

**SIMILARITY ANALYSIS OF PLASTIC DEGRADING, POLY
ETHYLENE TEREPHTHALATE HYDROLASE (PETase) OF
BACTERIAL ORIGIN**

**Project Submitted for the Award of Degree of
Master of Science in Zoology**

Submitted By

Miss. R. ANU (2020MSCZ01)

GUIDED BY

Dr. A. TAMILSELVI



PG DEPARTMENT OF ZOOLOGY

FATIMA COLLEGE (Autonomous)

Re-Accredited with 'A++' by NAAC (Cycle –IV)

MADURAI- 625 018

JUNE, 2022


CERTIFICATE

This is to certify that this dissertation entitled "**SIMILARITY ANALYSIS OF PLASTIC DEGRADING, POLY ETHYLENE TEREPHTHALATE HYDROLASE (PETase) OF BACTERIAL ORIGIN**" submitted by MISS. R. ANU (2020MSCZ01) as partial fulfillment for the degree of Master of Science in Zoology is based on the results of studies carried out by her under my guidance and supervision during the academic year 2021-2022 at Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.



Head of the Department

(Dr. A. Tamil Selvi)



Signature of the Guide

(Dr. A. Tamil Selvi)

DATE: 07.06.2022

Dr. A. TAMIL SELVI
Head, Dept. of Zoology
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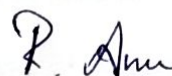
DATE: 07.06.2022

DECLARATION

I do hereby declare that this dissertation entitled “SIMILARITY ANALYSIS OF PLASTIC DEGRADING, POLY ETHYLENE TEREPHTHALATE HYDROLASE (PETase) OF BACTERIAL ORIGIN” has been originally carried out by me under the guidance and supervision of Dr.A. Tamil Selvi, Head, Department of Zoology, Fatima College (Autonomous), Madurai- 18 and this work has not been submitted elsewhere for the award of any other degree.

STATION: MADURAI

DATE: 07.06.2022



Signature of the Student

R. ANU

(2020MSCZ01)

MOLECULAR DOCKING FOR PROTEINS OF CYSTIC FIBROSIS AND MUSCULAR DYSTROPHIES

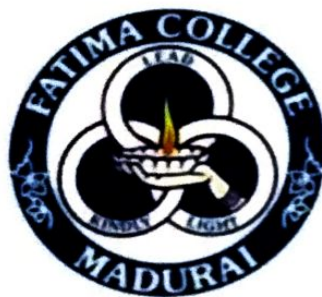
**Project Submitted for the Award of Degree of
Master of Science in Zoology**

Submitted By

Ms.A.GEETHA (2020MSCZ02)

GUIDED BY

Dr. ANTONY AMALA JAYASEELI

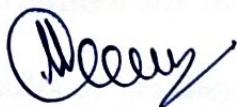


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MADURAI– 625 018.**

JUNE, 2022

CERTIFICATE

This is to certify that this dissertation entitled “**MOLECULAR DOCKING FOR PROTEINS OF CYSTIC FIBROSIS AND MUSCULAR DYSTROPHIES**” submitted by Ms.A.Geetha (2020MSCZ02) as partial fulfillment for the degree of Master of Science in Zoology is based on the results of studies carried out by her under my guidance and supervision during the academic year 2021-2022 at Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.



Head of the Department

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(Dr. Antony Amala Jayaseeli)

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DATE: 07.06.2022

Dr. Antony Amala Jayaseeli,
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CERTIFICATE

This is to certify that this dissertation entitled "**MOLECULAR DOCKING FOR PROTEINS OF CYSTIC FIBROSIS AND MUSCULAR DYSTROPHIES**" submitted by Ms.A.Geetha (2020MSCZ02) as partial fulfillment for the degree of Master of Science in Zoology is based on the results of Studies carried out by her under my Guidance and Supervision during the Academic Year 2021-2022 at Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.

STATION: MADURAI

DATE: 07.06.2022

Antony Amala Jayaseeli
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**“ BIOCHEMICAL EFFECTS OF BUTYLATED HYDROXY TOLUENE
ON TILAPIA FISH ”**

**Dissertation Submitted for the Award of Degree of Master of
Science in Zoology
Submitted By**

Ms. S. Harshini Priya (2020MSCZ03)

**Under the guidance
of**

Dr. N. MALATHI, M.Sc., Ph. D., GATE., MD (ACU)
Assistant Professor, Department of Zoology,
Dean of Academic Affairs (Science), Research Guide and Supervisor,
Fatima College (Autonomous)
Madurai – 625 018



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Re-Accredited with ' A++ ' BY NAAC (Cycle - IV)

MADURAI – 625 018

APRIL 2022

CERTIFICATE

This is to certify that this dissertation entitled “ **BIOCHEMICAL EFFECTS OF BUTYLATED HYDROXY TOLUENE ON TILAPIA FISH** ” submitted by **MS. S. Harshini Priya (2020MSCZ03)** as a partial fulfillment for the degree of **Master of Science in Zoology** is based on the results of studies carried out by her under my guidance and supervision during the academic year 2021-2022 at Fatima College (Autonomous), Madurai-18. This project work has not been submitted elsewhere for any other degree.



Signature of the Head of

the Department

(Dr. A. Tamil Selvi)

Dr. A. TAMIL SELVI

Head, Dept. of Zoology

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Signature of the Supervisor

and Guide

(Dr. Mrs. N. Malathi)

STATION: MADURAI

DATE: 7. 6. 22

DECLARATION

I do hereby declare that this dissertation entitled “ **BIOCHEMICAL EFFECTS OF BUTYLATED HYDROXY TOLUENE ON TILAPIA FISH** ” has been originally carried out by me under the guidance and supervision of **Dr. Mrs. N. Malathi**, Assistant Professor, Department of zoology and Dean of Academic Affairs (Science), Research Guide and Supervisor, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for the award of any other degree.



STATION: MADURAI

Signature of the Student

DATE: 7.6.2022

S. Harshini Priya

(2020MSCZ03)

**A COMPARATIVE STUDY ON THE COMPOSTING
EFFICIENCY OF TWO EARTHWORM SPECIES
EISENIA FETIDA AND *EUDRILUS EUGENIAE* ON
ORGANIC WASTES**

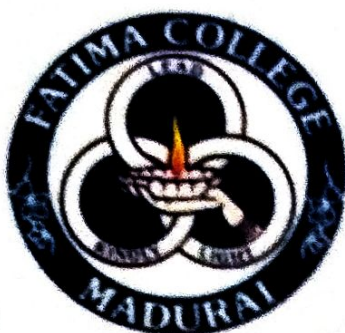
**Project Submitted for the Award of Degree of Master of
Science in Zoology**

Submitted By

Miss. J.PRINITA (2020MSCZ06)

GUIDED BY

Dr. V. Bharathy



PG DEPARTMENT OF ZOOLOGY

FATIMA COLLEGE (Autonomous)

Re-Accredited with 'A++' by NAAC (Cycle -IV)

MADURAI- 625 018

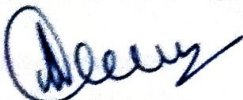
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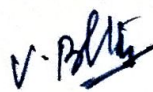
This is to certify that this dissertation entitled "A comparative study on composting efficiency of two earthworm species *Eisenia fetida* and *Eudrilus eugeniae* on organic wastes" submitted by Ms. J.Prinita, as partial fulfillment for the degree of Master of Science in Zoology is based on the results of studies carried out by them under my guidance and supervision in Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.

STATION: MADURAI

DATE: 7.06.2022



Head of the Department


Dr. V. Bharathy
GUIDE

Dr. A. TAMIL SELVI

Head, Department of Zoology

FATIMA COLLEGE (AUTONOMOUS)

Dr. A. Tamil Selvi

DECLARATION

I do hereby declare this dissertation entitled A COMPARATIVE STUDY ON THE COMPOSTING EFFICIENCY OF TWO EARTHWORM SPECIES *EISENIA FETIDA* AND *EUDRILUS EUGENIAE* ON ORGANIC WASTES has been originally carried out by us under the guidance and supervision of Dr.V. Bharathy, Department of Zoology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for the award of any other degree.

Station: Madurai

Date: 7/06/22

By

J. Prinita

**SCREENING AND CHARACTERIZATION OF
AN ALTERNATIVE STAINS FOR
HISTOLOGICAL STUDIES**

**Project Submitted for the Award of Degree of
Master of Science in Zoology**

Submitted By

B.RAJA LAKSHMI (2020MSCZ08)

GUIDEDBY

Dr.N.NAGARANI



PGDEPARTMENTOFZOOLOGY

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Re-Accredited with 'A++'by NAAC (Cycle-IV)

MADURAI- 625 018

JUNE 2022

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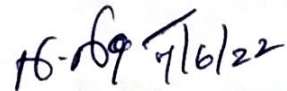
This is to certify that this dissertation entitled "**SCREENING AND CHARACTERIZATION AN ALTERNATIVE STAINS FOR HISTOLOGICAL STUDIES**" Submitted by **B.RAJA LAKSHMI (2020MSCZO8)**, as partial fulfillment for the degree of **MASTER OF SCIENCE IN ZOOLOGY**, is based on the results of studies carried out by them under my guidance and supervision in Fatima college (Autonomous), Department of Zoology, Madurai-18. This project has not been submitted elsewhere for any other degree.

Place: Madurai

Date:



Signature of the HOD



Signature of the Guide

Dr. A. TAMIL SELVI
Head, Dept. of Zoology
FATIMA COLLEGE (AUTONOMOUS)
MADURAI-625 018

DECLARATION

I do hereby declare that this dissertation entitled **"SCREENING AND CHARACTERIZATION AN ALTERNATIVE STAINS FOR HISTOLOGICAL STUDIES"** Submitted to Fatima college, Madurai in Partial fulfillment of requirement of the award of **MASTER OF SCIENCE IN ZOOLOGY**, is a record of original project work done by me under the guidance of **Dr. N. Nagarani**. I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

Place: Madurai

Date: 07/06/2022

B. Rajalakshmi

B.Raja lakshmi

**A STUDY ON HEAVY METAL ACCUMULATION IN VAIGAI
RIVER AND ITS IMPACT ON *CHANNA STRIATA***

**Project Submitted for the Award of Degree of
Master of Science in Zoology**

Submitted By

N. SHALINI (2020MSCZ09)

GUIDED BY

Dr. S. BARATHY



PG DEPARTMENT OF ZOOLOGY

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Re-Accredited with 'A++' by NAAC (Cycle –IV)

MADURAI– 625 018

JUNE, 2022

CERTIFICATE

This is to certify that this dissertation entitled “A STUDY ON HEAVY METAL ACCUMULATION IN VAIGAI RIVER AND ITS IMPACT ON *CHANNA STRIATA*” submitted by N. SHALINI (2020MSCZ09) as partial fulfillment for the degree of Master of Science in Zoology is based on the results of studies carried out by her under my guidance and supervision during the academic year 2021-2022 at Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.



Head of the Department

(Dr. A. Tamil Selvi)



Signature of the Guide

(Dr. S. Barathy)

Dr. A. TAMIL SELVI

Head, Dept. of Zoology

FATIMA COLLEGE (AUTONOMOUS)

MADURAI-625 018

STATION: MADURAI

DATE: 7.6.2022

DECLARATION

I do hereby declare that this dissertation entitled "A STUDY ON HEAVY METAL ACCUMULATION IN VAIGAI RIVER AND ITS IMPACT ON *CHANNA STRIATA*" has been originally carried out by me under the guidance and supervision of Dr. S. BARATHY, Department of Zoology, Fatima College (Autonomous), Madurai- 18 and this work has not been submitted elsewhere for the award of any other degree.

STATION: MADURAI

DATE: 07.06.2022

N. Shalini

Signature of the Student

N. SHALINI

(2020MSCZ09)

AN INVESTIGATION ON INSECT DIVERSITY AT ODAIPATTY

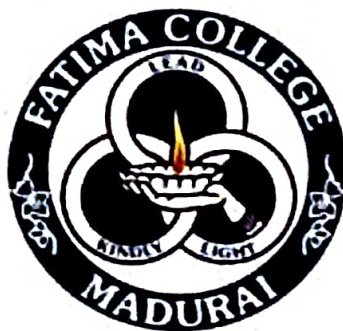
**Project Submitted for the Award of Degree of
Master of Science in Zoology**

Submitted By

Miss. P. SWEATHA (2020MSCZ10)

GUIDED BY

Mrs. J. THELMA



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JUNE, 2022

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This is to certify that this dissertation entitled “AN INVESTIGATION ON INSECT DIVERSITY AT ODAIPATTY” submitted by MISS. P. SWEATHA (2020MSCZ10) as partial fulfillment for the degree of **Master of Science in Zoology** is based on the results of studies carried out by her under my guidance and supervision during the academic year 2021-2022 at Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.



Head of the Department

(Dr. A. TAMIL SELVI)



Signature of the Guide

(Mrs. J. THELMA)

Dr. A. TAMIL SELVI

Head, Dept. of Zoology

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MADURAI-625 018

STATION: MADURAI

DATE: 07.06.2022

DECLARATION

I do hereby declare that this dissertation entitled “AN INVESTIGATION ON INSECT DIVERSITY AT ODAIPATTY” has been originally carried out by me under the guidance and supervision of Mrs. J. Thelma, Assistant professor, Department of Zoology, Fatima College (Autonomous), Madurai- 18 and this work has not been submitted elsewhere for the award of any other degree.

STATION: MADURAI

DATE: 07.06.2022

P. Sweatha
Signature of the Student

P.SWEATHA

(2020MSCZ10)

AN ALTERNATIVE SOURCE OF pH INDICATOR AND CYTOSTAIN

**Project Submitted for the Award of Degree of Master of
Science in Zoology**

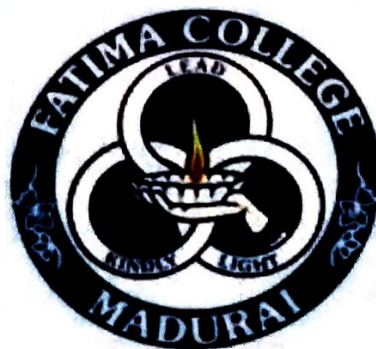
Submitted By

S.VARSHINI

(2020MSCZ11)

GUIDED BY

Dr. N.NAGARANI



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FATIMA COLLEGE (Autonomous)

Re-Accredited with 'A++' by NAAC (Cycle -IV)

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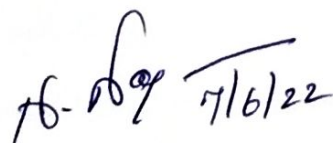
This is to certify that this dissertation entitled **"AN ALTERNATIVE SOURCE OF PH INDICATOR AND CYTOSTAIN"** Submitted by **S.VARSHINI (2020MSCZ11)**, as partial fulfillment for the degree of **MASTER OF SCIENCE IN ZOOLOGY**, is based on the results of studies carried out by them under my guidance and supervision in Fatima college (Autonomous), Department of Zoology, Madurai-18. This project has not been submitted elsewhere for any other degree.

Place: Madurai

Date: 07.06.2022



Signature of the HOD



Signature of the Guide

Dr. A. TAMIL SELVI
Head, Dept. of Zoology
FATIMA COLLEGE (AUTONOMOUS)
MADURAI-625 018

DECLARATION

I do hereby declare that this dissertation entitled "**AN ALTERNATIVE SOURCE OF pH INDICATOR AND CYTOSTAIN**" Submitted to Fatima college, Madurai in Partial fulfillment of requirement of the award of **MASTER OF SCIENCE IN ZOOLOGY**, is a record of original project work done by me under the guidance of **Dr. N. Nagarani**. I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

Place: Madurai

Date: 07.06.2022

S. Varshini

S. Varshini

**A COMPARATIVE STUDY ON FISH *PAMPUS CHINENSIS* FED
WITH ARTIFICIAL AND NATURAL FEED**

**Project Submitted for the Award of Degree of
Master of Science in Zoology**

Submitted By

S. Yafiya (2020MSCZ12)

GUIDED BY

Dr. S. BARATHY



**PG DEPARTMENT OF ZOOLOGY
FATIMA COLLEGE (Autonomous)
Re-Accredited with 'A++' by NAAC (Cycle –IV)
MADURAI– 625 018**

JUNE, 2022

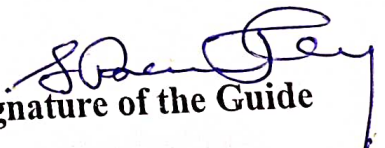
CERTIFICATE

This is to certify that this dissertation entitled "**A COMPARATIVE STUDY ON FISH *PAMPUS CHINESIS* FED WITH ARTIFICIAL AND NATURAL FEED**" submitted by S. Yafiya (2020MSCZ12) as partial fulfillment for the degree of Master of Science in Zoology is based on the results of studies carried out by her under my guidance and supervision during the academic year 2021-2022 at Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.



Head of the Department

(Dr. A. Tamil Selvi)



Signature of the Guide

(Dr. S. Barathy)

Dr. A. TAMIL SELVI
Head, Dept. of Zoology
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STATION: MADURAI

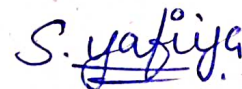
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DECLARATION

I do hereby declare that this dissertation entitled "**A COMPARATIVE STUDY ON FISH *PAMPUS CHINESIS* FED WITH ARTIFICIAL AND NATURAL FEED**" has been originally carried out by me under the guidance and supervision of **Dr. S. BARATHY**, Department of Zoology, Fatima College (Autonomous), Madurai- 18 and this work has not been submitted elsewhere for the award of any other degree.

STATION: MADURAI

DATE: 07/6/22



Signature of the Student

S. Yafiya

(2020MSCZ12)

**ANTIMICROBIAL ACTIVITY OF MARINE BACTERIAL
ORGANISMS ISOLATED FROM THE COASTAL AREAS OF
CHENNAI AND MANDAPAM, INDIA.**

**Project Submitted for the Award of Degree of
Master of Science in Zoology**

Submitted By

Miss. M. MONISHA (2020MSCZ04)

GUIDED BY

Dr. K. MANIMEGALAI



PG DEPARTMENT OF ZOOLOGY

FATIMA COLLEGE (Autonomous)

Re-Accredited with 'A++' by NAAC (Cycle -IV)

MADURAI- 625 018

MAY, 2022

CERTIFICATE

This is to certify that the dissertation entitled "ANTIMICROBIAL ACTIVITY OF MARINE BACTERIAL ORGANISMS ISOLATED FROM THE COASTAL AREAS OF CHENNAI AND MANDAPAM, INDIA" submitted in partial fulfillment of DEGREE OF MASTER OF SCIENCE IN ZOOLOGY is a research work that has been originally carried out by M. MONISHA (2020MSCZO4) under my guidance and supervision in the Department of Zoology, Fatima College (Autonomous), Madurai- 18 in the academic year 2021-2022. It is further certified that this dissertation or any part of this has not been submitted elsewhere for the award of any other degree.

Station: Madurai

Date: 7. 6. 2022



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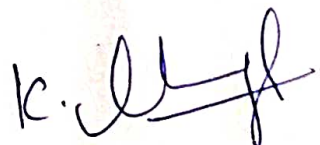
(Dr.A.TAMILSELVI)

Dr. A. TAMIL SELVI

Head, Dept. of Zoology

FATIMA COLLEGE (AUTONOMOUS)

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Signature of the Project Guide

(Dr.K.MANIMEGALAI)

DECLARATION

I hereby declare that this dissertation entitled “ANTIMICROBIAL ACTIVITY OF MARINE BACTERIAL ORGANISMS ISOLATED FROM THE COASTAL AREAS OF CHENNAI AND MANDAPAM, INDIA” submitted in partial fulfillment of Degree of MASTER OF SCIENCE IN ZOOLOGY is a research work that has been originally done by me under the guidance and supervision of Dr. K. MANIMEGALAI, Assistant Professor, Fatima College (Autonomous), Madurai and this work has not been submitted elsewhere for the award of any other degree.

Station: Madurai

Date: 7.6.2022

M. Monisha.

Signature of the student

M. Monisha (2020MSCZO4)

SURVEY OF COVID INFECTED PERSONS IN TAMIL NADU

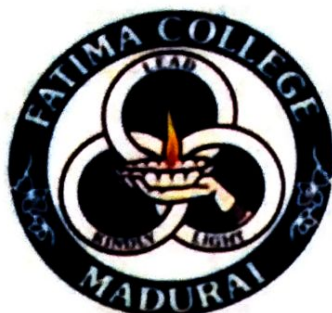
**Project Submitted for the Award of Degree of
Master of Science in Zoology**

Submitted By

Miss. M. NAGA SHALINI (2020MSCZ05)

GUIDEDBY

Dr. SR. BIJI CYRIAC



PG DEPARTMENT OF ZOOLOGY

FATIMA COLLEGE (Autonomous)

Re-Accredited with 'A++' by NAAC (Cycle –IV)

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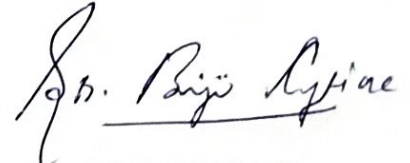
JUNE, 2022

CERTIFICATE

This is to certify that this dissertation entitled "**SURVEY OF COVID INFECTED PERSONS IN TAMIL NADU**" submitted by Ms. M. Naga Shalini as partial fulfillment for the degree of Master of Science in Zoology is based on the results of studies carried out by them under my guidance and supervision in Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.

STATION: MADURAI

DATE: 07.06.2022



DR. SR. BIJI CYRIAC

GUIDE



HEAD OF THE DEPARTMENT

Dr. A. TAMIL SELVI

Head, Dept. of Zoology

FATIMA COLLEGE (AUTONOMOUS)

(DR. A. TAMIL SELVI)
MADURAI-625018

DECLARATION

I do hereby declare this dissertation entitled "**SURVEY OF COVID INFECTED PERSONS IN TAMIL NADU**" has been originally carried out by us under the guidance and supervision of Dr. Sr. Biji Cyriac, Department of Zoology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for the award of any other degree.

Station: Madurai

By

Date: 07.06.2022

Ms. M. NAGA SHALINI (2020MSCZ05)

M. Naga Shalini