

**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 ZOOLOGY




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

CERTIFICATE

This is to certify that the Project Report entitled "***EFFECTS OF ANTIBACTERIAL ACTIVITY IN CHEMICALLY SYNTHESIZED ZINC OXIDE NANOPARTICLES***" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **BACHELOR OF SCIENCE IN ZOOLOGY** is a record of original research work done by **JEEVA S (Reg. No: 21MUZO1010), JITHENTHIRAN G (Reg. No: 21MUZO1011)** during the period of her/his study (2021-2024) in the Department of Zoology, 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
HEAD OF THE DEPARTMENT
DEPARTMENT OF ZOOLOGY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:

1. 
15/05/24

2. 
15/5/24

Dr. R. THANGARAJ, Ph.D.
Assistant Professor
Department of Zoology
Periyar University
Rasipuram - 637 408

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DEPARTMENT OF ZOOLOGY



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
RASIPURAM, NAMAKKAL DISTRICT, TAMILNADU

CERTIFICATE

This is to certify that the Project Report entitled "**MEDICINAL PLANT *SOLANUM TORVUM* LEAF EXTRACT AGAINST MALARIAL VECTOR *ANOPHELES STEPHENSI***" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **BACHELOR OF SCIENCE IN ZOOLOGY** is a record of original research work done by **PAVITHRA K (21MUZO1003), SHAKITHA BANU R (21MUZO1006), SRIPRIYA B (21MUZO1007), MANIKANDAN K (21MUZO1012)**, during the period of her/his study 2021-2024) in the Department of Zoology, 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 / Associates ship / Fellowship or similar title to any candidate of any University.

[Signature]
Project Guide 15/05/24

[Signature]
HEAD OF THE DEPARTMENT
DEPARTMENT OF ZOOLOGY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DTL-637 408).

Submitted for the project viva-voce examination held on 15/05/2024

Examiners

1. *[Signature]*
15/05/24

Dr. R. THANGARAJ, Ph.D.,
Assistant Professor
Department of Zoology
Periyar University
Salem-636 011,
Tamil Nadu, India.

2. *[Signature]*
15/5/24.

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)


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Rasipuram - 637 408 Namakkal District, Tamil Nadu



CERTIFICATE

This is to certify that the Project Report entitled **ETHNOVETERINARY MEDICINAL PLANTS USED TO TREAT CATTLE DISEASES BY TRADITIONAL HEALERS OF KOLLI HILLS** Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **BACHELOR OF SCIENCE IN ZOOLOGY** is a record of original research work done by **LOGITHA S (21MUZO1001) NISHANYA A (21MUZO1002) SWETHA M (21MUZO1008) NAVEEN B (21MUZO1013)** during the period of her/his study (2021-2024) in the Department of Zoology, 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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DEPARTMENT OF ZOOLOGY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15/5/24

Examiners:

1. 
15/05/24

2.

Dr. R. THANGARAJ, Ph.D.,
Assistant Professor
Department of Zoology
Periyar University
Salem-636 011,
Tamil Nadu, India.

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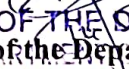
**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
Rasipuram, Namakkal District, Tamil Nadu

DEPARTMENT OF ZOOLOGY

CERTIFICATE

This is to certify that the Project Report entitled "SYNTHESIS, CHARACTERIZATION AND ANTI-MICROBIAL ACTIVITY OF MAGNESIUM OXIDE NANOPARTICLES AGAINST SELECTED FOOD PATHOGENS" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **BACHELOR OF SCIENCE IN ZOOLOGY** is a record of original research work done by **PRIYADHARSHINI R (21MUZO1004), SENBAGAPPRIYA K K (21MUZO1005), VIDHYA M (21MUZO1009), THIRUMOORTHY P (21MUZO1014)** during the period of her/his study (2021-2024) in the Department of Zoology, 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
Head of the Department
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
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RASIPURAM (TK), NAMAKKAL DISTRICT, 637 408.

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Dr. R. THANGARAJ, Ph.D.
Assistant Professor
Department of Zoology
Periyar University
Salem-636 011,
Tamil Nadu, India.



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



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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
Idappadi - 637 101.
☎ : 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 (Dist)- 637 101



பயோ குவாலிட்டி லேப்

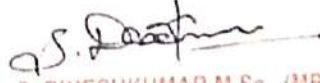
BIOQUALITY LABORATORY

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.

Dr. S. Achiraman
Associate Professor



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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