

**PHENOTYPIC DETECTION OF CLINICALLY RELEVANT
FUNGI FROM ENVIRONMENTAL SOIL SAMPLES ALONG
WITH THEIR SOIL CHARACTERISTICS IN SOUTH
KERALA**

Dissertation submitted to

MAHATMA GANDHI UNIVERSITY

In partial fulfilment for the degree of

MASTER OF SCIENCE IN MICROBIOLOGY

Submitted by,

ANOOJA ANILKUMAR

Reg. No. 200011020559

Under the guidance of

Dr. AJITH V

Assistant professor, Department of microbiology,

Pushpagiri Medical College Tiruvalla



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July-September, 2022

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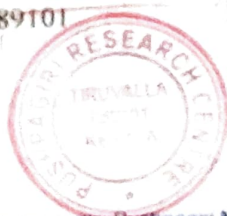
CERTIFICATE

This is to certify that the thesis entitled "**PHENOTYPIC DETECTION OF CLINICALLY RELEVANT FUNGI FROM ENVIRONMENTAL SOIL SAMPLES ALONG WITH THEIR SOIL CHARACTERISTICS IN SOUTH KERALA**" submitted by **ANOOJA ANILKUMAR (Reg. No. 200011020559)**, **SREE SANKARA COLLEGE, KALADY** in partial fulfilment of the requirement for the award of Master of Science in **MSc Microbiology**, is an authentic record of the work done by her under my supervision at **Pushpagiri Research Centre, Tiruvalla** in the period of **July 2022 to September 2022**.

I further certify that she has completed all the assigned work and duties to complete satisfaction and has impressed me with her dedication and constant strive for excellence in work.

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BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled “**PHENOTYPIC DETECTION OF CLINICALLY RELEVANT FUNGI FROM ENVIRONMENTAL SOIL SAMPLES ALONG WITH THEIR SOIL CHARACTERISTICS IN SOUTH KERALA**” submitted to Mahatma Gandhi University in the partial fulfilment of the requirements for the award of the degree of **MASTER OF SCIENCE IN MICROBIOLOGY**, is a record of original work done by **ANOOJA ANILKUMAR** under the guidance of **Dr. AJITH V, M.B.B.S, MD, Assistant Professor , Department of Microbiology, Pushpagiri Institute of Medical Sciences and Research Centre, Tiruvalla** during the year of 2022.

Place: Kalady

05-12-2022

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**Isolation and Molecular Characterization of kerA gene
from Keratinolytic Bacteria**

Dissertation Submitted to

MAHATMA GANDHI UNIVERSITY

In partial fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MICROBIOLOGY

Submitted By

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CERTIFICATE

This is to certify that the dissertation entitled **“Isolation and molecular characterization of kerA gene from keratinolytic bacteria”** is a bonafide record of the original research work done by **Ms. Ashisaa, Sree Sankara College, Kalady** for the partial fulfillment of the requirement for the award of **‘Degree of Masters of Science in Microbiology’** during the period of her study in the Department of Microbiology, under my direct supervision & guidance.



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This is to certify that the dissertation in entitled **ISOLATION AND MOLECULAR CHARACTERIZATION OF KERA GENE FROM KERATINOLYTIC BACTERIA** submitted to Mahatma Gandhi University in the partial fulfillment of the requirements for the award of the degree of **MASTER OF SCIENCE IN MICROBIOLOGY**, is a record of original work done by **Ms. ASHISAA** under the guidance of **Dr. K S RISHAD, Research Director**, Unibiosys Biotech Research Labs, Kalamassery, Cochin. During the year 2022.

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UTILIZATION OF SOYMILK IN THE DEVELOPMENT OF KIWI INCORPORATED SHRIKHAND

Dissertation submitted to

MAHATMA GANDHI UNIVERSITY

in partial fulfilment for the award of the Degree of

MASTER OF SCIENCE IN MICROBIOLOGY

By

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(Reg. No. 200011020561)

Under the guidance of

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Dr. S. MOHAN

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EVALUATION OF YEAST LACTIC ACID BACTERIA CONSORTIUM FOR APPLICATION IN FERMENTED FOODS

Dissertation submitted to

MAHATMA GANDHI UNIVERSITY

in partial fulfilment for the award of the Degree of

MASTER OF SCIENCE IN MICROBIOLOGY

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Head of the Department

**COMPARISON OF ELISA KITS FROM TWO DIFFERENT
MANUFACTURERS TO DETERMINE THE PRESENCE OF
ANTINUCLEAR ANTIBODIES IN AUTO-IMMUNE
DISEASES**

Dissertation Submitted to

MAHATMA GANDHI UNIVERSITY

In partial fulfilment for the degree of

MASTER OF SCIENCE IN MICROBIOLOGY

Submitted by,

CLERIN MARIYA VARGHESE

Reg.No.200011020563

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I further certify that she has completed all the assigned work and duties to complete satisfaction and has impressed me with her dedication and constant strive for excellence in work.

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IMPACT OF PARTIAL REPLACEMENT OF RAW RICE WITH PARBOILED RICE ON IDLI FERMENTATION

Dissertation submitted to

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MASTER OF SCIENCE IN MICROBIOLOGY

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**CEFTAZIDIME-AVIBACTAM SUSCEPTIBILITY IN
GRAM -NEGATIVE CARBAPENEM RESISTANT
ISOLATES**

Dissertation Submitted to

MAHATMA GANDHI UNIVERSITY

In partial fulfilment for the degree of

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Submitted by,

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**COLISTIN SUSCEPTIBILITY TESTING BY BROTH
MICRODILUTION METHOD AND IN COMPARISON
WITH E-TEST**

Dissertation Submitted to
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In partial fulfilment for the degree of
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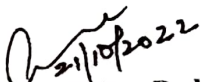
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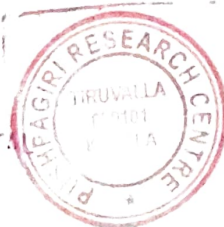
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Place: Kalady

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**ANTIMICROBIAL RESISTANCE IN *E. coli* FROM
ONLINE MARKETED FISH IN COCHIN, KERALA**

Dissertation Submitted to

MAHATMA GANDHI UNIVERSITY

In partial fulfillment for the award of the degree of

MASTER OF SCIENCE IN MICROBIOLOGY

Submitted by,

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F.No:2-16/2021-MFB

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This is to certify that Ms. PARVATHY SUSEELAN from Sree Sankara College, Mattoor, Sankar Nagar, Kalady has carried out her project work, entitled "**Antimicrobial Resistance in *E. coli* from Online Marketed Fish in Cochin, Kerala**" submitted for the partial fulfillment of the requirement Degree of **Master of Science in Microbiology**. This is an authentic record of research work carried out by her under my guidance at Microbiology, Fermentation and Biotechnology Division, ICAR- Central Institute of Fisheries Technology, Cochin during the period from July 2022 to October 2022. The dissertation has not formed the basis for the award of any Degree/Diploma/Associateship/Fellowship or other similar title to any candidate of any university.

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Scientist
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This is to certify that the dissertation entitled “**ANTIMICROBIAL RESISTANCE IN *E. coli* FROM ONLINE MARKETED FISH IN COCHIN, KERALA**” submitted to Mahatma Gandhi University in partial fulfillment of the requirements for the award of the degree of **MASTER OF SCIENCE IN MICROBIOLOGY**, is a record of original work done by **PARVATHY SUSEELAN** under the guidance of **T. MUTHULAKSHMI**, Scientist, Microbiology, Fermentation and Biotechnology, ICAR-Central Institute of Fisheries Technology, Cochin during the year 2022.

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Place: Kalady

Date: 04-11-2022

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**PHENOTYPIC CHARACTERIZATION AND
DETECTION OF CARBAPENEM RESISTANCE IN
CLINICAL ISOLATES**

Dissertation Submitted to

MAHATMA GANDHI UNIVERSITY

In partial fulfilment for the degree of

MASTER OF SCIENCE IN MICROBIOLOGY

Submitted by,

RANJANA E S

Reg. No. 2000110220568

Under the guidance of

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Assistant Professor and Scientist

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I further certify that she has completed all the assigned work and duties to complete satisfaction and has impressed me with her dedication and constant strive for excellence in work.

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**ANTI-MICROBIAL ACTIVITY OF SKIN SURFACE
LACTIC ACID BACTERIA AGAINST
STAPHYLOCOCCAL ISOLATES OF CANINE
PYODERMA**

Dissertation Submitted to

MAHATMA GANDHI UNIVERSITY

In partial fulfilment for the award of the degree of
MASTER OF SCIENCE IN MICROBIOLOGY

Submitted by,

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CERTIFICATE

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**ANTI-MICROBIAL ACTIVITY OF UDDER SURFACE
LACTIC ACID BACTERIA AGAINST STAPHYLOCOCCUS
AUREUS FROM BOVINE MASTITIS**

Dissertation Submitted to

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Place: Kalady

Date: 05-12-2022

Dr. S. MOHAN

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**VIRULENCE FACTORS AND PHENOTYPIC
CHARACTERIZATION OF CANDIDA SPECIES FROM
CLINICAL ISOLATES**

Dissertation Submitted to

MAHATMA GANDHI UNIVERSITY

In partial fulfilment for the degree of

MASTER OF SCIENCE IN MICROBIOLOGY

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