

(AFFILIATED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM) EDATHALA P.O, ALUVA-683564

CERTIFICATE

This is to certify that the dissertation entitled "CROCUS SATIVUS IN POLYHERBAL OIL FORMULATION: A COMPARATIVE EVALUATION OF ITS INFLUENCE ON PHYTOCHEMICAL AND ANTIOXIDANT PROPERTIES "submitted to Mahatma Gandhi University, Kottayam in partial fulfillment of requirement for the award of the Degree of Bachelor of Science in Biotechnology, is a record of the original research work done by Ms. ANEENA KAREEM (200021043070) under the supervision and guidance of ALPHY NISA STEAPHEN, Dept. of Biotechnology, Al-Ameen College, Edathala during the period of January 2023.

Internal Guide:

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Submitted to the eternal examiner for viva voice on:

Date:

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Internal Examiner: Penisha Remisha Ramesh,

External Examiner: Spring Gopiko K. S



(AFFILIATED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM) EDATHALA P.O, ALUVA-683564

CERTIFICATE

This is to certify that the dissertation entitled "EVALUATING THE EFFECTS OF DIFFERENT OILS ON SENSORY, PHYSIOCHEMICAL AND SKIN BENEFICIAL PROPERTIES OF POLYHERBAL FORMULATIONS: A COMPARATIVE STUDY" submitted to Mahatma Gandhi University, Kottayam in partial fulfillment of requirement for the award of the Degree of Bachelor of Science in Biotechnology, is a record of the original research work done by Ms. HANEENA P A (200021043085), Ms. HAANAM K S (200021043082) under the supervision and guidance of ALPHY NISA STEAPHEN, Dept. of Biotechnology, Al-Ameen College, Edathala during the period of January 2023.

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Submitted to the eternal examiner for viva voice on:

Internal Examiner Remisla Remisla Rameslo

External Examiner : Popular



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CERTIFICATE

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External Examiner: Gopiko K.S



(Affiliated to Mahatma Gandhi University, Kottayam) Edathala P.O, Aluva - 683564

CERTIFICATE

This is to certify that the dissertation entitled "GREEN SYNTHESIS OF ZINC OXIDE NANOPARTICLES USING Musa paradisiaca PEEL EXTRACT" submitted to the Mahatma Gandhi University. Kottayam in partial fulfilment of the requirements for the award of the degree of Bachelor of Science in Biotechnology is a record of original research work done by Sruthi, T.S under the supervision and guidance of Sanooja, M.S.

Rahimol Ramesh

Head of department

Biotechnology

Internal Examiner

Regards Remishe Ramesh.

External Examiner

2



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CERTIFICATE

This is to certify that the dissertation title "PRODUCTION OF NOVEL BACTERIA CONSORTIUM BY ISOLATION OF ORGANIC WASTE DEGRADING BACTERIA FROM GARBAGE DUMP AREA " submitted in Mahatma Gandhi University, Kottayam in partial fulfillment of requirement for the award of the Degree of Bachelor of Science in Biotechnology, is a bonafide record of the original work done by KARTHIKA D.S Reg no -200021043090 under the supervision and guidance of assistant prof Remisha Ramesh. Department of Biotechnology, Al-Ameen college, Edathala during the period of 2022 to 2023.

Head of the department

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Submitted to the external examiner for viva voce on

Internal examiner: Remisla Remisla Romesh.

External examiner: Specific Gopika. K.S



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External Examiner: Jophila Gopika K. S



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CERTIFICATE

This is to certify that the dissertation entitled "ELICIT THE SMALL COMPOUNDS FROM EDIBLE MUSHROOM USING NADES" submitted to the Mahatma Gandhi University, Kottayam in partial fulfilment of the requirements for the award of the degree of Bachelor of Science in Biotechnology is a record of original research work done by Ashi P D under the supervision and guidance of Rahimol Ramesh

Rahimol Ramesh Head of Department Biotechnology

Internal Examiner

Sanooja · M·s

External Examiner



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CERTIFICATE

This is to certify that the dissertation entitled "GREEN SYNTHESIS OF ZINC OXIDE NANOPARTICLES USING Calotropis procera LEAF EXTRACT" submitted to Mahatma Gandhi University, Kottayam in partial fulfilment of the requirements for the award of Bachelor of Science in Biotechnology is a record of original research done by Varsha Suresh under the supervision and guidance of Sanooja M S.

Guide:

Rahimol Ramesh

Head of Department

Renista Rennista Ramesti.

External Examine



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683564

CERTIFICATE

This is to certify that the dissertation title "ENUMERATION AND ISOLATION OF ENDOPHYTIC BACTERIA AND FUNGI IN GINGER (Zingiberofficinale)" submitted in Mahatma Gandhi University, Kottayam in partial fulfillment of requirement for the award of the Degree of Bachelor of Science in Biotechnology, is a bonafide record of the original work done by IAJAZUR RAHMAN ISHTHIYAQUE, reg no. 200021043087 under the supervision and guidance of assistant prof Remisha Ramesh. Department of biotechnology, Al-Ameencollege, Edathala during the period of 2022 to 2023.

Head of the department Fahi

Internal guide: Remitte

Submitted to the external examiner for viva voce on ... 28.14.123...

Internal examiner: Parisha Ramesh External examiner: Japan Gopika K. 5



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CERTIFICATE

This is to certify that the dissertation entitled "EVALUATION OF THE ANTI-INFLAMMATORY EFFECT OF A POLYHERBAL FORMULATION WITH AND WITHOUT Crocus sativus: A COMPARATIVE ANALYSIS" submitted to Mahatma Gandhi University, Kottayam in partial fulfillment of requirement for the award of the Degree of Bachelor of Science in Biotechnology, is a record of the original research work done by Ms. MS. HADIYA JABBAR (200021043083) under the supervision and guidance of ALPHY NISA STEAPHEN, Dept. of Biotechnology, Al-Ameen College, Edathala during the period of January 2023.

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Submitted to the eternal examiner for viva voice on:

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External Examiner: Gopike K.5



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CERTIFICATE

This is to certify that the dissertation entitled "GREEN SYNTHESIS OF ZINC OXIDE NANOPARTICLES USING Citrus sinensisPEEL EXTRACT" submitted to the Mahatma Gandhi University, Kottayam in partial fulfilment of the requirements for the award of the degree of Bachelor of Science in Biotechnology is a record of original research work done by Abhirami K.R under the supervision and guidance of Sanooja.M.S

Rahimol Ramesh

Head of department

Biotechnology

Internal Examiner

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Remisha Ramesh.

External Examiner

GOPIKA. K.S



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Internal Guide: DATE

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CERTIFICATE

This is to certify that the dissertation title "UV INDUCED BACTERIAL STRAIN DEVELOPMENT FOR CELLULASE ENZYME PRODUCTION - on Bacillus subtilis" submitted in Mahatma Gandhi University, Kottayam in partial fulfillment of requirement for the award of the Degree of Bachelor of Science in Biotechnology, is a bonafide record of the original work done by MIDHUN VARGHESE, reg no. 200021043092 under the supervision and guidance of Mrs Dhanya Vijayan, Academic coordinator, Merit Biolabs, Kochi.

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Submitted to the external examiner for viva voce on 28-04-2023

Internal examiner: Remela Ramesh Rends

External examination John Las Gopike K.S



(AFFILIATED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM) EDATHALA P.O, ALUVA - 683564

CERTIFICATE

This is to certify that the dissertation entitled "A PLACKETT-BURMAN DESIGN BASED ANALYSIS OF NATURAL INGREDIENTS SYNERGISTIC EFFECTS ON SKIN'S OIL AND MOISTURE RETENTION" submitted to Mahatma Gandhi University, Kottayam in partial fulfillment of requirement for the award of the Degree of Bachelor of Science in Biotechnology, is a record of the original research work done by Ms. THASLEEMA P.R (200021043103) Ms. HAIRUNNISA (200021043084) under the supervision and guidance of ALPHY NISA STEAPHEN, Dept. of Biotechnology, Al-Ameen College, Edathala during the period of January 2023.

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External Examiner: Gopika K.S



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CERTIFICATE

This is to certify that the dissertation entitled "AN ASSESSMENT OF WATER QUALITY OF ELOOKKARA TO CHECK POLLUTION FROM INDUSTRIAL WASTE" submitted to the Mahatma Gandhi University, Kottayam in partial fulfilment of the requirements for the award of the degree of Bachelor of Science in Biotechnology is a record of original research work done by Parvathy T V under the supervision and guidance of Rahimol Ramesh

Rahimol Ramesh Head of Department Biotechnology

Internal Examiner

Sanooja Mis

External Examiner

C-RIVO. K.S



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Caning . V. S

External Examiner:



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CERTIFICATE

This is to certify that the dissertation entitled "COMPARATIVE ANALYSIS OF ANTIMICROBIAL PROPERTIES OF COCONUT OIL-BASED POLYHERBAL FORMULATIONS AGAINST Escherichia coli AND Staphylococcus aureus" submitted to Mahatma Gandhi University, Kottayam in partial fulfillment of requirement for the award of the Degree of Bachelor of Science in Biotechnology, is a record of the original research work done by Ms. STANIYA P S (200021043102) under the supervision and guidance of ALPHY NISA STEAPHEN, Dept. of Biotechnology, Al-Ameen College, Edathala during the period of January 2023.

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Remisla Romesh

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GOPIKA.K.S

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CERTIFICATE

This is to certify that the dissertation title BIOSYNTHESIS OF NANOPARTICLES USING Plectratus barbatus submitted in Mahatma Gandhi University, Kottayam in partial fulfillment of requirement for the award of the Degree of Bachelor of Science in Biotechnology, is a bonafide record of the original work done by JASMIN, reg no. 200021043088 under the supervision and guidance of Mrs Dhanya Vijayan , Academic coordinator, Merit Biolabs, Kochi.

Head of the department

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Rahimol Ramesh Head of Department Biotechnology

Internal Examiner

Sanoga M.S

External Examiner

Gopika. K.S

Gopika. K.S



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Rahimol Ramesh Head of Department Biotechnology

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Sanocja. A.S

External Examiner

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External Examiner: Personal Remisla Ramesh.

External Examiner: Gopiko K.S

Head of Department:



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Rahimol Ramesh Head of Department Biotechnology

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Sanoeja. A.S

External Examiner

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OPIKA.K.S



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Head of the Department:

Submitted to the eternal examiner for viva voice on:

External Examiner: Nazla K.4 G. External Examiner: Gopiko K.5