

**PHYTOCHEMICAL ANALYSIS AND *IN-VITRO* ANTI-
MICROBIAL ACTIVITY OF METHANOL EXTRACT
OF *ANNONA MURICATA* LEAVES**

*Miniproject submitted to Periyar University, Salem, in partial fulfillment of the
requirements for the award of the degree of*

BACHELOR OF SCIENCE IN BIOCHEMISTRY

Submitted By

S. DINESH KUMAR	- 20UBC1100
N. LOGESHWARI	- 20UBC1109
R. NARMATHA	- 20UBC1110
S. SWETHA	- 20UBC1114

Under the guidance of

M. PRIYANGAGANDHI, M.Sc., M.Phil.,



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(AFFILIATED TO PERIYAR UNIVERSITY)

(ACCREDITED 'A' GRADE BY NAAC UGC RECOGNIZED 2(F) & (B) STATUS)

RASIPURAM - 637 408, NAMAKKAL DT - TAMILNADU

APRIL 2023

M. PRIYANGAGANDHI, M.Sc., M.Phil.,
Assistant Professor, Department of Biochemistry,
Muthayammal College of Arts and Science (Autonomous),
Rasipuram - 637 408.



CERTIFICATE

This is to certify that the mini project entitled "**PHYTOCHEMICAL ANALYSIS AND IN-VITRO ANTI-MICROBIAL ACTIVITY OF METHANOL EXTRACT OF ANNONA MURICATA LEAVES**" submitted for the degree of **BACHELOR OF SCIENCE IN BIOCHEMISTRY** by **S. DINESH KUMAR - 20UBC1100, N. LOGESHWARI - 20UBC1109, R. NARMATHA - 20UBC1110** and **S. SWETHA - 20UBC1114** is the record of research work carried out by them during the period of **2020-2023** under my guidance and supervision and that this work has not formed the basis for any Degree/ Diploma/ Associate ship/ Fellowship or other titles in this university or institution of higher learning.

Head of the Department

Dr. M. Shabana Begum, M.Sc., M.Phil., Ph.D
Head, Department of Biochemistry,
Muthayammal College of Arts and Science

Signature of the Guide

Project submitted to the viva-voice examination held on 10.05.2023 at
Muthayammal College of Arts & Science (Autonomous), Rasipuram.

Examiners :

-
-

DECLARATION

We do hereby declare that the mini project entitled "**PHYTOCHEMICAL ANALYSIS AND *IN-VITRO* ANTI-MICROBIAL ACTIVITY OF METHANOL EXTRACT OF *ANNONA MURICATA* LEAVES**" submitted to the **PERIYAR UNIVERSITY** in partial fulfillment of requirements for the award of the degree of **BACHELOR OF SCIENCE IN BIOCHEMISTRY** is the bonafide record of work carried out during the period of 2020-2023 under the guidance of **M. PRIYANGAGANDHI, M.Sc., M.Phil.**, Assistant Professor, Department of Biochemistry, Muthayammal College of Arts and Science, Rasipuram and that this work has not formed the basis for the award of any Degree/ Diploma/ Associate ship/ Fellowship or other titles in this university or higher learning.

PLACE: Rasipuram

DATE: 10.05.2023

SIGNATURE OF THE CANDIDATES

S. DINESH KUMAR 

N. LOGESHWARI N. Logeshwari

R. NARMATHA R. Narmatha.

S. SWETHA S. Swetha

PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTI-BACTERIAL ACTIVITY OF METHANOL EXTRACT OF *ATROCARPUS HETEROPHYLLUS* LEAVES

Miniproject submitted to Periyar University, Salem, in partial fulfillment of the requirements for the award of the degree of

BACHELOR OF SCIENCE IN BIOCHEMISTRY

Submitted By

P. KAVIN - 20UBC1101

R. PRAKASH - 20UBC1103

A. DEENA - 20UBC1105

G. SOWNDHARYA - 20UBC1112

Under the guidance of

Mr. P.TAMILMANI, M.Sc., M.Phil., (Ph.D)



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(ACCREDITED 'A' GRADE BY NAAC UGC RECOGNIZED 2(F) & (B) STATUS)

RASIPURAM - 637 408, NAMAKKAL DT -TAMILNADU

APRIL 2023

Mr. P.TAMILMANI, M.Sc., M.Phil., (Ph.D)
Assistant Professor, Department of Biochemistry,
Muthayammal College of Arts and Science (Autonomous),
Rasipuram - 637 408.



CERTIFICATE

This is to certify that the mini project entitled "**PHYTOCHEMICAL ANALYSIS AND IN VITRO ANTI-BACTERIAL ACTIVITY OF METHANOL EXTRACT OF ATROCARPUS HETEROPHYLLUS LEAVES**" submitted for the degree of **BACHELOR OF SCIENCE IN BIOCHEMISTRY** by **P. KAVIN - 20UBC1101, R. PRAKASH - 20UBC1103, A. DEENA - 20UBC1105** and **G. SOWNDHARYA - 20UBC1112** is the record of research work carried out by them during the period of **2020-2023** under my guidance and supervision and that this work has not formed the basis for any Degree/ Diploma/ Associate ship/ Fellowship or other titles in this university or institution of higher learning.

Head of the Department

Dr. M. Shabana Begum, M.Sc., M.Phil., Ph.D.

Head, Department of Biochemistry,

Muthayammal College of Arts and Science,

Rasipuram - 637 408, Namakkal Dist.

Signature of the Guide

Project submitted to the viva-voice examination held on 10.05.23 at Muthayammal College of Arts & Science (Autonomous), Rasipuram.

Examiners :

1.

2.

DECLARATION

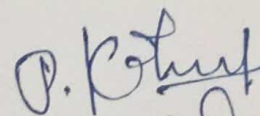
We do hereby declare that the mini project entitled "PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTI-BACTERIAL ACTIVITY OF METHANOL EXTRACT OF *ATROCARPUS HETEROPHYLLUS* LEAVES" submitted to the PERIYAR UNIVERSITY in partial fulfillment of requirements for the award of the degree of BACHELOR OF SCIENCE IN BIOCHEMISTRY is the bonafide record of work carried out during the period of 2020-2023 under the guidance of Mr. P. TAMILMANI, M.Sc., M.Phil., (Ph.D) Assistant Professor, Department of Biochemistry, Muthayammal College of Arts and Science, Rasipuram and that this work has not formed the basis for the award of any Degree/ Diploma/ Associate ship/ Fellowship or other titles in this university or higher learning.

PLACE: RASIPURAM

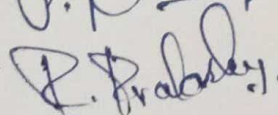
DATE: 10.05.2023

SIGNATURE OF THE CANDIDATES

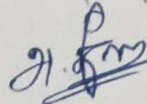
P. KAVIN



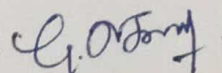
R. PRAKASH



A. DEENA



G. SOWNDHARYA



**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTI
INFLAMMATORY ACTIVITY OF METHANOL
EXTRACT OF *TINOSPORA CORDIFOLIA* LEAVES**

*Miniproject submitted to Periyar University, Salem, in partial fulfillment of the
requirements for the award of the degree of*

BACHELOR OF SCIENCE IN BIOCHEMISTRY

Submitted By

R. GAYATHRI	- 20UBC1106
S. JEEVITHA	- 20UBC1107
P. ROHITH KUMAR	- 20UBC1104
S. YAZHINI	- 20UBC1115

Under the guidance of

Mr. S. MAHARAJAN, M.Sc., M.Phil.,



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RASIPURAM - 637 408, NAMAKKAL DT - TAMILNADU

APRIL 2023

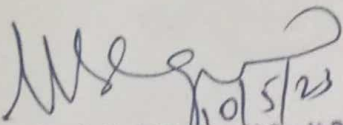
Mr. S. MAHARAJAN, M.Sc., M.Phil.,

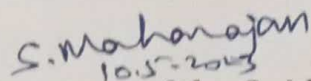
Assistant Professor, Department of Biochemistry,
Muthayammal College of Arts and Science (Autonomous),
Rasipuram - 637 408.



CERTIFICATE

This is to certify that the mini project entitled "**PHYTOCHEMICAL ANALYSIS AND IN VITRO ANTI INFLAMMATORY ACTIVITY OF METHANOL EXTRACT OF TINOSPORA CORDIFOLIA LEAVES**" submitted for the degree of **BACHELOR OF SCIENCE IN BIOCHEMISTRY** by **R. GAYATHRI - 20UBC1106, S. JEEVITHA - 20UBC1107, P. ROHITH KUMAR - 20UBC1104** and **S. YAZHINI - 20UBC1115** is the record of research work carried out by them during the period of **2020-2023** under my guidance and supervision and that this work has not formed the basis for any Degree/ Diploma/ Associate ship/ Fellowship or other titles in this university or institution of higher learning.

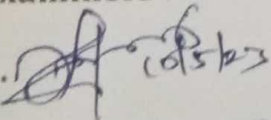
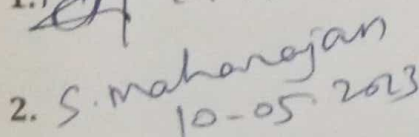

Dr. M. S. Mahalingam, M.Sc., M.Phil., Ph.D
Head, Department of Biochemistry,
Muthayammal College of Arts and Science
Rasipuram - 637 408, Namakkal Dist.


S. Maharanjan
Signature of the Guide

10/05/2023

Project submitted to the viva-voice examination held on ____ at Muthayammal College of Arts & Science (Autonomous), Rasipuram.

Examiners :

- 
1. _____
- 
2. S. Maharanjan
10-05-2023

DECLARATION

We do hereby declare that the mini project entitled "PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTI INFLAMMATORY ACTIVITY OF METHANOL EXTRACT OF *TINOSPORA CORDIFOLIA* LEAVES" submitted to the **PERIYAR UNIVERSITY** in partial fulfillment of requirements for the award of the degree of **BACHELOR OF SCIENCE IN BIOCHEMISTRY** is the bonafide record of work carried out during the period of 2020-2023 under the guidance of **Mr. S. MAHARAJAN, M.Sc., M.Phil.**, Assistant Professor, Department of Biochemistry, Muthayammal College of Arts and Science, Rasipuram and that this work has not formed the basis for the award of any Degree/ Diploma/ Associate ship/ Fellowship or other titles in this university or higher learning.

PLACE: RASIPURAM

DATE: 10/05/2023

SIGNATURE OF THE CANDIDATES

R. GAYATHRI R. Gayathri

S. JEEVITHA S. Jeevitha

P. ROHITH KUMAR P. Rohith Kumar

S. YAZHINI S. Yazhini

**PHYTOCHEMICAL ANALYSIS AND *IN VITRO*
ANTIOXIDANT ACTIVITY OF ETHANOL
EXTRACT OF *MICHELIA CHAMPACA***

*Miniproject submitted to Periyar University, Salem, in partial fulfillment of the
requirements for the award of the degree of*

BACHELOR OF SCIENCE IN BIOCHEMISTRY

Submitted By

A. KAVIYA - 20UBC1108

M. RITHIKA - 20UBC1111

V. KAVIN - 20UBC1102

K. SRIDEVI - 20UBC1113

Under the guidance of

Mrs. T. RENUKA, M.Sc., M.Sc., M.Ed.,



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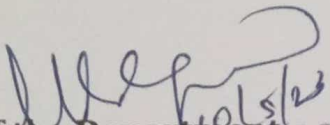
APRIL 2023

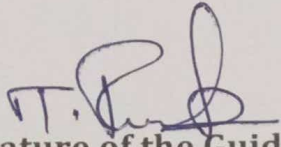
Mrs. T. RENUKA, M.Sc., M.Sc., M.Ed.,
Assistant Professor, Department of Biochemistry,
Muthayammal College of Arts and Science (Autonomous),
Rasipuram - 637 408.



CERTIFICATE

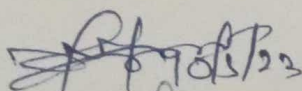
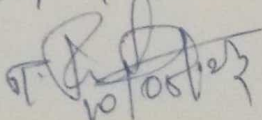
This is to certify that the mini project entitled "**PHYTOCHEMICAL ANALYSIS AND IN VITRO ANTI-OXIDANT ACTIVITY OF ETHANOL EXTRACT OF MICHELIA CHAMPACA LEAVES**" submitted for the degree of **BACHELOR OF SCIENCE IN BIOCHEMISTRY** by **A. KAVIYA - 20UBC1108, M. RITHIKA - 20UBC1111, V. KAVIN - 20UBC1102** and **K. SRIDEVI - 20UBC1113** is the record of research work carried out by them during the period of **2020-2023** under my guidance and supervision and that this work has not formed the basis for any Degree/ Diploma/ Associate ship/ Fellowship or other titles in this university or institution of higher learning.


Head of the Department
Dr. M. Srabani Begam, M.Sc., M.Phil., Ph.D
Head, Department of Biochemistry,
Muthayammal College of Arts and Science,
Rasipuram - 637 408, Namakkal Dist.


Signature of the Guide

Project submitted to the viva-voice examination held on 10.05.2023 at
Muthayammal College of Arts & Science (Autonomous), Rasipuram.

Examiners :

1. 
2. 

DECLARATION

We do hereby declare that the mini project entitled "PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTI-OXIDANT ACTIVITY OF ETHANOL EXTRACT OF *MICHELIA CHAMPACA* LEAVES" submitted to the **PERIYAR UNIVERSITY** in partial fulfillment of requirements for the award of the degree of **BACHELOR OF SCIENCE IN BIOCHEMISTRY** is the bonafide record of work carried out during the period of 2020-2023 under the guidance of **Mrs. T. RENUKA, M.Sc., M.Sc., M.Ed.**, Assistant Professor, Department of Biochemistry, Muthayammal College of Arts and Science, Rasipuram and that this work has not formed the basis for the award of any Degree/ Diploma/ Associate ship/ Fellowship or other titles in this university or higher learning.

PLACE : Rasipuram

DATE : 10.05.2023

SIGNATURE OF THE CANDIDATES

A. KAVIYA *Akaviya*

M. RITHIKA *M. Rithika*

V. KAVIN *V. Kavini*

K. SRI DEVI *K. Sridevi*

**PHYTOCHEMICAL ANALYSIS AND *IN VITRO*
ANTICANCER ACTIVITY OF *Couroupita*
guianensis (NAGALINGAM LEAF)**

*Project report submitted to Periyar University, Salem in partial fulfillment of
the requirements for the award of degree of*

MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY

By

B.M. KEERTHANA SRI

(Reg. No: 21MPMB1002)



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Under the Guidance of

Mr. P. TAMILMANI, M.Sc., M.Phil., (Ph.D.,)

(Assistant Professor)

DEPARTMENT OF BIOCHEMISTRY

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Affiliated To Periyar University, Salem

Accredited by NAAC with 'A' grade, Recognized By UGC under section 2(F) & 12(B)

Rasipuram – 637 408, Namakkal District, Tamilnadu.

MAY-2023

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with 'A' grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408.Namakkal District, Tamilnadu

DEPARTMENT OF BIOCHEMISTRY

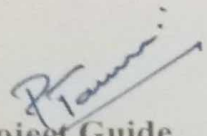


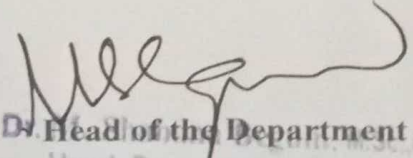
**MUTHAYAMMAL
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CERTIFICATE

This is to certify that the Project Report entitled “**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTICANCER ACTIVITY OF *Couroupita guianensis* (NAGALINGAM LEAF)**” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original research work done by **B.M. KEERTHANA SRI** (Reg. No : 21MPMB1002) during the period of her study (2021-2023) in the Department of Biochemistry Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


Dr. Head of the Department
Head, Department of Biochemistry,
Muthayammal College of Arts and Science,
Rasipuram - 637 408, Namakkal Dist.

Submitted for the project viva-voce examination held on 17.05.2023

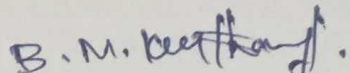
Examiners:

1. 

2. 

DECLARATION

I do here by declare that the project report entitled, “**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTICANCER ACTIVITY OF *Couroupita guianensis* (NAGALINGAM LEAF)**” Submitted to Periyar University, Salem in partial fulfillment for the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original and independent research work done by me during 2021-2023 under the supervision and guidance of **Mr. P. TAMILMANI, M.Sc., M.Phil., (Ph.D)**. It has not previously formed the basis for the award of any degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.


Signature of the Candidate

Place: Rasipuram

Date: 17/05/2023

**PHYTOCHEMICAL ANALYSIS AND *IN-VITRO*
ANTI CANCER ACTIVITY OF 1-BUTANOL
EXTRACT OF *EUPHORBIA HIRTA* LEAVES
USING GASTRIC CANCER (AGS)**

*Project report submitted to Periyar University, Salem in partial fulfillment of
the requirements for the award of degree of*

MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY

By

KIRUTHIKA .S

(Reg. No: 21MPMB1003)



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Under the Guidance of

Dr. M. SHABANA BEGUM, M.Sc., M.Phil., Ph.D.,

(Assistant Professor & Head)

DEPARTMENT OF BIOCHEMISTRY

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Affiliated To Periyar University, Salem

Accredited by NAAC with 'A' grade, Recognized By UGC under section 2(F) & 12(B)

Rasipuram – 637 408, Namakkal District, Tamilnadu.

MAY-2023

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
Affiliated to Periyar University, Salem,
Accredited by NAAC with 'A' grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408.Namakkal District, Tamilnadu

DEPARTMENT OF BIOCHEMISTRY

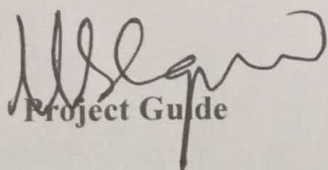


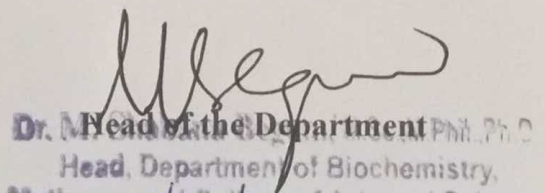
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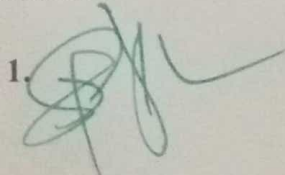
This is to certify that the Project Report entitled “**PHYTOCHEMICAL ANALYSIS AND *IN-VITRO* ANTICANCER ACTIVITY OF 1-BUTANOL EXTRACT OF *EUPHORBIA HIRTA* LEAVES USING GASTRIC CANCER(AGS)**” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original research work done by **KIRUTHIKA .S (Reg. No : 21MPMB1003)** during the period of her study (2021-2023) in the Department of Biochemistry Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

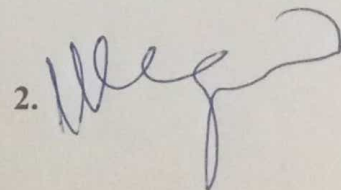

Project Guide


Dr. M. Head of the Department P.N.D.
Head, Department of Biochemistry,
Muthayammal College of Arts and Science
Rasipuram - 637 408, Namakkal Dist.

Submitted for the project viva-voce examination held on 17/05/2023

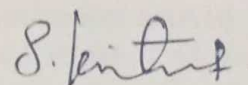
Examiners:

1. 

2. 

DECLARATION

I do here by declare that the project report entitled, “**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTICANCER ACTIVITY OF 1-BUTANOL EXTRACT OF *EUPHORBIA HIRTA* LEAVES USING GASTRIC CANCER (AGS)**” Submitted to Periyar University, Salem in partial fulfillment for the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original and independent research work done by me during 2021-2023 under the supervision and guidance of **Dr M. SHABANA BEGUM, M.Sc., M.Phil., Ph.D.** It has not previously formed the basis for the award of any degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.



Signature of the Candidate

Place: Rasipuram

Date: 17 / 05 / 2023

**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTI
CANCER ACTIVITY OF METHANOL EXTRACT OF
LANTANA CAMARA LEAVES USING BREAST
CANCER CELL LINES (MDA-MB-231)**

*Project report submitted to Periyar University, Salem in partial fulfillment of
the requirements for the award of degree of*

MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY

By

SOBANA .P

(Reg. No: 21MPMB1004)



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Under the Guidance of

Dr. M. DEVI, M.Sc., M.Phil., Ph.D.,

(Assistant Professor)

DEPARTMENT OF BIOCHEMISTRY

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(AUTONOMOUS)**

Affiliated To Periyar University, Salem

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Rasipuram – 637 408, Namakkal District, Tamilnadu.

MAY-2023

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem.

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Rasipuram-637408, Namakkal District, Tamilnadu

DEPARTMENT OF BIOCHEMISTRY

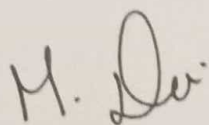


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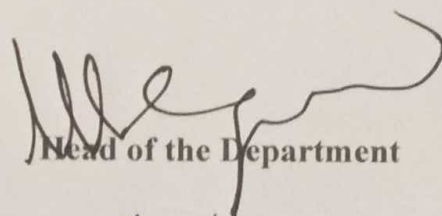
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CERTIFICATE

This is to certify that the Project Report entitled "**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTI CANCER ACTIVITY OF METHANOL EXTRACT OF *LANTANA CAMARA* LEAVES USING BREAST CANCER CELL LINES (MDA-MB-231)**" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original research work done by **SOBANA .P (Reg. No : 21MPMB1004)** during the period of her study (2021-2023) in the Department of Biochemistry Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.



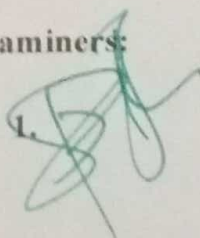
Project Guide



Head of the Department

Submitted for the project viva-voce examination held on 17/05/2023

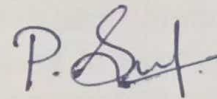
Examiners:

1. 

2. M. Devi.
17/05/2023

DECLARATION

I do here by declare that the project report entitled, "**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTI CANCER ACTIVITY OF METHANOL EXTRACT OF *LANTANA CAMARA* LEAVES USING BREAST CANCER CELL LINES (MDA-MB-231)**" Submitted to Periyar University, Salem in partial fulfillment for the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original and independent research work done by me during 2021-2023 under the supervision and guidance of **Dr M. DEVI, M.Sc., M.Phil., Ph.D.** It has not previously formed the basis for the award of any degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.



Signature of the Candidate

Place: *Rasipuram*

Date: *17/05/2023*

**PHYTOCHEMICAL ANALYSIS AND
IN VITRO ANTICANCER ACTIVITY OF
FICUS RACEMOSE**

*Project report submitted to Periyar University, Salem in partial fulfillment of
the requirements for the award of degree of*

MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY

By

R. UMA

(Reg. No: 21MPMB1005)



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Under the Guidance of

Dr. M. SHABANA BEGUM, M.Sc., M.Phil., Ph.D.,

(Assistant Professor & Head)

DEPARTMENT OF BIOCHEMISTRY

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(AUTONOMOUS)**

Affiliated To Periyar University, Salem

Accredited by NAAC with 'A' grade, Recognized By UGC under section 2(F) & 12(B)

Rasipuram – 637 408, Namakkal District, Tamilnadu.

MAY-2023

DECLARATION

I do here by declare that the project report entitled, "**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTICANCER ACTIVITY OF *FICUS RACEMOSE***" Submitted to Periyar University, Salem in partial fulfillment for the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original and independent research work done by me during 2021-2023 under the supervision and guidance of **Dr. M. SHABANA BEGUM, M.Sc., M.Phil., Ph.D.** It has not previously formed the basis for the award of any degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.

R.umar.

Signature of the Candidate

Place: Rasipuram

Date: 17/05/2023

**PHYTOCHEMICAL ANALYSIS AND *IN VITRO*
ANTI-INFLAMMATORY, *IN VITRO* ANTIDIABETIC
OF *MORINDA CITRIFOLIA* (NONI PLANT)**

*Project report submitted to Periyar University, Salem in partial fulfillment of
the requirements for the award of degree of*

MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY

By

N. AJITH KUMAR

(Reg. No: 21MPMB1006)



**MUTHAYAMMAL
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Under the Guidance of

S. MAHARAJAN, M.Sc., M.Phil.,

(Assistant Professor)

DEPARTMENT OF BIOCHEMISTRY

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)**

Affiliated To Periyar University, Salem

Accredited by NAAC with 'A' grade, Recognized By UGC under section 2(F) & 12(B)

Rasipuram – 637 408, Namakkal District, Tamilnadu.

MAY-2023

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Affiliated to Periyar University, Salem,
Accredited by NAAC with 'A' grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408.Namakkal District, Tamilnadu

DEPARTMENT OF BIOCHEMISTRY



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CERTIFICATE

This is to certify that the Project Report entitled "**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTI-INFLAMMATORY, *IN VITRO* ANTIDIABETIC OF *MORINDA CITRIFOLIA* (NONI PLANT)**" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original research work done by **N. AJITH KUMAR (Reg. No : 21MPMB1006)** during the period of his study (2021-2023) in the Department of Biochemistry Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

S. Maharajan
Project Guide

Submitted for the project viva-voce examination held on

[Signature]
Head of the Department
Dr. M. Subhana Begum, M.Sc., M.Phil., Ph.D
Head, Department of Biochemistry,
Muthayammal College of Arts and Science,
Rasipuram - 637 408, Namakkal Dist.

Examiners:

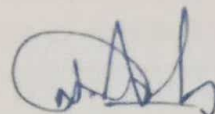
1.

[Signature]

2. *S. Maharajan*

DECLARATION

I do here by declare that the project report entitled, "**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTI-INFLAMMATORY, *IN VITRO* ANTIDIABETIC OF *MORINDA CITRIFOLIA* (NONI PLANT)**" Submitted to Periyar University, Salem in partial fulfillment for the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original and independent research work done by me during 2021-2023 under the supervision and guidance of **S. MAHARAJAN, M.Sc., M.Phil.** It has not previously formed the basis for the award of any degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.



Signature of the Candidate

Place: *Rabipuram*

Date: *17/05/2023*

**PHYTOCHEMICAL ANALYSIS AND
IN VITRO ANTIOXIDANT ACTIVITY OF
SOLANUM TORVUM**

*Project report submitted to Periyar University, Salem in partial fulfillment of
the requirements for the award of degree of*

MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY

By

RAJPAVITHRAN .D

(Reg. No: 21MPMB1007)



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Under the Guidance of

Mrs. T. RENUKA, M.Sc., M.Sc., M.Ed.,

(Assistant Professor)

DEPARTMENT OF BIOCHEMISTRY

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(AUTONOMOUS)**

Affiliated To Periyar University, Salem

Accredited by NAAC with 'A' grade, Recognized By UGC under section 2(F) & 12(B)

Rasipuram – 637 408, Namakkal District, Tamilnadu.

MAY-2023

DECLARATION

I do here by declare that the project report entitled, "**PHYTOCHEMICAL ANALYSIS AND *IN VITRO* ANTIOXIDANT ACTIVITY OF *SOLANUM TORVUM***" Submitted to Periyar University, Salem in partial fulfillment for the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original and independent research work done by me during 2021-2023 under the supervision and guidance of **Mrs. T. RENUKA, M.Sc., M.Sc., B.Ed.** It has not previously formed the basis for the award of any degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.

D. Rajalakshmi

Signature of the Candidate

Place: Rajapuram

Date: 17.5.2023

**PHYTOCHEMICAL ANALYSIS, *IN VITRO*
ANTIOXIDANT AND ANTI DIABETIC ACTIVITY
OF *MORUS ALBA***

*Project report submitted to Periyar University, Salem in partial fulfillment of
the requirements for the award of degree of*

MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY

By

A. VENKATESH
(Reg. No: 21MPMB1008)



**MUTHAYAMMAL
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Under the Guidance of

M. PRIYANKAGANDHI, M.Sc., M.Phil.,
(Assistant Professor)

**DEPARTMENT OF BIOCHEMISTRY
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(AUTONOMOUS)**

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Rasipuram – 637 408, Namakkal District, Tamilnadu.

MAY-2023

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DEPARTMENT OF BIOCHEMISTRY



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CERTIFICATE

This is to certify that the Project Report entitled "**PHYTOCHEMICAL ANALYSIS, IN VITRO ANTIOXIDANT AND ANTI DIABETIC ACTIVITY OF MORUS ALBA**" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original research work done by **A. VENKATESH (Reg. No : 21MPMB1008)** during the period of his study (2021-2023) in the Department of Biochemistry Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

Project Guide

Head of the Department
Dr. M. Shebana Begum, M.Sc., M.Phil., Ph.D
Head, Department of Biochemistry,
Muthayammal College of Arts and Science
Rasipuram - 637 408, Namakkal Dist.

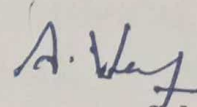
Submitted for the project viva-voce examination held on 17/05/2023

Examiners:

2.

DECLARATION

I do here by declare that the project report entitled, "**PHYTOCHEMICAL ANALYSIS, *IN VITRO* ANTIOXIDANT AND ANTI DIABETIC ACTIVITY OF *MORUS ALBA***" Submitted to Periyar University, Salem in partial fulfillment for the requirements for the award of degree of **MASTER OF SCIENCE IN MEDICAL BIOCHEMISTRY** is a record of original and independent research work done by me during 2021-2023 under the supervision and guidance of **M. PRIYANKAGANDHI, M.Sc., M.Phil.** It has not previously formed the basis for the award of any degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.



Signature of the Candidate

Place: *Rasipuram.*

Date: *17.05.2023.*

EXTRACTION OF TERPENOIDS FROM *Manilkara Hexandra* LEAVES FOR THE SYNTHESIS OF SILVER NANOPARTICLES AND EVALUATION OF LARVICIDAL, ANTIMICROBIAL AND ANTIOXIDANT EFFICACY

Project report submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

ANUSUYA.S

(Reg. No: 21MPBT1001)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
A UNIT OF VIGNETRA**

Under the Guidance of

Mrs. K. CHITRA, M.Sc., M.Phil.,

(Assistant Professor)

DEPARTMENT OF BIOTECHNOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY-2023

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Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408, Namakkal District, Tamilnadu,

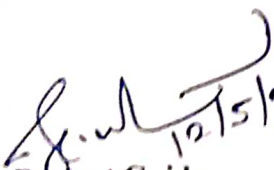
DEPARTMENT OF BIOTECHNOLOGY




MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
Rasipuram, Namakkal District, Tamilnadu

CERTIFICATE

This is to certify that the Project Report entitled "EXTRACTION OF TERPENOIDS FROM *Manilkara Hexandra* LEAVES FOR THE SYNTHESIS OF SILVER NANOPARTICLES AND EVALUATION OF LARVICIDAL, ANTIMICROBIAL AND ANTIOXIDANT EFFICACY" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** is a record of original research work done by ANUSUYA.S (Reg. No: 21MPBT1001) during the period of her study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


12/5/2023
Project Guide


12.05.23
Head of the Department
Dr.P. SELVAMALEESWARAN M.Sc.,M.Phil.,Ph.D.,
HEAD
Department of Biotechnology
Muthayammal College of Arts & Science
Rasipuram - 637 408, Namakkal (Dt)
Tamilnadu, India.

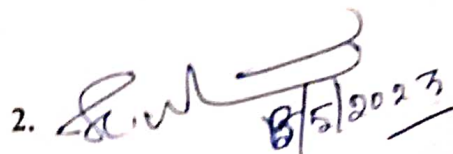
Submitted for the project Viva-Voce examination held on 13.05.2023

Examiners:

1.


13/5/2023

2.


13/5/2023

IDENTIFICATION OF MICROORGANISMS FROM SOIL BY MOLECULAR METHODS

*Project report submitted to Periyar University, Salem in partial fulfillment of
the requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

ARUNA. S

(Reg. No: 21MPBT1002)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
KODAIKANNE

Under the Guidance of

Mrs. K. CHITRA, M.Sc., M.Phil.,

(Assistant Professor)

DEPARTMENT OF BIOTECHNOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

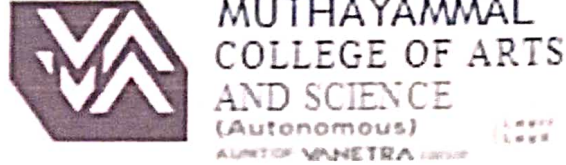
Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY-2023

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

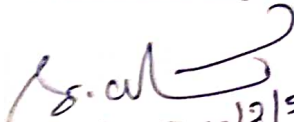
Affiliated to Periyar University, Salem,
Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408, Namakkal District, Tamilnadu.

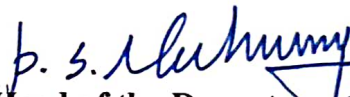
DEPARTMENT OF BIOTECHNOLOGY



CERTIFICATE

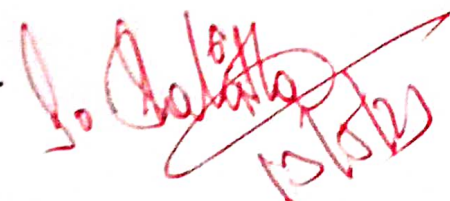
This is to certify that the Project Report entitle "IDENTIFICATION OF MICROORGANISM FROM SOIL BY MOLECULAR METHODS" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** is a record of original research work done by **ARUNA S (Reg. No: 21MPBT1003)** during the period of her study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.



Project Guide 12/5/2023


Head of the Department 12.05.23
Dr.P. SELVAMALEESWARAN M.Sc., M.Phil., Ph.D.,
HEAD
Department of Biotechnology
Muthayammal College of Arts & Science
Rasipuram 637 408, Namakkal (Dt.)
Tamilnadu, India.

Submitted for the project viva-voce examination held on 13.05.2023

Examiners:

1. 
12/5/23

2. 
13/5/23

**MYCOSYNTHESIS OF COPPER OXIDE NANOPARTICLES
FROM ENDOPHYTIC FUNGUS *Corynespora smithii* STRAIN ZM-1
ISOLATED FROM *Ziziphus mauritiana* FOR POTENTIAL
BIOLOGICAL APPLICATIONS**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

HARINA V

(Reg. No: 21MPBT1003)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
ADAR OF VANETRA**

Under the Guidance of

Dr. D. KAVITHA, M.Sc., M.Phil., Ph.D.,

(Assistant Professor)

DEPARTMENT OF BIOTECHNOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY-2023

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Affiliated to Periyar University, Salem,
Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408, Namakkal District, Tamilnadu,

DEPARTMENT OF BIOTECHNOLOGY




MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
Rasipuram

CERTIFICATE

This is to certify that the Project Report entitled "MYCOSYNTHESIS OF COPPER OXIDE NANOPARTICLES FROM ENDOPHYTIC FUNGUS *Corynespora smithii* STRAIN ZM -1 ISOLATED FROM *Ziziphus mauritiana* FOR POTENTIAL BIOLOGICAL APPLICATIONS" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of original research work done by HARINA.V (Reg. No.: 21MPBT1003) during the period of her Study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


Head of the Department
Dr.P. SELVAMALEESWARAN M.Sc., M.Phil., Ph.D.,
HEAD
Department of Biotechnology
Muthayammal College of Arts & Science
Rasipuram 637 408, Namakkal (Dt)
Tamilnadu, India


Submitted for the project Viva-Voce examination held on 13.05.2023

Examiners:

1.


13/5/23

2.


13/5/23

BIOFUEL PRODUCTION FROM CASSAVA SAGO WASTE USING BACTERIA

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

HARIPRABHAVATHI S

(Reg. No: 21MPBT1004)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
A UNIT OF VANETRA

Under the Guidance of

Dr. D. KAVITHA, M.Sc., M.Phil., Ph.D.,

(Assistant Professor)

DEPARTMENT OF BIOTECHNOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY- 2023

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem.

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Rasipuram-637408, Namakkal District, Tamil Nadu

DEPARTMENT OF BIOTECHNOLOGY




**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
Rasipuram, Namakkal District, Tamil Nadu

CERTIFICATE

This is to certify that the Project Report entitled "BIOFUEL PRODUCTION FROM CASSAVA SAGO WASTE USING BACTERIA" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** is a record of original research work done by **HARIPRABHAVATHI S (Reg. No: 21MPBT1004)** during the period of her study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

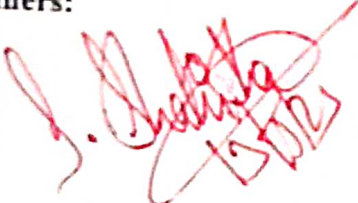

Project Guide

Dr. P. SELVAMALEESWARAN, Ph.D.

HEAD
13.05.23
Head of the Department
Department of Biotechnology
Muthayammal College of Arts & Science
Rasipuram - 637 408, Namakkal (Dt)
Tamilnadu, India.

Submitted for the project Viva-Voce examination held on 13.05.2023.

Examiners:

1.


13/5/23

2.


13/5/23

ISOLATION OF BIOEMULSIFIERS FROM BACTERIA AS A POTENTIAL FOOD EMULSIFIER

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

RAMYADEVI R

(Reg. No.:21MPBT1005)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
AUNTOR VANNETRA**

Under the Guidance of

Dr. D. KAVITHA, M.Sc., M.Phil., Ph.D.,

(Assistant Professor)

DEPARTMENT OF BIOTECHNOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY-2023

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DEPARTMENT OF BIOTECHNOLOGY

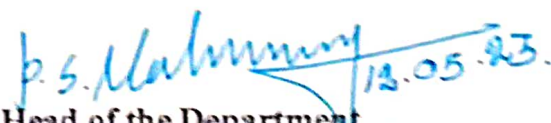


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Rasipuram, Namakkal District, Tamil Nadu

CERTIFICATE

This is to certify that the Project Report entitled "ISOLATION OF BIOEMULSIFIERS FROM BACTERIA AS A POTENTIAL FOOD EMULSIFIER" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of original research work done by RAMYADEVI R (Reg. No: 21MPBT1005) during the period of her study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

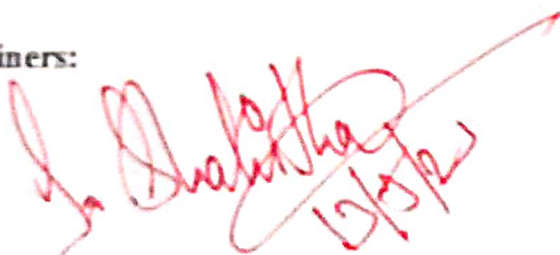

Project Guide


Head of the Department
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Tamilnadu, India.

Submitted for the project Viva-Voce examination held on 13.05.2023.

Examiners:

1.


13/5/23

2.


13/5/23

ANTIMICROBIAL ACTIVITY AND SILVER NANOPARTICLE SYNTHESIS OF *TRAMETES VERSICOLOR* AND ITS CHARACTERIZATION

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

RATHIPRIYA T

(Reg. No:21MPBT1006)



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(Autonomous)
A UNIT OF VIGNETRA**

Under the Guidance of

Dr. P. SELVAMALEESWARAN, M.Sc., M.Phil., Ph.D.,

(Assistant Professor & Head)

DEPARTMENT OF BIOTECHNOLOGY

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MAY- 2023

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DEPARTMENT OF BIOTECHNOLOGY




MUTHAYAMMAL
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PART OF VIGNETRA

CERTIFICATE

This is to certify that the Project Report entitled "ANTIMICROBIAL ACTIVITY AND SILVER NANOPARTICLE SYNTHESIS OF *TRAMETES VERSICOLOR* AND ITS CHARACTERIZATION" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of original research work done by RATHIPRIYA T (Reg. No: 21MPBT1006) during the period of her study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science, (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide

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Submitted for the project viva-voce examination held on 13.05.2024

Examiners:

1. 

2. 

**BIOLOGICAL EFFICACY OF THE ISOLATED COMPOUND GYMNEMIC ACID AND
MAGNESIUM OXIDE NANOPARTICLES FABRICATED USING *Gymnema
sylvestre* LEAVES**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

**SARMILA M
(Reg. No.: 21MPBT1007)**



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**Under the Guidance of
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MAY-2023

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**MUTHAYAMMAL
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RASIPURAM, NAMAKKAL DISTRICT, TAMILNADU

CERTIFICATE

This is to certify that the Project Report entitled **-BIOLOGICAL EFFICACY OF THE ISOLATED COMPOUND GYMNEMIC ACID AND MAGNESIUM OXIDE NANOPARTICLES FABRICATED USING *Gymnema sylvestre* LEAVES**” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** is a record of original research work done by **SARMILA.M** (Reg. No.: 21MPBT1007) during the period of her study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science, (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma /Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


Head of the Department
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Tamilnadu, India.

Submitted for the project Viva-Voce examination held on 13.05.2023

Examiners:

1.



2. 
13/5/23

**PHYTOCHEMICAL SCREENING, ANTIOXIDANT ACTIVITY
AND GC-MS ANALYSIS OF BIOACTIVE COMPONENTS OF
FICUS GLOMERATA SEEDS**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

SIVAKAVI S

(Reg. No: 21MPBT1008)



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Under the Guidance of

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This is to certify that the Project Report entitled **PHYTOCHEMICAL SCREENING, ANTIOXIDANT ACTIVITY AND GC-MS ANALYSIS OF BIOACTIVE COMPONENTS OF *FICUS GLOMERATA* SEEDS** Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** is a record of original research work done by **SIVAKAVI S (Reg No: 21MBPT1008)** during the period of her study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any university.


Project Guide


Head of the Department
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Tamilnadu, India.

Submitted for the project Viva-Voce examination held on 12.05.2023

Examiners:

1. 
12/5/23

2. 

**INVITRO STUDY ON ANTIOXIDANT AND ANTIDIABETIC
ACTIVITY OF TINOSPORA CORDIFOLIA**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

SOWMIYA A

(Reg. No: 21MPBT1009)



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Under the Guidance of

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(Assistant Professor)

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MAY- 2023

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DEPARTMENT OF BIOTECHNOLOGY

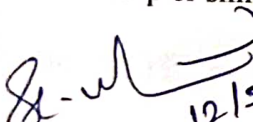



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This is to certify that the Project Report entitled "*INVITRO STUDY ON ANTIOXIDANT AND ANTIDIABETIC ACTIVITY OF TINOSPORA CORDIFOLIA*" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** is a record of original research work done by **SOWMIYA A (Reg No: 21MBPT1009)** during the period of her study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science(Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any university.

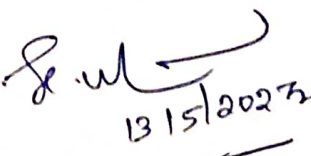

12/15/2023
Project Guide


12.05.23
Head of the Department
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Rasipuram 637 408, Namakkal (Dt)
Tamilnadu, India

Submitted for the project Viva-Voce examination held on: 13.05.2023

Examiners:

1. 

2. 
13/5/2023

ANTIMICROBIAL AND ANTIOXIDANT ACTIVITY ON SILVER NANOPARTICLE SYNTHESIS FROM "*TERMINALIA ARJUNA*"

Project report submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

DHANRAJ.R.V

(Reg. No: 21MPBT1010)



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Under the Guidance of

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(Assistant Professor)**

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MAY- 2023

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Dr. P. RAJASEKHARAN, M.Sc., M.Phil., Ph.D.,
Assistant Professor,
Department of Biotechnology,
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Rasipuram, Namakkal Dt. 637408.

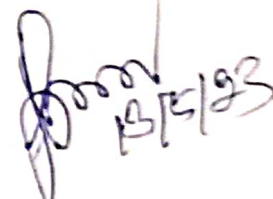

12.05.23
Dr. P. SELVAMALEESWARAN M.Sc., M.Phil., Ph.D.,
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Rasipuram 637 408, Namakkal (Dt)
Tamilnadu, India.

Examiners:

1.


13/5/23

2.


13/5/23

**GREEN SYNTHESIS OF SILVER NANOPARTICLE
SARGASSUM CINEREUM AND ITS ANTI-ARTHRITIC ACTIVITY**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

GOKULA

(Reg. No:21MPBT1011)



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Under the Guidance of

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(Assistant Professor & Head)

DEPARTMENT OF BIOTECHNOLOGY

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This is to certify that the Project Report entitled "**GREEN SYNTHESIS OF SILVER NANOPARTICLE SARGASSUM CINEREUM AND ITS ANTI -ARTHRITIC ACTIVITY**" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** is a record of original research work done by **GOKUL A (Reg. No.: 21MPBT1011)** during the period of his study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science(Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

P. S. Mahalingam
Project Guide

P. S. Mahalingam
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Submitted for the project viva-voce examination held on 13.05.2023 Tamilnadu, India.

Examiners:

1.

S. Sankar
13/5/23

2.

P. S. Mahalingam

**ADVANCED APPROACH ON *PLEUROTUS OSTREATUS* SILVER
NANOPARTICLES AGAINST DENGUE CAUSING VECTOR**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

JEYARAM KUMAR V

(Reg.No:21MPBT1012)



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Under the Guidance of

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(Assistant Professor)

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MAY-2023

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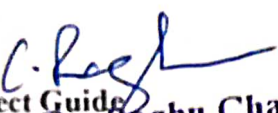
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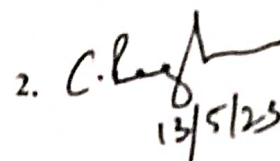
This is to certify the Project Report entitled "ADVANCED APPROACH ON PLEUROTUS OSTREATUS SIVER NANOPARTICLES AGAINST DENGUE CAUSING VECTOR" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of original research work done by JEYARAM KUMAR V (Reg. No: 21MPBT1012) during the period of his study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


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Rasipuram - 637408, Namakkal (Dt)
Tamilnadu, India.

Examiners:

1. 

2. 
13/5/23

**MECHANISM OF ANTIDIABETIC ACTIVITY OF
METHANOLIC EXTRACT *NELUMBO NUCIFERA* FLOWER IN
INDUCED TYPE 2 DIABETES**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

PREMKUMAR S

(Reg No: 21MPBT1013)



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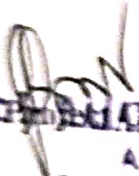


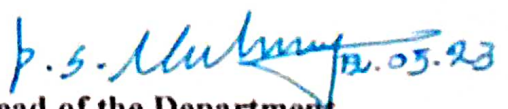
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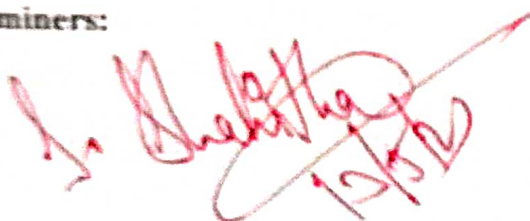
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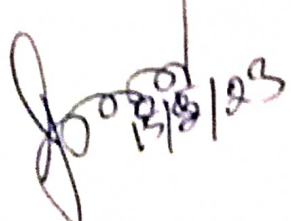
This is to certify that the Project Report entitled **MECHANISM OF ANTIDIABETIC ACTIVITY OF METHANOLIC EXTRACT "NELUMBO NUCIFERA" FLOWER IN INDUCED TYPE 2 DIABETES** Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** is a record of original research work done by **PREMKUMAR. S (Reg No: 21MBPT1013)** during the period of his study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any university.


Dr. P. SELVAMALEESWARAN, M.Sc., M.Phil., Ph.D.,
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Head of the Department
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HEAD
Department of Biotechnology,
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Rasipuram - 637 408, Namakkal Dt.
Tamilnadu, India.

Examiners:

1. 

2. 

**SYNTHESIS AND CHARACTERIZATION OF SILVER
NANOPARTICLES USING GREEN SEAWEED *CAULERPA
PELTATA* AND IT'S IMPACT ON ANTICANCER ACTIVITIES**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

SATHEESH PRAVEEN R

(Reg.No:21MPBT1014)



**MUTHAYAMMAL
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AND SCIENCE
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ALINDIYAN MANETRA**

Under the Guidance of

Dr. D.RAJASEKARAN, M.Sc., M.Phil., Ph.D.,

(Assistant Professor)

**DEPARTMENT OF BIOTECHNOLOGY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)**

Affiliated to Periyar University, Salem,

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12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY-2023

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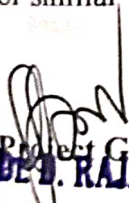
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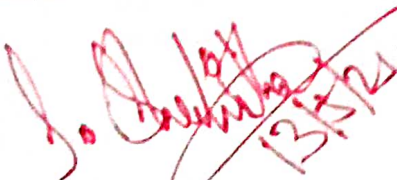
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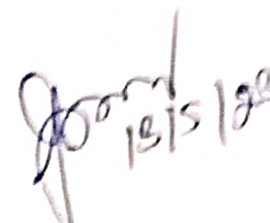
This is to certify that the Project Report entitled **SYNTHESIS AND CHARACTERIZATION OF SILVER NANOPARTICLES USING GREEN SEAWEED "CAULERPA PELTATA" AND IT'S IMPACT ON ANTICANCER ACTIVITIES** Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** is a record of original research work done by **SATHEESH PRAVEEN R (Reg No: 21MPBT1014)** during the period of his study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any university.


Project Guide
DR. RAJASEKARAN, M.Sc., M.Phil., Ph.D.,
Assistant Professor,
Department of Biotechnology,
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12.05.23
Dr. P. SELVAMALEE, M.Phil., Ph.D.,
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Tamil Nadu, India
13/05/2023

Examiners:

1. 
13/5/23

2. 
13/5/23

**SYNTHESIS AND CHARACTERIZATION OF SILVER
NANOPARTICLES AND ANALYSIS FOR ANTI-CANCER ACTIVITY
OF PSYCHOTRIA NERVOSA (R) LEAF EXTRACT**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

BY

SUGANESH K

(Reg. No:21MPBT1015)



**MUTHAYAMMAL
COLLEGE OF ARTS
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ALAKKOTTAI VANETRA**

Under the Guidance of

Dr. JIM THOMAS, M.Sc., PGDip., Ph.D.,

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DEPARTMENT OF BIOTECHNOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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MAY-2023

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DEPARTMENT OF BIOTECHNOLOGY




**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
Rasipuram, Namakkal District, Tamil Nadu

CERTIFICATE

This is to certify that the Project Report entitled **"SYNTHESIS AND CHARACTERIZATION OF SILVER NANOPARTICLES AND ANALYSIS FOR ANTI-CANCER ACTIVITY OF *PSYCHOTRIA NERVOSA (R)* LEAF EXTRACT"**

Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** is a record of original research work done by **SUGANESH K (Reg No: 21MPBT1015)** during the period of his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

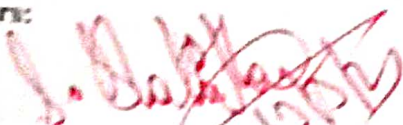

Project Guide

 12.05.23
Dr. P. SELVAMALLESVARAN M.Sc., M.Phil., Ph.D.
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Rasipuram, Namakkal (DI)

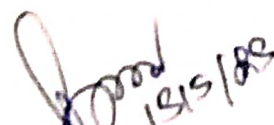
Submitted for the project viva-voce examination held on 12/05/2023

Examiners:

1.


19/5/23

2.


19/5/23

**INFLUENCE OF PHOTOPERIOD ON BIOMASS PRODUCTION
OF GREEN ALGAE *HAEMATOCOCCUS PLUVIALIS***

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

SURESHKUMAR T

(Reg. No: 21MPBT1016)



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Under the Guidance of

Dr. RAGHU CHANDRASEKARAN

(Assistant Professor)

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12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY - 2023

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This is to certify that the Project Report entitled "INFLUENCE OF PHOTOPERIOD ON BIOMASS PRODUCTION OF GREEN ALGAE *HAEMATOCOCCUS PLUVIALIS*" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of original research work done by SURESHKUMAR T (Reg. No: 21MPBT1016) during the period of 1 year/his study (2021 – 2023) in the Department of biotechnology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide **Dr. Raghuram Chandrasekaran**
Assistant Professor,
Department of Biotechnology (R&D)
Muthayammal College of Arts & Science,
Rasipuram - 637 408.

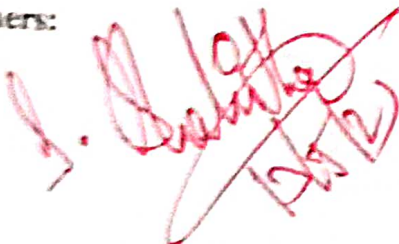
Submitted for the project viva-voce examination held on

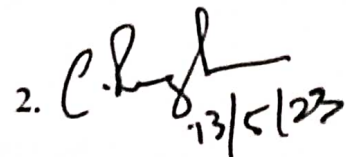

12.5.23
Dr. P. Selvanivel
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Rasipuram - 637 408, Namakkal (Dt)
Tamil Nadu, India.

13.05.2023

Examiners:

1.


12/5/23

2. 
13/5/23

**INVITRO ANTI-INFLAMMATORY ACTIVITY AND SYNTHESIS OF
ZINC NANOPARTICLE FROM *PORTIERIA HORNEMANII***

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

VIGNESH RAJ D

(Reg. No: 21MPBT1017)



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ALUMNI OF VANETRA**

Under the Guidance of

Dr. P. SELVAMALEESWARAN, M.Sc., M.Phil., Ph.D.,

(Assistant Professor & Head)

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This is to certify that the Project Report entitled "*INVITRO* ANTI-INFLAMMATORY ACTIVITY AND SYNTHESIS OF ZINC NANOPARTICLE FROM *PORTIERIA HORNEMANII*" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of original research work done by VIGNESH RAJ D (Reg. No: 21MPBT1017) during the period of his study (2021-2023) in the Department of Biotechnology, Muthayammal College of Arts and Science (Autonomous), Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

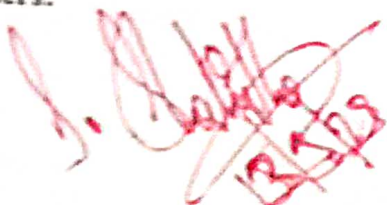

Project Guide


Head of the Department
Dr. P. SELVAMALEESWARAN M.Sc., M.Phil., Ph.D.
HEAD

Submitted for the project Viva-Voce examination held on 13.05.2023
Department of Biotechnology
Muthayammal College of Arts & Science
Rasipuram-637408, Namakkal (Dt),
Tamilnadu, India.

Examiners:

1.



2.



**EFFECTS OF WARMING ON PHYSIOLOGY OF COASTAL
DIATOM THALASSIOSIRA WEISSFLOHII**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN BIOTECHNOLOGY

By

YUVARAJA S B

(Reg. No: 21MPBT1018)



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Under the Guidance of

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12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY - 2023

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Rasipuram-637408, Namakkal District, Tamil Nadu

DEPARTMENT OF BIOTECHNOLOGY

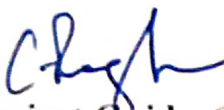



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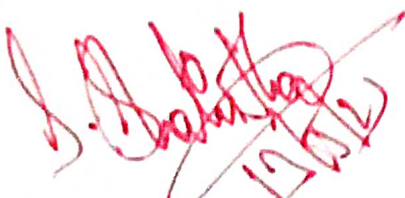
This is to certify that the Project Report entitled "EFFECTS OF WARMING ON PHYSIOLOGY OF COASTAL DIATOM *THALASSIOSIRA WEISSFLOGII*" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of original research work done by YUVARAJA S B (Reg. No: 21MPBT1018) during the period of her/his study (2021 – 2023) in the Department of biotechnology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide **Chandrasekaran**
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Head of the Department
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Department of Biotechnology
Muthayammal College of Arts & Science
Rasipuram - 637408, Namakkal (D)

Examiners:

1.


12/5/23

2.


9/3/5/23

Hand sanitizers: Efficiency against microbes from currency notes and coins in local circulation

Mini project submitted to Periyar University in partial fulfillment of the requirement for the degree of

BACHELOR OF SCIENCE IN MICROBIOLOGY

BY

GUNA K (Reg.No:20UMB1187)

HALIMA SADHIYA B (Reg.No:20UMB1219)

JAGADEESH T (Reg.No:20UMB1188)

JAYAPRAKASH P (Reg.No:20UMB1189)

JEEVITHA A (Reg.No:20UMB1221)

JEYAPRAKASH M (Reg.No:20UMB1190)

KANISHKA S (Reg.No:20UMB1223)

Under the Guidance of

Dr. M. SELVAN, M.Sc., M. Phil., Ph.D.,



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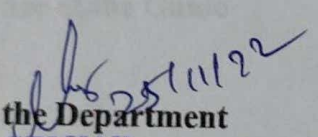
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Tamil Nadu, India.

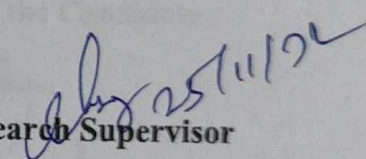
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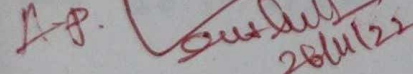
CERTIFICATE

This is to certify that the dissertation entitled “**Hand Sanitizer Efficiency against microbes from currency notes and coins in local circulation**” submitted to Periyar University in partial fulfillment of the requirement for the ward of the degree of **BACHELOR OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **GUNA K (Reg.No:20UMB1187), HALIMA SADHIYA B (Reg.No:20UMB1219), JAGADEESH T (Reg.No:20UMB1188), JAYAPRAKASH M (Reg.No:20UMB1189), JEEVITHA A (Reg.No:20UMB1221), JAYAPRAKASH P (Reg.No:20UMB1190), KANISKA S (Reg.No:20UMB1223)** during the period of his/her study (2022-2023) in the Department of Microbiology, Muthayammal College of Arts & Science, Rasipuram under my supervision / guidance and that this dissertation has not formed the basis for the award of Degree /Diploma / Associateship /Fellowship or similar title to any candidate of any University.


Head of the Department

Dr. M. SELVAN, M.Sc., M.Phil., Ph.D.,
Assistant Professor and Head
Department of Microbiology
Muthayammal College of Arts & Science
Rasipuram-637 408. Namakkal (Dt.)
Tamilnadu.


Research Supervisor

1. 
28/11/22

2. 
28/11/22

**Antimicrobial susceptibility of *Escherichia coli* and
Staphylococcus aureus from Diabetic pus sample**

*Mini project submitted to Periyar University in partial fulfillment of the
requirement for the degree of*

BACHELOR OF SCIENCE IN MICROBIOLOGY

By

ANUSHAYA S (Reg.No:20UMB1213)

GOKULA SELVAN G (Reg.No:20UMB1185)

MEGANATHAN A (Reg.No: 20UMB1198)

PRAVEEN KUMAR K (Reg.No:20UMB1201)

PRIYANKA M (Reg.No:20UMB1234)

SOWMIYA M V (Reg.No:20UMB1241)

YAZHINI S (Reg.No:20UMB1247)

Under the guidance of

Dr. S. ANBALAGAN, M.Sc., M.Phil., Ph.D., FABMS, FLAAM.,



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UGC Recognised 2 (f) & 12(B) Status

Rasipuram - 637 408, Namakkal DT

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NOVEMBER- 2022

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Associate professor
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Tamil Nadu, India



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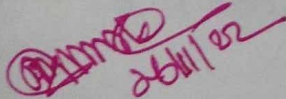
CERTIFICATE

This is to certify that the dissertation entitled "**Antimicrobial susceptibility of *Escherichia coli* and *Staphylococcus aureus* from Diabetic pus sample**" submitted to Periyar University in partial fulfillment of the requirement for the award of the degree of **BACHELOR OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **ANUSHAYA S (Reg.No:20UMB1213), GOKULA SELVAN G (Reg.No:20UMB1185), MEGANATHAN A (Reg.No: 20UMB1198), PRAVEEN KUMAR K (Reg.No:20UMB1201), PRIYANKA M (Reg.No:20UMB1234), SOWMIYA M V (Reg.No:20UMB1241), YAZHINI S (Reg.No:20UMB1247)** during the period of his/her study (2020-2023) in the Department of Microbiology, Muthayammal College of Arts & Science, Rasipuram under my supervision / guidance and that this dissertation has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

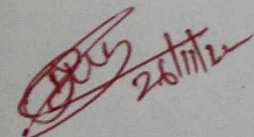

Head of the Department
Dr. M. SELVAN, M.Sc., M.Phil., Ph.D.,
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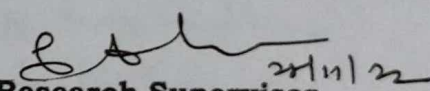
Examiners:

1.


26/11/22

2.


26/11/22


Research Supervisor

Dr. S. ANBALAGAN, M.Sc., M.Phil., Ph.D., FABMS., FIAAM.
Research Supervisor,
Department of Microbiology,
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Rasipuram, Namakkal - 637408, TamilNadu.

**ENUMERATION AND CHARACTERIZATION OF
PROBIOTIC ORGANISMS FROM INTESTINE OF
FRESH WATER FISHES.**

*Mini project submitted to Periyar University ,Salem in partial fulfillment of
the requirement for the award degree of*

BACHELOR OF SCIENCE IN MICROBIOLOGY

Submitted by

MOHANA SUNDHARAM. P	(20UMB1199)
PRASHANTH RAJ. D	(20UMB1200)
PREMRAJASANDHAR. M	(20UMB1202)
MALARVIZHI. G	(20UMB1227)
MUMTHAPRIYA. S. J	(20UMB1229)
MYTHILI. S	(20UMB1230)
NAVEENA. M	(20UMB1231)

Under the Guidance of

Dr. S. SHAHITHA, M. SC., M. Phil., Ph. D.,FIAAM



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Rasipuram - 637 408.Namakkal DT

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NOVEMBER - 2022



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This is to certify that the dissertation entitled “ENUMERATION AND CHARACTERIZATION OF PROBIOTIC ORGANISMS FROM INTESTINE OF FRESH WATER FISHES” submitted to Periyar University in partial fulfilment of the requirement for the award of the degree of BACHELOR OF SCIENCE IN MICROBIOLOGY is a record of original research work done by **MOHANASUNDHARAM.P(20UMB1199)**, **PRASHANTHRAJ.M(20UMB1200)**, **PREMRAJASANDHAR.M(20UMB1202)**, **MALARVIZHI.G(20UMB1227)**, **MUMTHAPRIYA.S.J(20UMB1229)**, **MYTHILIS (20UMB1230)**, **NAVEENA.M (20UMB1231)** during the period of her study (2020-2023) in the Department of Microbiology, Muthayammal College of Arts & Science, Rasipuram under my supervision / guidance and that this dissertation has not formed the basis for the award of Degree/Diploma / Associateship / Fellowship or similar title to any candidate of any University.

Head of the department

Dr.M.SELVAN, M.Sc., M.Phil., Ph.D.,
Assistant Professor and Head
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Research Supervisor

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Muthayammal College of Arts & Science
Rasipuram-637 408. Namakkal (Dt.)

Examiners:

1.

2.

**Isolation, Identification and antimicrobial profiling of bacteria
isolated from Ornamental Aquarium fishes and their feeds**

*Mini project submitted to Periyar University in partial fulfilment of the
requirement for the degree of*

BACHELOR OF SCIENCE IN MICROBIOLOGY

By

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VINOTHKUMAR J (Reg. No: 20UMB1210)

SANTHIYA A (Reg. No: 20UMB1238)

SASIKALA P (Reg. No: 20UMB1239)

SIVAPRIYA A (Reg. No: 20UMB1240)

SWETHA E (Reg. No: 20UMB1245)

Under the Guidance of

Mr. N. RADHAKRISHNAN, M.Sc., M.Phil.,



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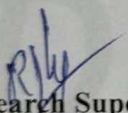
**DEPARTMENT OF MICROBIOLOGY
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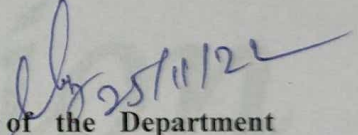
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Rasipuram - 637 408, Namakkal Dt,
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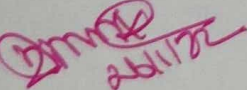
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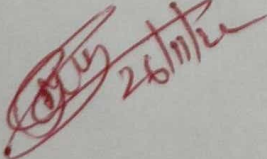
This is to certify that the dissertation entitled "Isolation, Identification and antimicrobial profiling of bacteria isolated from Ornamental Aquarium fishes and their feeds" submitted to Periyar University in partial fulfilment of the requirement for the award of the degree of **BACHELOR OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **SAMPATHRAJ A (Reg. No: 20UMB1206)**, **SANTHOSHKUMAR M (Reg. No: 20UMB1207)**, **VINOTHKUMAR J (Reg. No: 20UMB1210)**, **SANTHIYA A (Reg. No: 20UMB1238)**, **SASIKALA P (Reg. No: 20UMB1239)**, **SIVAPRIYA A (Reg. No: 20UMB1240)** and **SWETHA E (Reg. No: 20UMB1245)** during the period of his / her study (2022 - 2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram under my supervision / guidance and that this dissertation has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


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Examiners:

1. 
26/11/22

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26/11/22

**ISOLATION AND IDENTIFICATION OF BACTERIA AND THEIR
SENSITIVITY PATTERN USING SELECTED MEDICINAL PLANTS
WITH STANDARIZATION**

*Mini project submitted in Periyar University in partial
fulfillment of the requirement for the degree of*

BACHELOR OF SCIENCE IN MICROBIOLOGY

Submitted by

ELANGO VAN A (20UMB1183)
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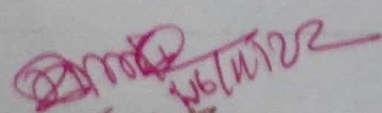
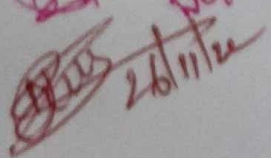
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DECLARATION

**Antibacterial Activity, Phytochemical Analysis of *Hibiscus
sabdariffa* against Diabetic Wound Pathogens**

*Mini project submitted to Periyar University in partial fulfillment of the
requirement for the degree of*

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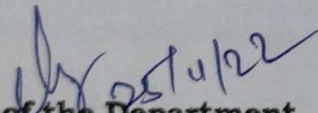
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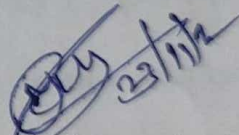
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**Isolation and Identification of Multidrug resistance bacteria
from hospital soil**

*Mini project submitted to Periyar University in partial fulfillment of the
requirement for the degree of*

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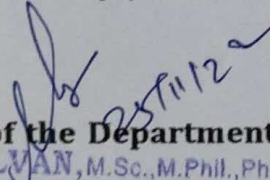
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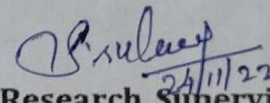


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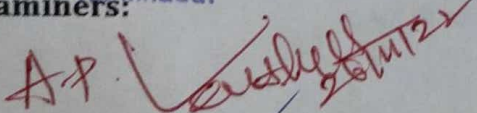

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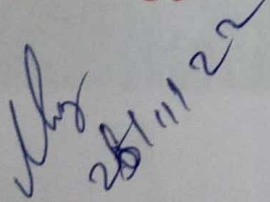

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Isolation and identification of Bacteria from Egg Shell

Mini project submitted to Periyar University in partial fulfillment of the requirement for the degree of

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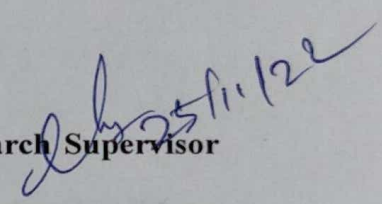
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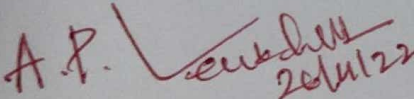
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*ISOLATION AND IDENTIFICATION OF BACTERIA FROM
DIFFERENT MOBILE PHONE DEVICES*

*Mini project submitted to Periyar University in partial fulfillment of the
requirement for the degree of*

BACHELOR OF SCIENCE IN MICROBIOLOGY

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Signature of the Guide

Signature of the Candidate

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**Isolation and identification of *Bacillus* spp &
Staphylococcus aureus from the expired drink sample**

*Mini project submitted to Periyar University in partial fulfillment of the
requirement for the degree of*

BACHELOR OF SCIENCE IN MICROBIOLOGY

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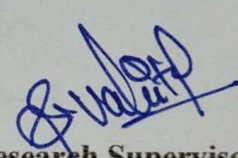
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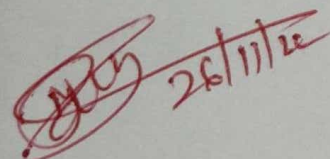

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26/11/22

**ISOLATION AND IDENTIFICATION OF ORGANISMS FROM
WOUND SAMPLE AND THE ANTIMICROBIAL ACTIVITY OF
MEDICAL PLANTS.**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

AARTHI . D

(Reg. No: 21MPMI1001)



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This is to certify that the Project Report entitled “ISOLATION AND IDENTIFICATION OF ORGANISMS FROM WOUND SAMPLE AND THE ANTIMICROBIAL ACTIVITY OF MEDICAL PLANTS .” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **AARTHI .D (Reg. No: 21MPMI1001)** during the period of her/his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


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Submitted for the project viva-voice examination held on

13/1/23

Examiners:

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13/1/23

**ISOLATION AND MOLECULAR IDENTIFICATION OF
PHOSPHATE SOLUBILIZING BACTERIA AND IN VITRO
SCREENING OF IAA PRODUCTION**

*Project report submitted to Periyar University, Salem in partial fulfilment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

GOKULA PRIYA. M

(Reg. No:21MPMI1002)



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INFLUENCE OF PLANT EXTRACTS OBTAINED FROM *ACALYPHA INDICA* PLANT AGAINST MICROORGANISMS ISOLATED FROM CONTAMINATED HERBAL FORMULATION PRODUCTS

Project report submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN MICROBIOLOGY

By

JANANI. R
(Reg. No: 21MPMI1003)



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Under the Guidance of

DR. M. SELVAN, M.Sc., M.Phil., Ph.D.,
Head & Assistant Professor,
Department of Microbiology

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- 637 408, Namakkal District, Tamil Nadu.

MAY- 2023

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Project Guide

Submitted for the project viva-voce examination held on 13/05/2023.

Examiners:

1. 

2. 
13/05/23

**ISOLATION, IDENTIFICATION OF MICROBIAL ISOLATES FROM
URINARY TRACT INFECTION PATIENTS AND EVALUATION
OF ANTIMICROBIAL ACTIVITY USING
SALVIA HISPANICA (CHIA SEED) EXTRACT**

*Project report submitted to Periyar University, Salem in partial fulfillment of the requirements
for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

JOTHIKA. R
(Reg. No: 21MPMI1004)



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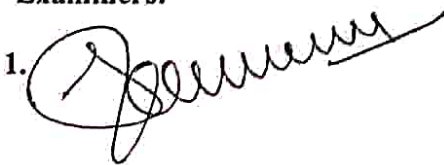
This is to certify that the Project Report entitled “ISOLATION, IDENTIFICATION OF MICROBIAL ISOLATES FROM URINARY TRACT INFECTION PATIENTS AND EVALUATION OF ANTIMICROBIAL ACTIVITY USING *SALVIA HISPANICA* (CHIA SEED) EXTRACT” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **JOTHIKA. R** (Reg. No: 21MPMI1004) during the period of her/his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


Head of the Department
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Submitted for the project viva-voce examination held on 13-05-2023

Examiners:

1. 

2. 

**ISOLATION AND IDENTIFICATION OF BACTERIA FROM
SPOILED FRUIT AND THE ANTIMICROBIAL ACTIVITY
OF MEDICINAL PLANT EXTRACT
*ANISOMELES MALABARICA***

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

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This is to certify that the Project Report entitled “**ISOLATION AND IDENTIFICATION OF BACTERIA FROM SPOILED FRUIT AND THE ANTIMICROBIAL ACTIVITY OF MEDICINAL PLANT EXTRACT ANISOMELES MALABARICA**” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **PARIMALA. S (Reg. No: 21PMB012)** during the period of her/his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

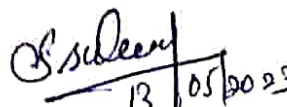

13/05/2023
Project Guide

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Submitted for the project viva-voce examination held on 13.05.2023

Examiners:

1. 

2. 
13/05/2023

**BIOSYNTHESIS OF SILVER NANOPARTICLE USING SOIL
MICROORGANISM AND ITS ANTIMICROBIAL ACTIVITY
AGAINST HUMAN PATHOGENS AND PHYTOPATHOGENS AND
ITS IMPACT IN SEED GERMINATION AND SEEDLING GROWTH**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

SHOBIYA S

21MPMI1006



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This is to certify that the Project Report entitled “**BIOSYNTHESIS OF SILVER NANOPARTICLE USING SOIL MICROORGANISM AND ITS ANTIMICROBIAL ACTIVITY AGAINST HUMAN PATHOGENS AND PHYTOPATHOGENS AND ITS IMPACT IN SEED GERMINATION AND SEEDLING GROWTH**” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **SHOBIYA S (Reg. No: 21MPMI1006)** during the period of her study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

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12/05/23
Project Guide

Submitted for the project viva-voce examination held on 13/05/2023

Examiners:

1. *[Signature]*

2. *12/05/23*
(Dr. VITHIYAN)

**SCREENING THE EFFICACY OF DIFFERENT SPICES IN INHIBITING THE
GROWTH OF FOOD BORNE BACTERIAL ISOLATES**

*Project report submitted to Periyar University, Salem in partial fulfilment of the requirements for
the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

SUSMITHA S

(Reg. No: 21MPMI1007)



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DEPARTMENT OF MICROBIOLOGY

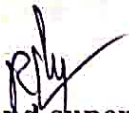


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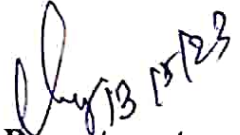
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This is to certify that the Project Report entitled “**SCREENING THE EFFICACY OF DIFFERENT SPICES IN INHIBITING THE GROWTH OF FOOD BORNE BACTERIAL ISOLATES**” Submitted to Periyar University, Salem in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **SUSMITHA S (Reg. No: 21MPMI1007)** during the period of his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Guide and supervisor

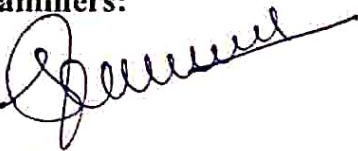
(N. RADHAKRISHNAN)


Head of the Department
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Submitted for the project viva-voce examination held on

13-05-2023

Examiners:

1. 

2. 

N. RADHAKRISHNAN, M.Sc., M.Phil.,
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ISOLATION AND IDENTIFICATION OF CELLULOLYTIC BACTERIA FROM SOIL AND THEIR PRODUCTION ACTIVITY

*Project report submitted to Periyar University, Salem in partial fulfillment of the
Requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

BY

R.VASANTHI

(Reg. No: 21MPMI1008)



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Under the Guidance of

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This is to certify that the Project Report entitled "ISOLATION AND IDENTIFICATION OF CELLULOLYTIC BACTERIA FROM SOIL AND THEIR PRODUCTION ACTIVITY" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN MICROBIOLOGY is a record of original research work done by **VASANTHI.R (Reg No: 21MPMI1008)** during the period of her/his study (2021-2023) in the Department of Microbiology, **Muthayammal College of Arts and Science, Rasipuram (Autonomous)** under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

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Submitted for the project viva-voce examination held on 13.05.2023.

Examiners:

1.

2.

N. RADHAKRISHNAN, M.Sc., M.Phil.,
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**GREEN SYNTHESIS OF SILVER NANOPARTICLES FROM *TRIDAX PROCUMBENS* AND
HYBANTHUS ENNEASPERMUS EXTRACTS AND THEIR ANTIBACTERIAL POTENTIAL
AGAINST WOUND PATHOGENS**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

ARUNKUMAR.R

(Reg. No: 21MPMI009)

TNSCST FUNDED STUDENT PROJECT

TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY, CHENNAI



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Under the Guidance of

Dr. M. Maghimaa M.Sc., M.Phil., Ph.D.,

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DEPARTMENT OF MICROBIOLOGY



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This is to certify that the Project Report entitled “GREEN SYNTHESIS OF SILVER NANOPARTICLES FROM *TRIDAX PROCUMBENS* AND *HYBANTHUS ENNEASPERMUS* EXTRACTS AND THEIR ANTIBACTERIAL POTENTIAL AGAINST WOUND PATHOGENS” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **ARUNKUMAR.R** (Reg. No: 21MPMI009) during the period of /his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

M. Maghimaa
Project Guide

Dr. M. MAGHIMAA

Principal Investigator

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Submitted for the project viva-voce examination held on 13/05/2023

Examiners:

1.

[Signature]

2.

[Signature] 13/5/23

**COMPARITIVE ANALYSIS OF COPPER NANOPARTICLES FROM TWO
DIFFERENT PLANT LEAF EXTRACT (*Cardiospermum halicacabum* and
Bauhinia purpurea) THROUGH GREEN SYNTHESIS METHOD**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

ELAYARAJA G

(Reg. No:21MPMI1010)



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ALMA MATER: VANHEIRA

CERTIFICATE

This is to certify that the Project Report entitled “**COMPARITIVE ANALYSIS OF COPPER NANOPARTICLES FROM TWO DIFFERENT PLANT LEAF EXTRACT (*Cardiospermum halicacabum* and *Bauhinia purpurea*) THROUGH GREEN SYNTHESIS METHOD**” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **ELAYARAJA. G (Reg. No: 21MPMI1010)** during the period of her/his study (2022-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

Elayaraja G
13/05/2023

Project Guide

Dr. M. Selvan
13/05/23

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Submitted for the project viva-voce examination held on 13/05/2023

Examiners:

1.

[Signature]

2.

Dr. Selvan
13/05/23

**ISOLATION AND GROWTH CHARACTERIZATION OF *Azotobacter Sps*, IN
GREEN GRAM WITH SOLID FORMULATION**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

HARISH V

(Reg. No: 21MPMI1011)



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Under the Guidance of

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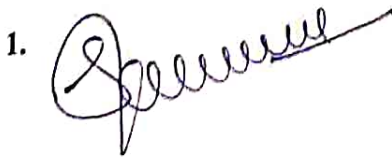
This is to certify that the Project Report entitled “ISOLATION AND GROWTH CHARACTERIZATION OF *Azotobacter Sps*, GREEN GRAM WITH SOLID FORMULATION” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **HARISH V (Reg. No: 21MPMI1011)** during the period of her/his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


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Head of the Department
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Tamilnadu

Submitted for the project viva-voce examination held on 13.05.2023

Examiners:

1. 

2. 

ANTIMICROBIAL ACTIVITY OF *JUSTICIA ADHATODA* AND *GINKGO BILOBA* AGAINST PATHOGEN ISOLATED FROM SEWAGE WATER

Project report submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN MICROBIOLOGY

By

KESAVAMOORTHY T

(Reg. No:21MPMI1012)



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Affiliated to Periyar University, Salem,

Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY- 2023

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Accredited by NAAC with „A” grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408.Namakkal District,Tamilnadu

DEPARTMENT OF MICROBIOLOGY

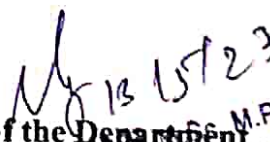


**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
A UNIT OF VANDANA GROUP

CERTIFICATE

This is to certify that the Project Report entitled “**ANTIMICROBIAL ACTIVITY OF JUSTICIA ADHATODA AND GINKGO BILOBA AGAINST PATHOGEN ISOLATED FROM SEWAGE WATER**” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **T. KESAVAMOORTHY (Reg. No: 21MPMI012)** during the period of her/his study (2022-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


Head of the Department
Dr.M.SELVAPATHI M.Phil.,Ph.D.,
Assistant Professor and Head
Department of Microbiology

Submitted for the project viva-voce examination held on


13/05/2023

Examiners:

1.



2.



GROWTH OPTIMIZATION OF *Chlorellasps.*, AND ITS BIOFERTILIZER ACTIVITY IN GREEN GRAM

*Project report submitted to Periyar University, Salem in partial fulfillment of
therequirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

BY

KRISHANAKUMAR J

(Reg. No: 21MPMI1013)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
A COLLEGE OF VANETRA

Under the Guidance of

Mrs. N.Sathyabama , M.Sc., M.Phil

(Assistant Professor)

DEPARTMENT OF MICROBIOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A” grade, Recognized by UGC under Section 2(f) & 12(B), Rasipuram -

637 408, Namakkal District, Tamil Nadu.

MAY- 2023

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Affiliated to Periyar University, Salem,

Accredited by NAAC with „A” grade, Recognized by UGC under Section 2(f) & 12(B), Rasipuram-637408, Namakkal District, Tamilnadu

DEPARTMENT OF MICROBIOLOGY




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AND SCIENCE**
(Autonomous)
ALLOT OF VANEIRA

CERTIFICATE

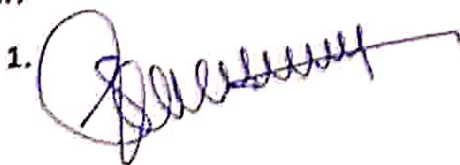
This is to certify that the Project Report entitled " **GROWTH OPTIMIZATION OF *Chlorella* sps, AND ITS BIOFERTILIZER ACTIVITY IN GREEN GRAM**" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **KRISHANAKUMAR . J (Reg. No:21MPMI1013)** during the period of her/his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


Head of the Department
Dr. M. SELVAN, M.Sc., M.Phil., Ph.D.,
Assistant Professor and Head
Department of Microbiology
Muthayammal College of Arts & Science
Rasipuram-637408, Namakkal (Dt.)
Tamilnadu.

Submitted for the project viva-voce examination held on **12/01/2023**

Examiner.

1. 

2. 

**PRODUCTION OF BACTERIOCIN FROM LACTIC ACID BACTERIA
(LACTOBACILLUS SPP.) AND CHARACTERIZATION OF ITS ANTIMICROBIAL
ACTIVITY AGAINST COMMON FOOD BORNE PATHOGENS**

*Project report submitted to Periyar University, Salem in partial fulfilment of the requirements for
the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

MANIKANDAN N

(Reg. No: 21MPMI1014)



**MUTHAYAMMAL
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|| LEAD

Under the Guidance of

Dr. K. VITHIYA, M.Sc., Ph.D.,

(Assistant Professor)

DEPARTMENT OF MICROBIOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE(AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A” grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY- 2023

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637408.Namakkal District, Tamilnadu

DEPARTMENT OF MICROBIOLOGY

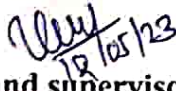


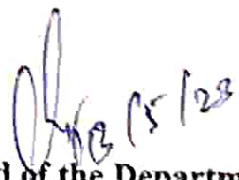
**MUTHAYAMMAL
COLLEGE OF ARTS
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CERTIFICATE

This is to certify that the Project Report entitled “**PRODUCTION OF BACTERIOCIN FROM LACTIC ACID BACTERIA (*LACTOBACILLUS SPP.*) AND CHARACTERIZATION OF ITS ANTIMICROBIAL ACTIVITY AGAINST COMMON FOOD BORNE PATHOGENS**” Submitted to Periyar University, Salem in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **MANIKANDAN N (Reg. No: 21MPMI1014)** during the period of his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

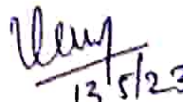

12/05/23
Guide and supervisor
(Dr. K. VITHIYA)


15/5/23
Head of the Department
Dr. M. SELVAN, M.Sc., M.Phil., Ph.D.,
Assistant Professor and Head
Department of Microbiology
Muthayammal College of Arts & Science
Rasipuram-637408, Namakkal (Dt.)
Tamilnadu.

Submitted for the project viva-voce examination held on 13-05-2023

Examiners:

1. 

2. 
13/5/23

ANTIMICROBIAL ACTIVITY OF *HIBISCUS ROSA SINENSIS*

AGAINST (UTI) URINARY TRACT PATHOGENS

Project report submitted to Periyar University, Salem in partial fulfillment

of the requirements for the award of degree of

MASTER OF SCIENCE IN MICROBIOLOGY

NANDHAKUMAR S

(Reg. No:21MPMI1015)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
ASSOCIATION OF WOMEN
LEAD

Under the Guidance of

Dr. S. SHAHITHA, M.Sc., M.Phil., Ph.D., FIAAM.,

(Assistant Professor)

DEPARTMENT OF MICROBIOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE

(AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A” grade, Recognized by UGC under Section 2(f)

& 12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY-2023

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE

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DEPARTMENT OF MICROBIOLOGY



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
ASPECT OF VANETRA

CERTIFICATE

This is to certify that the Project Report entitled “ANTIBACTERIAL ACTIVITY OF *HIBISCUS ROSA SINENSIS* AGAINST (UTI) URINARY TRACT PATHOGEN” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **NANDHAKUMAR.S (Reg. No: 21MPMI1015)** during the period of her/his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship or similar title to any candidate of any University.

P. S. SATHISHA, M.Sc., M.Phil., Ph.D., FIAAM
Assistant Professor cum Research Supervisor

Submitted for the project viva-voce examination held on _____
Muthayammal College of Arts & Science
Rasipuram-637 408, Namakkal (Dt.)

Head of the Department
Dr.M.SELVAN, M.Sc., M.Phil., Ph.D.,
Assistant Professor and Head
Department of Microbiology
Muthayammal College of Arts & Science
Rasipuram-637 408, Namakkal (Dt.)
Tamilnadu.

Examiners:

1.

2.

**ANTIMICROBIAL ACTIVITY OF MEDICINAL PLANT
(WITHNIA SOMNIFERA) AGAINST WOUND PATHOGENS**

*Project report submitted to Periyar University, Salem in partial fulfillment
of the requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

NAVEEN K

(Reg. No: 21MPMI1016)



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Under the Guidance of

Dr. M. SELVAN, M.Sc., M.Phil., Ph.D.,

Assistant Professor and Head,

Department of Microbiology

DEPARTMENT OF MICROBIOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with 'A' grade, Recognized by UGC under Section 2(f) & 12(B),


Rasipuram - 637 408, Namakkal - District, Tamil Nadu.

MAY- 2023

CERTIFICATE

This is to certify that the Project Report entitled "ANTIMICROBIAL ACTIVITY OF MEDICINAL PLANT (*WITHANIA SOMNIFERA*) AGAINST WOUND PATHOGENS" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN MICROBIOLOGY is a record of original research work done by NAVEEN.K (Reg. No: 21MPMI1016) during the period of his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

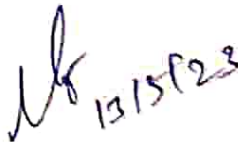

Project Guide


Head of the Department
Dr. M. S. SELVAN, M.Sc., M.Phil., Ph.D.
Assistant Professor and Head
Department of Microbiology
Muthayammal College of Arts & Science
Rasipuram-537 408, Namakkal (Dt.)
Tamilnadu.

Submitted for the project viva-voce examination held on 13/05/2023

Examiners:

1. 

2. 

**GREEN SYNTHESIZING OF SILVER NANOPARTICLES FROM *CARYOTA URENS*
AGAINST LARVICIDAL ACTIVITY & ANTI-MICROBIAL ACTIVITY**

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

SRIRAM M

(Reg. No: 21MPMI1017)



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Under the Guidance of

Dr.S.SHAHITHA,M.Sc.,M.Phil.,Ph.D.,FIAAM.,

(Assistant Professor)

DEPARTMENT OF MICROBIOLOGY

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12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY – 2023

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(B), Rasipuram-637408, Namakkal District, Tamilnadu.

DEPARTMENT OF MICROBIOLOGY



MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (Autonomous) A PART OF VANETRA

CERTIFICATE

This is to certify the Project Report entitled "Green synthesizing of silver nanoparticles from caryota urens against larvicidal activity & antimicrobial activity" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN MICROBIOLOGY is a record of original research work done by SRIRAM M (Reg. No: 21MPMI1017) during the period of her/his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, (Autonomous) Rasipuram under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

Dr. M. Selvan, M.Sc., M.Phil., Ph.D., Assistant Professor and Head, Department of Microbiology, Muthayammal College of Arts & Science, Rasipuram-637408, Namakkal (Dt.) Tamilnadu.

Head of the Department Dr. M. SELVAN, M.Sc., M.Phil., Ph.D., Assistant Professor and Head Department of Microbiology Muthayammal College of Arts & Science Rasipuram-637408, Namakkal (Dt.) Tamilnadu.

Examiners:

1. [Signature]

2. [Signature]

**ANTIMICROBIAL ACTIVITY OF CONTAMINATED WATER TEST
CHEMICAL AND NATURAL METHODS USING *kusha grass, water hyacintha***

*Project report submitted to Periyar University, Salem in partial fulfillment of the
requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

SURESH V

(Reg. No: 21MPMI1018)



**MUTHAYAMMAL
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(Autonomous)
A UNIT OF VANETRA

LEAD

Under the Guidance of

Dr . S. ANBALAGAN, M.Sc., M.Phil., Ph.D., ,

(Assistant Professor)

DEPARTMENT OF MICROBIOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY-2023

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(AUTONOMOUS)**

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12(B),

Rasipuram-637408.Namakkal District, Tamilnadu


DEPARTMENT OF MICROBIOLOGY




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(Autonomous)
A UNIT OF VANETRA GROUP

CERTIFICATE

This is to certify that the Project Report entitled “**Antimicrobial activity of contaminated water test chemical and natural methods using kusha grass, water hyacintha.**” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **SURESH.V (Reg. No: 21MPMI1018)** during the period of her/his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

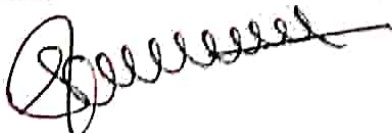

Project Guide 13/1/23

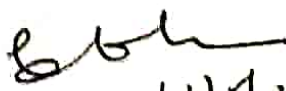

Head of the Department

Submitted for the project viva-voice examination held on 13/1/23

Dr.M.SELVAN, M.Sc., M.Phil., Ph.D.,
Assistant Professor and Head
Department of Microbiology
Muthayammal College of Arts & Science
Rasipuram-637 408. Namakkal (Dt.)
Tamilnadu.

Examiners:

1. 

2. 
13/1/23

**ISOLATION AND IDENTIFICATION OF MULTIDRUG
RESISTANT UTI PATHOGENS AND THEIR ANTIBACTERIAL
ACTIVITY OF MEDICINAL PLANTS**

*Project report submitted to Periyar University, Salem in partial fulfillment of
the requirements for the award of degree of*

MASTER OF SCIENCE IN MICROBIOLOGY

By

TAMILSELVAN G

(Reg. No: 21MPMI1019)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
A UNIT OF VANETRA**

Under the Guidance of

Mrs. N. SATHYABAMA, M.Sc., M.Phil.,

(Assistant Professor)

DEPARTMENT OF MICROBIOLOGY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f)

&12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY – 2023

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(AUTONOMOUS)**

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f)
& 12(B),

Rasipuram-637408.Namakkal District,Tamilnadu

DEPARTMENT OF MICROBIOLOGY




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AND SCIENCE**
(Autonomous)
ALUMNI OF VANETRA

1902
1957

CERTIFICATE

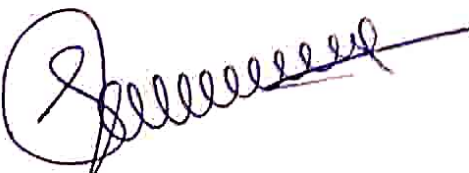
This is to certify that the Project Report entitled “**ISOLATION AND IDENTIFICATION OF MULTIDRUG RESISTANT UTI PATHOGENS AND THEIR ANTIBACTERIAL ACTIVITY OF MEDICINAL PLANTS**” Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN MICROBIOLOGY** is a record of original research work done by **TAMILSELVAN.G (Reg. No: 21MPMI1019)** during the period of her/his study (2021-2023) in the Department of Microbiology, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

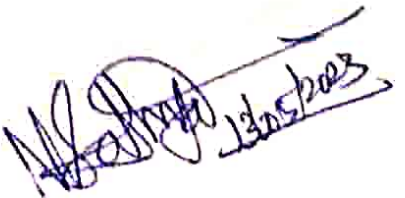

Project Guide


Head of the Department
Dr.M.SELVAN, M.Sc.,M.Phil.,Ph.D.,
Assistant Professor and Head
Department of Microbiology
Muthayammal College of Arts & Science
Rasipuram-637 408, Namakkal (Dt.)
Tamilnadu.

Submitted for the project viva-voice examination held on 12/11/23

Examiners:

1. 

2. 



Palani Andavar Feeds Private Limited

Mfrs. Of Poultry & Cattle Feeds – Exporters Eggs

86, Pudupatti Road, Namagiripet – 637406

Namakkal (Dt)

CERTIFICATE



This is to certify that Mr...**S.JEEVA**..... from the Department of Zoology, Muthayammal college of Arts and Science, Rasipuram, Namakkal-637408, has undergone Internship training on Poultry Feed Formulation techniques during the periods from**31.05.2023**....to ...**19.06.2023**....at Palani andavar Poultry Feeds, Namagiripet, Rasipuram, Namakkal -637406.

Dr.S.Senthilkumar Raj BVSc.,&A.H

Executive-Technical



Palani Andavar Feeds Private Limited

Mfrs. Of Poultry & Cattle Feeds – Exporters Eggs

86, Pudupatti Road, Namagiripet – 637406

Namakkal (Dt)

CERTIFICATE



This is to certify that Mr...**G.JITHENTHIRAN**..... from the Department of Zoology, Muthayammal college of Arts and Science, Rasipuram, Namakkal-637408, has undergone Internship training on Poultry Feed Formulation techniques during the periods from**31.05.2023**...to ...**19.06.2023**....at Palani andavar Poultry Feeds, Namagiripet, Rasipuram, Namakkal -637406

Dr.S.Senthilkumar Raj BVSc.,&A.H

Executive-Technical



பயோ குவாலிட்டி லேப்

BIOQUALITY LABORATORY

81/31, S.P. Pudur, Opp. Priya Towers, Paramathi Road, Namakkal - 637 001.

Internship Certificate



This is to certify that **Miss. S. LOGITHA** (Reg. No.21UZO005) from the department of Zoology, Muthayammal College of Arts & Science, Rasipuram, Namakkal - 637 408, has undergone Internship Training on Clinical Laboratory Techniques during the periods from 26/05/2023 to 17/06/2023 at **Bioquality Laboratory**, Namakkal - 637 001.

S. DINESHKUMAR M.Sc., (MB)


LAB INCHARGE



Chemical Ecology Research, Lab
Department of Environmental Biotechnology
Bharathidasan University
Tiruchirappalli-620024



This is to certify that Mr. **K. MANIKANDAN** from the Department of Zoology , Muthayammal College of Arts & Science, Rasipuram, Namakkal - 637 408, has undergone Internship Training on Animal Handling and Molecular techniques during the periods from **22/05/2023 to 05/06/2023** at Chemical Ecology Research lab, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli - 620 024.


Dr. S. Achiraman
Associate Professor



Chemical Ecology Research Lab
Department of Environmental Biotechnology
Bharathidasan University
Tiruchirappalli-620024



This is to certify that Mr. **B. NAVEEN** from the Department of Zoology , Muthayammal College of Arts & Science, Rasipuram, Namakkal - 637 408, has undergone Internship Training on Animal Handling and Molecular techniques during the periods from **22/05/2023** to **05/06/2023** at Chemical Ecology Research lab, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli - 620 024.

Dr. S. Achiraman
Associate Professor



பயோ குவாலிட்டி லேப்

BIOQUALITY LABORATORY

81/31, S.P. Pudur, Opp. Priya Towers, Paramathi Road, Namakkal - 637 001.

Internship Certificate



This is to certify that **Miss. A. NISHANYA** (Regd. No.21UZO008) from the department of Zoology, Muthayammal College of Arts & Science, Rasipuram, Namakkal - 637 408, has undergone Internship Training on Clinical Laboratory Techniques during the periods from 26/05/2023 to 17/06/2023 at **Bioquality Laboratory**, Namakkal - 637 001.


S. DINESHKUMAR M.Sc., (MB)



பயோ குவாலிட்டி லேப்


BIOQUALITY LABORATORY

81/31, S.P. Pudur, Opp. Priya Towers, Paramathi Road, Namakkal - 637 001.

Internship Certificate



This is to certify that **Miss. K. PAVITHRA** (Regd. No.21UZO009) from the department of Zoology, Muthayammal College of Arts & Science, Rasipuram, Namakkal - 637 408, has undergone Internship Training on Clinical Laboratory Techniques during the periods from 26/05/2023 to 17/06/2023 at **Bioquality Laboratory**, Namakkal - 637 001.


S. DINESHKUMAR M.Sc., (MB)
LAB INCHARGE



Chemical Ecology Research Lab
Department of Environmental Biotechnology
Bharathidasan University
Tiruchirappalli-620024



This is to certify that Ms. **K. K. SENBAGAPPRIYA** from the Department of Zoology, Muthayammal College of Arts & Science, Rasipuram, Namakkal - 637 408, has undergone Internship Training on Animal Handling and Molecular techniques during the periods from **22/05/2023 to 05/06/2023** at Chemical Ecology Research lab, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli - 620 024.

Dr. S. Achiraman
Associate Professor



RAKSHAN POLY CLINIC

124, Mettu Street, Bhavani Main Road
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☎ : 04283 - 224300, 88700 10022




TO WHOM IT MAY CONCERN

This is to certify that Ms.B.SRI PRIYA a B.Sc., Zoology student from Muthayammal college of Arts & Science, Rasipuram, Namakkal- 637 408, has successfully completed her training from (03.06.2023 to 17.06.2023) at RAKSHAN POLY CLINIC, Mettu street Idappadi.

During the period of her internship programme, she was found to be punctual, hardworking and sincere in her Duties.

We wish her success in all her future endeavors.


RAKSHAN POLYCLINIC
Dr. I.G. NAGARAJAN, MS., (Ortho)
Regd. No. 71671
124, Kattuvalavu South Street,
Idappadi (PO), SALEM (DI) - 637 101



பயோ குவாலிட்டி லேப்

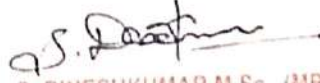
BIOQUALITY LABORATORY

81/31, S.P. Pudur, Opp. Priya Towers, Paramathi Road, Namakkal - 637 001.

Internship Certificate



This is to certify that Miss. M. SWETHA (Regd. No.21UZO013) from the department of Zoology, Muthayammal College of Arts & Science, Rasipuram, Namakkal - 637 408, has undergone Internship Training on Clinical Laboratory Techniques during the periods from 26/05/2023 to 17/06/2023 at Bioquality Laboratory, Namakkal - 637 001.


S. DINESHKUMAR M.Sc., (MB)
LAB INCHARGE

THARANYA SCANS
THARANYA CLINIC

Reg no: PNA 4793/2011

473, Belukurichi, Namakkal-637 402

PH NO: 04286-246444, 8098914191

DR. K. Senthil Kumar M.B.B.S
General practitioner

Dr. K. Selvambigai M.B.B.S D.G.O
Obstetrician & Gynaecologist

CERTIFICATE



This is to certify that Mrs. VIDHYA from the department of
ZOOLOGY, Muthayammal college of Arts and Science, Rasipuram, Namakkal -637 408
has undergone basic training in common practices in my clinic (outpatient, ultrasound,
Maternity, Basic Lab investigation) during the period from 22.05.2023 - 05.06.2023.

Dr. K. SELVAMBIGAI, D.G.O
THARANYA SCANS,
Reg. No: PNA 4793/2011
Rasipuram Main Road, Belukurichi
Namakkal (Dt.) - 637 402
Ph. No. 04286 - 246444
+91 - 8098914191



Chemical Ecology Research Lab
Department of Environmental Biotechnology
Bharathidasan University
Tiruchirappalli-620024

CERTIFICATE



This is to certify that Mr. **P. THIRUMOORTHY** from the Department of Zoology, Muthayammal College of Arts & Science, Rasipuram, Namakkal - 637 408, has undergone Internship Training on Animal Handling and Molecular techniques during the periods from **22/05/2023 to 05/06/2023** at Chemical Ecology Research lab, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli - 620 024.

S. Achiraman

Dr. S. Achiraman
Associate Professor



Palani Andavar Feeds Private Limited

Mfrs. Of Poultry & Cattle Feeds – Exporters Eggs

86, Pudupatti Road, Namagiripet – 637406

Namakkal (Dt)

CERTIFICATE



This is to certify that Ms.....**R.PRIYADHARSHINI**..... from the Department of Zoology, Muthayammal college of Arts and Science, Rasipuram, Namakkal-637408, has undergone Internship training on Poultry Feed Formulation techniques during the periods from**31.05.2023**...to ...**19.06.2023**....at Palani andavar Poultry Feeds, Namagiripet, Rasipuram, Namakkal -637406.

Dr.S.Senthilkumar Raj BVSc.,&A.H

Executive-Technical



பிஓகுவாலி லேபொரட்டரி (BQL)

BIOQUALITY LABORATORY

81/31, S.P. Pudur, Opp. Priya Towers, Paramathi Road, Namakkal - 637 001.

Internship Certificate



This is to certify that Miss. R. SHAKITHIA BANU (Regd. No.21UZO017) from the department of Zoology, Muthayammal College of Arts & Science, Rasipuram, Namakkal - 637 408, has undergone Internship Training on Clinical Laboratory Techniques during the periods from 26/05/2023 to 17/06/2023 at Bioquality Laboratory, Namakkal - 637 001.

S. DINESHKUMAR M.Sc., (MB)

LAB INCHARGE