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

> M S Ramaiah Nagar MSRIT Post Bangalore 560 054

T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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Date: 19.10.202

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Dr. LAKSHMIKANTH R N

Head of the department: Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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Date: 19/10/2023.

Mukthe. H 19/10/23 Guide and supervisor

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Head of the department Uppartment of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

> M S Ramaiah Nagar MSRIT Post Bangalore 560 054

T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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5220 -2 Guide and supervisor:

K KN.

M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054

T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213

E principal.msrcasc@gmail.com W www.msrcasc.edu.in

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This is to certify that this dissertation entitled, "INCREASING THE SYNTHESIS OF ANTHOCYANINS, A FLAVONOID IN BLACK RICE (ORYZA SATIVA) CULTIVARS BY THE APPLICATION OF *PONGAMIA* BIOFERTILIZER submitted by GEETHA.B (P18EV21S0101), in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore City University is based on the work carried out by his/her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date: 19 10 2023

Guide and Co-Guide

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Head of the department pepartment of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054

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1 +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213 E principal mircasc e gmail com W www.mircasc.edu.in





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This is to certify that this dissertation entitles" Polyherbal formulations for treating malignancy tumour using clonogenic assay" Submitted by Ms. ANURADHA N GANGAPUR (P18EV21S004) in partial fulfilment of the requirements for the DEGREE OF MASTER OF SCIENCE IN BIOTECHNOLOGY" to Bangalore City university is based on the work carried out by them under the guidance and supervision. It is also certified that this project or any part of these has not been submitted elsewhere for any other degree.

Date: 18/10/2023.

Multha H 18/10/23 Guide and supervisor

- KAN.

Dep Had of the department ology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 Y +91 80 2360 0966/8597
 +91 80 2360 6905
 F +91 80 2360 6213





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Date: 18/10/2023

Muktha · H19/10/22 . Guide and supervisor

Char

Head of the Department Oppartment of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

> M S Ramaiah Nagar MSRIT Post Bangalore 560 054

1 +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213







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This is to certify that this dissertation entitled, "Assaying Antibacterial Activity of Extracts from Clove, Cinnamon and Lico rice on Distinct Bacteria Isolated from Polycystic Ovary Syndrome (PCOS) Vaginal Swab Samples" submitted by PAYAL SINGH in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY to Bangalore City University is based on the work carried out by his/her under my guidance and supervision. It is also certified that this dissertation or any part thereof has not submitted elsewhere for any other degree.

Date:

18/10/2023

Guide and supervisor: Chara Ray P

)CLAA.

Head of the department:

Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213





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Date:

18/10/2023

Guide and supervisor: - Chana Payiff

Head of the department:

Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 🕴 F +91 80 2360 6213

1 +91 80 2360 0966/8597 +91 80 2360 6905

E principal.msrcasc@gmail.com W www.msrcasc.edu.in

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Date: | 8 10 2023

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Department of <u>Bioten</u>hnology Head of the departmenthnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 +91 80 2360 0966/8597
+91 80 2360 6905
F +91 80 2360 6213

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This is to certify that this dissertation entitled "STUDIES ON POTENTIAL IN-VITRO PHARMACOLOGICAL, PHYTOCHEMICAL CHARACTERISTICS OF Coriandrum sativum MICROGREEN AND ITS EFFICACY AGAINST MCF-7" submitted by student DISHA S PATIL (P18EV21S0020) in partial fulfilment of the requirements for the DEGREE OF MASTER OF SCIENCE IN BIOTECHNOLOGY to Bengaluru City University is based on the work carried out by her under my guidance and supervision. It is also certified that this dissertation or any part of this has not been submitted elsewhere for any other degree.

Date: 18/10/2023

ICANO

Guide and supervisor:

- ICh MUD.

M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar
MSRIT Post
3angalore 560 054

T +91 80 2360 0966/8597
+91 80 2360 6905
F +91 80 2360 6213

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Date: 18/10/2022

Guide and supervisor:

h N.N.

Head of the Department: Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar **MSRIT** Post Bangalore 560 054

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+91 80 2360 0966/8597 +91 80 2360 6905 +91 80 2360 6213





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Date: 18/10/2023

1Ch 1200. Guide and supervisor:

h NU.

Head of the Department: Ospartment of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597
+91 80 2360 6905
F +91 80 2360 6213





ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಚ್ಚಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAC, Permanently Alfibiated to Bengaluru City University. Approved by Government of Karnataka, Approved by AICTE, New Delbi, Recognized by UGC under 21 & 12B of UGC act 1956

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Date: 19/10/223.

jens.

Guide and supervisor:

ha

Head of the Department: Department of Blotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597
+91 80 2360 6905
F +91 80 2360 6213

E principal.msrcasc@gmail.com W www.msrcasc.edu.in

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Guide and supervisor:

Head of the Department: Department of Blotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 T +91 80 2360 0966/8597
+91 80 2360 6905
F +91 80 2360 6213

E principal.msrcasc@gmail.com

W www.msrcasc.edu.in





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Date: 19/10/223.

Guide and supervisor:

Lind

Head of the Department: Department of Biotechnology M.S. Ramaiah College of Arts, Science & Commerce

M S Ramaiah Nagar MSRIT Post Bangalore 560 054

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- T +91 80 2360 0966/8597 +91 80 2360 6905 F +91 80 2360 6213
- E principal.msrcasc@gmail.com W www.msrcasc.edu.in

