



**Determination of Antibacterial Activity of Marine Puffer Fish
Lagocephalus sceleratus (Gmelin, 1789) From Thoothukudi Coast**

Dissertation submitted to

ST. MARY'S COLLEGE (Autonomous), THOOTHUKUDI

affiliated to

MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI

in partial fulfilment for the award of the degree of

MASTER OF SCIENCE IN ZOOLOGY

By

M. ANITHA

Reg. No. 18 APZO01



DEPARTMENT OF ZOOLOGY

(Re-accredited with 'A⁺' Grade by NAAC – 4th Cycle)

ST.MARY'S COLLEGE (AUTONOMOUS),

THOOTHUKUDI – 628 001

2019 – 20



CERTIFICATE

This is to certify that this dissertation entitled,

“Determination of Antibacterial Activity of Marine Puffer Fish

***Lagocephalus sceleratus* (Gmelin,1789) From Thoothukudi Coast”**

is a record of original research work done by **M.ANITHA**, under my supervision, and submitted in partial fulfilment for the award of the degree of **Master of Science in Zoology**. This dissertation has not formed the basis for any other degree.

S. Selvi.
GUIDE

Hermin Pasangha
H.O.D

Dr. HERMIN PASANGHA M.Sc., B.Ed., Ph.D.,
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Lucia Rose
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EXAMINER

S. Selvi.
25/11/2019.



DECLARATION

I hereby declare that the thesis entitled,
**“Determination of Antibacterial Activity of Marine Puffer Fish
Lagocephalus sceleratus (Gmelin, 1789) From Thoothukudi Coast”**
submitted by me for the award of the Degree of **Master of Science
in Zoology** is the result of my original and independent research work
carried out under the guidance of **Dr.S.Selvi, M.Sc., B.Ed., M.Phil., Ph.D.,**
Assistant Professor, Department of Zoology, St. Mary’s College (Autonomous)
Thoothukudi, and it has not been submitted for the award of any degree,
diploma, associateship, fellowship of any University or Institution.

M. Anitha

Signature of the Candidate

Place : Thoothukudi

(M.ANITHA)

Date : 23.10.19



**"SCREENING AND EVALUATION OF BIODEGRADABILITY OF
POLYETHENE BY SOIL BACTERIA"**

A dissertation submitted to

ST. MARY'S COLLEGE (Autonomous), Thoothukudi

affiliated to

MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI

in partial fulfilment for the award of the degree of

MASTER OF SCIENCE IN ZOOLOGY

By

A. MANEESHA

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(Re-accredited with 'A+' Grade by NAAC)

THOOTHUKUDI-628 001

OCTOBER-2019

CERTIFICATE

This is to certify that this dissertation entitled "SCREENING AND EVALUATION OF BIODEGRADABILITY OF POLYTHENE BY SOIL BACTERIA", submitted by **A. MANEESHA** Reg. No. 18APZO02 to **ST. MARY'S COLLEGE (Autonomous), THOOTHUKUDI** affiliated to **MANONMANIAM SUNDARANAR UNIVERSITY** in partial fulfilment for the award of the degree of Master of Science in Zoology is done by her during the period of 2019-20 under my guidance and supervision. It is further certified that this dissertation or any part of this has not been submitted elsewhere for any other degree.

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HERMIN PASANGHA M.Sc., B.Ed., Ph.D.,
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EXAMINER

Squally
25/10/2019

DECLARATION

I hereby declare that the dissertation entitled "**SCREENING AND EVALUATION OF BIODEGRADABILITY OF POLYTHENE BY SOIL BACTERIA**" submitted by me for the award of the degree of Master of Science in Zoology, is the result of my original and independent work carried out under the guidance of **Dr. JEMMA HERMELIN JESY DIAZ M.Sc., B.Ed., M.Phil, Ph.D.**, Assistant Professor, Department of Zoology, St. Mary's College (Autonomous), Thoothukudi and it has not been submitted elsewhere for the award of any other degree.

LOCATION : THOOTHUKUDI

DATE : 23.10.19.

A. Maneesha
(A. MANEESHA)

ANTIBACTERIAL AND ANTIOXIDANT ACTIVITIES OF
SHELL, CHITIN AND CHITOSAN OBTAINED FROM
MARINE PRAWN *PENAEUS SEMISCUATUS*

Dissertation submitted to
St. Mary's College (Autonomous), Thoothukudi
affiliated to
MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI
in partial fulfillment for the award of the degree of

MASTER OF SCIENCE IN ZOOLOGY

BY

S. MINITTA

Reg. No. 18APZO03



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THOOTHUKUDI - 628001

2019-20

CERTIFICATE

This is to certify that this dissertation entitled "ANTIBACTERIAL AND ANTIOXIDANT ACTIVITIES OF SHELL, CHITIN AND CHITOSAN OBTAINED FROM MARINE PRAWN *PENAEUS SEMISCUATUS*" submitted by S. MINITTA, Reg. No. 18APZO03 to St. Mary's College (Autonomous), Thoothukudi, affiliated to Manonmaniam Sundaranar University in partial fulfilment for the award of the degree of Master of Science of Zoology is done by her during the period of 2019 - 2020 under my guidance and supervision. It is further certified that this dissertation or any part of this has not been submitted elsewhere for any other degree.

GUIDE

Jennin Pasangla
HEAD OF THE DEPARTMENT

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EXAMINER

S. Jayal
25/10/2019

DECLARATION

I do hereby declare that this thesis entitled, "ANTIBACTERIAL AND ANTIOXIDANT ACTIVITIES OF SHELL, CHITIN AND CHITOSAN OBTAINED FROM MARINE PRAWN PENEAEUS SEMISCUATUS" submitted by me for the award of the degree of Master of Science in Zoology is the result of my original independent research work carried out under the guidance of Dr. Mrs. P.J. Joslin, M.Sc., M.Phil., Ph.D., Associate Professor, Department of Zoology, St. Mary's College (Autonomous), Thoothukudi, and it has not been submitted elsewhere for the award of any other degree.

Place : Thoothukudi

Date : 23/10/24

S. Minitha

Signature of the Candidate

ISOLATION OF HALOBACTERIA FROM SALT PAN SOIL

A dissertation submitted to

ST. MARY'S COLLEGE (Autonomous), Thoothukudi

affiliated to

MANONMANIAM SUNDARNAR UNIVERSITY, TIRUNELVELI

in partial fulfilment for the award of the degree of

MASTER OF SCIENCE IN ZOOLOGY

BY

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OCTOBER-2019

CERTIFICATE

This is to certify that this dissertation entitled, "ISOLATION OF HALOBACTERIA FROM SALT PAN SOIL" is a record of original research work done by M. MUTHARSI, Reg. no. 18APZO04 to ST. MARY'S COLLEGE (Autonomous), THOOTHUKUDI in partial fulfilment for the award of the degree of Master of Science in Zoology is done by her during the period of 2018-19 under my guidance and supervision. It is further certified that this dissertation or any part of this has not been submitted elsewhere for any other degree.

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EXAMINER

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25/10/2019

DECLARATION

I hereby declare that the dissertation entitled, "ISOLATION OF HALOBACTERIA FROM SALT PAN SOIL" submitted by me in partial fulfillment for the award of the degree of Master of Science in Zoology, is the result of my original and independent work carried out under the guidance of Dr. Mrs. R. Sri Priya M.Sc., Ph.D., Assistant Professor, Department of Zoology, St. Mary's College (Autonomous), Thoothukudi and it has not been submitted elsewhere for the award of any other degree.

Station: Thoothukudi

Date: 23-10-19

M. Mutharasi
(M.MUTHARASI)

**BIOACCUMULATION OF SELECTED HEAVY METALS IN
DASYATIS PASTINACA (LINNAEUS, 1758) FROM THE GULF OF
MANNAR COAST OF THOOTHUKUDI**

Dissertation submitted to

ST. MARY'S COLLEGE (Autonomous), Thoothukudi

affiliated to

MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI

in partial fulfilment for the award of the degree of

MASTER OF SCIENCE IN ZOOLOGY

By

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(Re-accredited with 'A⁺' Grade by NAAC -4th cycle)

THOOTHUKUDI-628001

2019-2020



CERTIFICATE

This is to certify that this dissertation entitled, **"BIOACCUMULATION OF SELECTED HEAVY METALS IN *DASYATIS PASTINACA* (LINNAEUS, 1758) FROM THE GULF OF MANNAR COAST OF THOOTHUKUDI"** is a record of original research work done by **A. NITHASHIA**, under my supervision and submitted in partial fulfilment for the award of degree of Master of Science in Zoology. This dissertation has not formed the basis for any other degree.

Place: Thoothukudi

Date: 23/10/2019

Signature of the Supervisor

Head of the Institution

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Head of the Department

Dr. HERMIN PASANGHA M.Sc., B.Ed., Ph.D.,
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PG & Research Department of Zoology
St. Mary's College (Autonomous)
Thoothukudi - 628 001.

Examiner

DECLARATION

I hereby declare that this dissertation entitled, "BIOACCUMULATION OF SELECTED HEAVY METALS IN *DASYATIS PASTINACA* (LINNAEUS, 1758) FROM THE GULF OF MANNAR COAST OF THOOTHUKUDI" submitted by me for the award of the degree of Master of Science in Zoology is the result of my original independent research work under the guidance of **Dr. Mrs. HERMIN PASANGHA, M.Sc., B.Ed., Ph.D.**, Associate Professor and Head, Department of Zoology, St. Mary's College (Autonomous), Thoothukudi, and it has not been submitted for the award of any degree, diploma, associate ship/ fellowship of any university or institution.

Place: Thoothukudi

Date: 23/10/2019

A. Nithasha
Signature of the Candidate

(A. NITHASHA)

**BLUE SWIMMER CRAB *PORTUNUS PELAGICUS* (LINNAEUS, 1758), THE
POTENTIAL CANDIDATE SPECIES FOR PHARMACOLOGICAL**

INVESTIGATION

Dissertation submitted to

ST. MARY'S COLLEGE (Autonomous), Thoothukudi

affiliated to

MANONMANIAM SUNDARANAR UNIVERSITY

in partial fulfilment for the award of the degree of

MASTER OF SCIENCE IN ZOOLOGY

By

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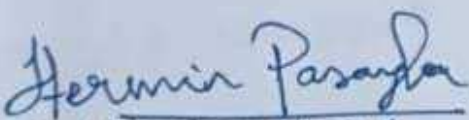
CERTIFICATE

This is to certify that this dissertation entitled " BLUE SWIMMER CRAB *PORTUNUS PELAGICUS* (LINNAEUS, 1758), THE POTENTIAL CANDIDATE SPECIES FOR PHARMACOLOGICAL INVESTIGATION" is a record of original research work done by K.SAKTHI VINMATHI under my supervision, and submitted in partial fulfilment for the degree of Master of Science in Zoology. This dissertation has not formed the basis of any other degree.

Place: Thoothukudi

Date: 23-10-2019

Sr. Shibana
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Examiner


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K. SAKTHI VINMATHI
Department of Zoology,
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DECLARATION

I hereby declare that the thesis entitled "**BLUE SWIMMER CRAB**
PORTUNUS PELAGICUS (LINNAEUS, 1758), POTENTIAL
CANDIDATE SPECIES FOR PHARMACOLOGICAL
INVESTIGATION" submitted by me for the Degree of Master of Science in
Zoology is the result of my original and independent research work carried
under the guidance of Dr. Sr. C. Shibana M.Sc., B. Ed., M. Phil., PhD.,
Assistant Professor of Zoology, St. Mary's College, Thoothukudi, and it has not
been submitted for the reward of any degree, diploma, associateship, fellowship
of any University or Institution.

Place: Thoothukudi

Date: 23.10.2019


(K.SAKTHI VINMATHI)

**PROXIMATE ANALYSIS AND DETERMINATION OF
HEAVY METALS IN WATER AND LETHRINUS FISH
SAMPLES (*Lethrinus microdon* and *Lethrinus lentjan*)
FOUND IN NEW HARBOUR COAST, THOOTHUKUDI**

A dissertation submitted to

ST. MARY'S COLLEGE (Autonomous), THOOTHUKUDI

affiliated to

MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI

in partial fulfilment for the award of the degree of

MASTER OF SCIENCE IN ZOOLOGY

By

R. SOLAI PRIYA

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DEPARTMENT OF ZOOLOGY

(Re-accredited with 'A+' Grade by NAAC – 4th Cycle)

ST. MARY'S COLLEGE (Autonomous),

Thoothukudi – 628 001 (2019 – 2020)

CERTIFICATE

This is to certify that this dissertation entitled ,
**ROXIMATE ANALYSIS AND DETERMINATION OF HEAVY
METALS IN WATER AND LETHRINUS FISH SAMPLES (*Lethrinus
crodon and Lethrinus lentjan*) FOUND IN NEW HARBOUR COAST,
THOOTHUKUDI** submitted by **R. SOLAI PRIYA, REG. NO.18APZO08** to
ST. MARY'S COLLEGE (Autonomous), THOOTHUKUDI under my
supervision, and submitted in partial fulfilment for the degree of **Master
in Science in Zoology** . This dissertation has not formed the basis for
any other degree.

Sherley
GUIDE

Hermin Pasangha

O.D

HERMIN PASANGHA M.Sc., B.Ed., Ph.D.,
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Lucia Rose

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EXAMINER

Sherley
25/10/2019



DECLARATION

I hereby declare that the thesis entitled, "**PROXIMATE ANALYSIS AND DETERMINATION OF HEAVY METALS IN WATER AND LETHRINUS FISH SAMPLES (*Lethrinus microdon* and *Lethrinus* *ntjan*) FOUND IN NEW HARBOUR COAST, THOOTHUKUDI**" submitted by me for the award of the Degree of **Master of Science in Zoology** is the result of my original and independent research work carried out under the guidance of **Dr. S.R.T. SHERLY CROSS M.Sc.,B.Ed.,M.Phil.,ph.D.** Assistant Professor, Department of Zoology, St. Mary's College, Thoothukudi, and it has not been submitted for the award of any degree, diploma, associateship, fellowship of any University or Institution..

R. Solai Priya

Signature of the Candidate

(R. SOLAI PRIYA)

Place : Thoothukudi

Date : 23.10.19

**IMPACT OF SPIRULINA SUPPLEMENTATION ON THE LARVAL
CHARACTERS AND ECONOMIC PARAMETERS OF THE
SILKWORM *BOMBYX MORI* L.**

Dissertation submitted to

ST. MARY'S COLLEGE (Autonomous), Thoothukudi

affiliated to

MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI

in partial fulfilment for the award of degree of

MASTER OF SCIENCE IN ZOOLOGY

By

K. SOWMIYA

Reg. No. 18APZO09



DEPARTMENT OF ZOOLOGY

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THOOTHUKUDI-628001

2019-20

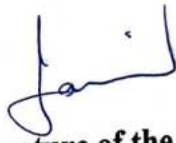


CERTIFICATE

This is to certify that this dissertation entitled, "IMPACT OF SPIRULINA SUPPLEMENTATION ON THE LARVAL CHARACTERS AND ECONOMIC PARAMETERS OF THE SILKWORM *BOMBYX MORI*L" is a record of original research work done by Miss. K. SOWMIYA, under my supervision, and submitted in partial fulfilment for the degree of Master of Science in Zoology. This dissertation has not formed the basis for any other degree.

Place: Thoothukudi

Date: 23.10.19



Signature of the Supervisor

Lucia Rose
Head of the Institution
Principal
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Head of the Department

HOD
PG & Research Department of Zoology
St. Mary's College (Autonomous)
Thoothukudi - 628 001.

Examiner


25/10/2019

DECLARATION

I hereby declare that this dissertation entitled, "**IMPACT OF SPIRULINA SUPPLEMENTATION ON THE LARVAL CHARACTERS AND ECONOMIC PARAMETERS OF THE SILKWORM *BOMBYX MORI.L***" Submitted by me for the award of the degree of Master of Science in Zoology is the result of my original independent research work under the guidance **Dr. S. MARY BAPTISTA JANET, M.Sc., M.Phil., B.Ed., Ph.D.,** Associate Professor, Department of Zoology, St.Mary's College, (Autonomous), Thoothukudi and it has not been submitted for the award of any degree , diploma, associateship / fellowship of any university or institution.

Place: Thoothukudi

K. Sowmiya
Signature of the candidate

Date: 23.10.19

(K. SOWMIYA)