

# **SIMILARITY ANALYSIS OF SARS CORONA VIRUS WUHAN-HU-1 ISOLATE AND INDIAN (KERALA) ISOLATE**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**Ms. AISHWARYA. R (2018Z01)**

**Mrs. KEERTHI. G (2018Z13)**

**Ms. SARANYA. R (2018Z24)**

**Ms. SUGANYA. G (2018Z34)**

**Ms. DEEPA PRABHA. B(2017Z10)**

**Under the Guidance of**

**Dr. A. TAMIL SELVI**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018**

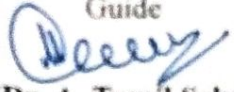
**March, 2021**

## CERTIFICATE

This is to certify that this project entitled "**SIMILARITY ANALYSIS OF SARS CORONA VIRUS 2 WUHAN-HU-1 ISOLATE AND INDIAN (KERALA) ISOLATE**" submitted by **Ms.R. Aishwarya** Mrs.G.Keerthi, Ms.R.Saranya., Ms.G.Suganya and Ms.B. Deepa Prabha for the degree of bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the Post Graduate Department of Zoology, Fatima College (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree.

Date: **30.03.2021**

Station: Madurai

Guide  
  
(Dr. A. Tamil Selvi)

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

## DECLARATION

We do hereby declare that this work has been originally carried out by us under the guidance and supervision of Dr. A. Tamil Selvi, Assistant Professor & Head in the Post Graduate Department of Zoology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for any other degree.

Date: 30.03.2021

Station: Madurai

R. Aishwarya  
Ms. Aishwarya. R

G. Keerthi  
Mrs. Keerthi. G

R. Saranya  
Ms. Saranya. R

G. Suganya  
Ms. Suganya. G

B. Deepaprabha.  
Ms. Deepa Prabha. B

# **STUDY ON HUMAN ACID SPHINGOMYELINASE USING BIOINFORMATICS TOOLS**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**Ms. AKSHAYA R (2018Z02)**

**Ms. MAHADEVI S (2018Z15)**

**Ms. SARMILA M (2018Z25)**

**Ms. TAMILTHAI A (2018Z35)**

**Mrs. FAYISHA J (2015Z14)**

**Under the Guidance of  
Dr.Mrs. Antony Amala Jayaseeli,  
M.Sc, Ph.D, B.Ed, PGDBI, SLET**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018**

**March, 2021**



## CERTIFICATE

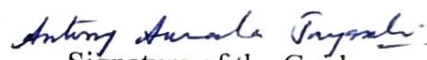
Dr.Mrs. Antony Amala Jayaseeli,  
M.Sc, Ph.D, B.Ed, PGDBI, SLET  
Assistant Professor in Zoology,  
Fatima College (Autonomous),  
Madurai - 625 018.

This is to certify that this Project entitled "COMPARITIVE STUDY ON HUMAN ACID SPHINGOMYELINASE – USING BIOINFORMATICS TOOLS" submitted by for the degree of Bachelor of Science is based on the results of studies carried out by me under my guidance and supervision in FATIMA COLLEGE (AUTONOMOUS) at the DEPARTMENT OF ZOOLOGY, MADURAI – 18. This project has not been submitted elsewhere for any other degree.



Head of the Department

(Dr. A. Tamil Selvi)

  
Signature of the Guide

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**Dr. A. TAMIL SELVI**  
Head, Dept. of Zoology  
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Station: Madurai

Date: 30.03.2021

## DECLARATION

I do hereby declare that this dissertation entitled “**STUDY ON HUMAN ACID SPHINGOMYELINASE USING BIOINFORMATICS TOOLS**” has been originally carried out by her under the guidance and supervision of **Dr. Mrs. Antony Amala Jayaseeli** 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** 13.03.2021

**Signature of the Student**

R. Akshaya  
Mahadevi S  
M. Sarmila  
Tamithai A.  
Fayisha J

# **“A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA”**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MISS. J. AROCKIA VICTORIYA (2018Z03)**

**MISS. M. MUTHUMEENAKSHI (2018Z16)**

**MISS. S. SATHYADIVYADHARSHINI (2018Z27)**

**MISS. S. THENMOZHI (2018Z36)**

**Under the Guidance of**

**Dr. N. MALATHI**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**

## CERTIFICATE

This is to certify that this dissertation entitled "**A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA**" submitted by **MS. J. Arockia Victoriya (2018Z03)**, MS. M. Muthumeenakshi (2018Z16), MS. S. Sathyadiviyadharshini (2018Z27) and MS. S. Thenmozhi (2018Z36) as a partial fulfillment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by her under my guidance and supervision during the academic year 2020-2021 in Fatima College (Autonomous), Department of Zoology, 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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MADURAI-625 018



**Signature of the Supervisor  
and Guide**  
(Dr. Mrs. N. Malathi)

**STATION: MADURAI**

**DATE: 30-03-2021.**



## DECLARATION

I do hereby declare that this dissertation entitled "A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA" has been originally carried out by her 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.

1. J. Arockia victoriya
2. M. Muthu meenakshi
3. S. Sathyadivyaadharshini
4. S. Thenmozhi

STATION: MADURAI

Signature of the Student

DATE: 30-03-2021

J. Arockia Victoriya (2018Z03)

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# **A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**Ms. ASNA FATHIMA. S (2018Z04)**

**Ms. NANCY DAYANA. A (2018Z17)**

**Ms. SATHYA. U (2018Z28)**

**Ms. THILAGAVATHI. E (2018Z37)**

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**Ms. T. MALAR MEENAKSHI**



**DEPARTMENT OF ZOOLOGY  
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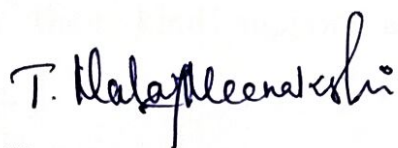
**March, 2021**

## CERTIFICATE

This is to certify that this Project entitled “A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES” submitted by Ms.S.Asna Fathima, Ms.A.Nancy Dayana, Ms.U.Sathya and Ms.E.Thilagavathi for the degree of Bachelor of Science is based on the results of studies carried out by them under my guidance and supervision in FATIMA COLLEGE (AUTONOMOUS) at the has not been submitted elsewhere for any other degree.

**Station: Madurai**

**Date:** 30.3.2021



**Signature of the Project Guide**

**(T. MALAR MEENAKSHI)**



**Signature of the Head of the Department**

**(Dr.A.TAMILSELVI)**

**Dr. A. TAMIL SELVI**  
Head, Dept. of Zoology  
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MADURAI-625 018



## DECLARATION

We do hereby declare that this dissertation entitled "A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES" submitted in partial fulfilment of Degree of Bachelor of Science in Zoology is a research work that has been originally done by us under the guidance and supervision of T. Malar Meenakshi, Assistant Professor in the 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: 30.3.2021**

### Signature of students

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Ms. SATHYA. U (2018Z28) *Sathya.U.*  
Ms. THILAGAVATHI. E (2018Z37) *Thilagavathi*

**“BIODIVERSITY OF INSECTS  
(MADURAI AND SIVAGANGAI DISTRICT)”**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MS. T BOOMADEVI (2018Z05)**

**MS. P. NITHYA (2018Z18)**

**MS. T. SELVA PRIYA (2018Z29)**

**MS. M. VIDHYA NIVASHINI (2018Z38)**

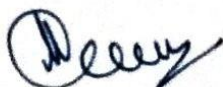
**Under the Guidance of  
DR. SR. BIJI CYRIAC, M. Sc., B. Ed., M. Phil., Ph.D**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**

## CERTIFICATE

This is to certify that this dissertation entitled "**Biodiversity of Insects (Madurai and Sivagangai District)**" submitted by **Ms. T. Booma devi**, Ms. P. Nithya, Ms. T. Selva Priya, and Ms. M. Vidhya Nivashini as a partial fulfilment for the degree of Bachelor 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, during the academic year 2020 - 2021. 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. Sr. BIJI CYRIAC)

**Dr. A. TAMIL SELVI**  
FAT Head, Dept. of Zoology  
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MADURAI-625 018  
STATION: MADURAI

DATE: 13.03.2021

## DECLARATION

We do here by declare that this dissertation entitled “**BIODIVERSITY OF INSECTS (MADURAI AND SIVAGANGAI DISTRICT)**” has been originally carried out by us under the guidance and supervision of Dr. Sr. BijiCyriac, 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: 13.03.2021

By,

Ms. T. Boomadevi (2018Z05) T. Boomadevi

Ms. P. Nithya (2018Z18) P. Nithya

Ms. T. Selva Priya (2018Z29) Selva Priya T.

Ms. M. Vidhya Nivashini (2018Z38) M. Vidhya Nivashini

**A STUDY ON INSECT DIVERSITY IN  
SATHYA MOORTHY NAGAR, VADIPATTI,  
MADURAI**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MS. R. BRINDHAA (2018Z06)**

**MS. R. PAVITHRA (2018Z19)**

**MS. T. SEVUGAPRIYA (2018Z30)**

**MS. M. VIJITHRA (2018Z39)**

**Under the Guidance of**

**Dr. V. BHARATHY**



**DEPARTMENT OF ZOOLOGY  
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MADURAI- 625018**

**March, 2021**



## CERTIFICATE

This is to certify that this dissertation entitled "A STUDY ON INSECT DIVERSITY IN SATHIYA MOORTHY NAGAR, VADIPATTI, MADURAI" submitted by **R. Brindhaa** (2018Z06), R. Pavithra (2018Z19), P. Vijithra (2018Z39) and T. Sevugapriya (2018Z30) as a partial fulfillment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in 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. TAMILSELVI)

**Dr. A. TAMIL SELVI**  
Head, Dept. of Zoology  
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MADURAI-625 018



Signature of the guide

(Dr. V. Bharathy)

STATION: MADURAI

DATE: 30.3.2021

## DECLARATION

I do here by declare that this dissertation entitled A STUDY ON INSECT DIVERSITY IN SATHIYA MOORTHY NAGAR, VADIPATTI MADURAI Submitted to Fatima college. Madurai in partial fulfilment of requirement of the award of MASTER SCIENCE IN ZOOLOGY. Is a record of original project work done by me.I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

Place: Madurai

Signature of the candidate

*Brindhha*  
R.BRINDHAA ( 2018Z06 )

*R. Pavithra*  
R. PAVITHRA (2018Z19 )

*P. Vijithra*  
P. VIJITHRA ( 2018Z39 )

*Selvapriya*  
T.SEVUGAPRIYA ( 2018Z30 )

Date :30 .03.2021



# **BIODIVERSITY ASSESSMENT IN THE SELECTED SITES OF SOUTH TAMIL NADU**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**ELAVENI R (2018Z08)**

**PRINSLA Y (2018Z20)**

**SHALINI S (2018Z31)**

**VIMALA C (2018Z40)**

**Under the Guidance of**

**Dr. N. NAGARANI**

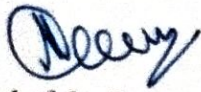


**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018**

**March, 2021**

## CERTIFICATE

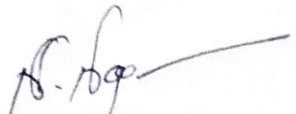
This is to certify that this dissertation entitled "**BIODIVERSITY ASSESSMENT IN THE SELECTED SITES OF SOUTH TAMIL NADU**" submitted by **Elaveni R (2018Z08)** Prinsla Y (2018Z20), Shalini S (2018Z31), Vimala C (2018Z40) as a partial fulfilment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in 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. TAMILSELVI)

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



Signature of the guide

(DR. N. NAGARANI)

STATION: MADURAI

DATE: 13.03.2021

## DECLARATION

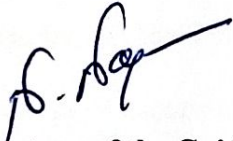
I do hereby declare that this dissertation entitled "**Biodiversity Assessment in the selected sites of South Tamil Nadu**" Submitted to Fatima college, Madurai in Partial fulfillment of requirement of the award of **BACHELOR OF SCIENCE IN ZOOLOGY**, is a record of original project work done by me. I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

**Place: Madurai**

**Date: 13.03.2021**

**Signature of the candidate**

R. Elavari  
Y. Prinsla  
S. Shalini  
C. Vimala.



**Signature of the Guide**

# **EFFECTIVE NEEM LITTER RECYCLING THROUGH VERMICOMPOSTING**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**KARTHIKA S (2018Z10)**

**RAJESHWARI S (2018Z22)**

**SHARMILA R (2018Z32)**

**MARIYA LINO LITISYA M (2018Z41)**

**Under the Guidance of**

**Dr. S. BARATHY**



**DEPARTMENT OF ZOOLOGY  
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MADURAI- 625018**

**March, 2021**

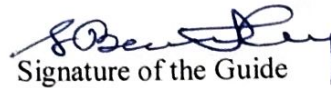
## CERTIFICATE

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This is to certify that this dissertation entitled "Effective neem litter recycling through vermicomposting" submitted by **S. Karthika**, S. Rajeshwari, R. Sharmila and M. Mariya Lino Litisya, as a partial fulfillment for the Degree of Bachelor of Science in Zoology is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020 in Fatima College (autonomous), Department of Zoology, Madurai-18. This project has not been submitted elsewhere for any other degree.

Station: Madurai

Date : 30.03.2021

  
Signature of the Guide

**Dr. S. Barathy**

  
Signature of the HOD

**Dr. A. Tamil Selvi**

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



## DECLARATION

---

We do hereby declare that this dissertation entitled “**Effective neem litter recycling through vermicomposting**” has been originally carried out by us under the guidance and supervision of **Dr. S. Barathy**, 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

By

Date : 30.03.2021

1. S. Karthika.
2. S. Rajeshwari
3. R. Sharmila
4. M. Mariya Lino Litiya

# **A STUDY ON BUTTERFLY FAUNA AT FATIMA COLLEGE CAMPUS**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**T.M KARTHIKA (2018Z11)**

**P. REVATHY (2018Z23)**

**S. SUBASRI (2018Z33)**

**Under the Guidance of**

**Mrs. J. THELMA**

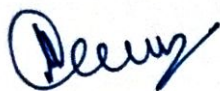


**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**



## CERTIFICATE

This is to certify that this dissertation entitled "A STUDY ON BUTTERFLY FAUNA AT FATIMA COLLEGE CAMPUS" submitted by T.M Karthika(2018Z11), P.Revathy(2018Z23) and S.Subasri(2018Z33) as a partial fulfillment for the degree of Bachelor of Science in Zoology is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.

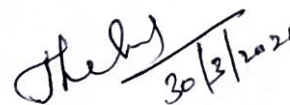


Signature of the Department Head

**Dr. A. TAMIL SELVI**  
Head, Department of Zoology  
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MADURAI - 625 018

(DR.A. TAMILSELVI)

Signature of the guide



(Mrs. J. THELMA)

STATION: MADURAI

DATE: 30.3.2021

## DECLARATION

We do hereby declare that this dissertation entitled "A STUDY ON BUTTERFLY FAUNA AT FATIMA COLLEGE CAMPUS" submitted to Fatima college, Madurai in Partial fulfillment of requirement of the award of **BACHELOR OF SCIENCE IN ZOOLOGY**, is a record of original project work done by us. We also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

STATION: MADURAI

DATE: 30.3.2021

Signature of the Student

T.M. Karthika.

(T.M.Karthika2018Z11)

P. Revathy

(P.Revathy2018Z23)

S. Subasri

(S.Subasri2018Z33)

# **SIMILARITY ANALYSIS OF SARS CORONA VIRUS WUHAN-HU-1 ISOLATE AND INDIAN (KERALA) ISOLATE**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**Ms. AISHWARYA. R (2018Z01)**

**Mrs. KEERTHI. G (2018Z13)**

**Ms. SARANYA. R (2018Z24)**

**Ms. SUGANYA. G (2018Z34)**

**Ms. DEEPA PRABHA. B(2017Z10)**

**Under the Guidance of**

**Dr. A. TAMIL SELVI**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018**

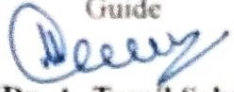
**March, 2021**

## CERTIFICATE

This is to certify that this project entitled "**SIMILARITY ANALYSIS OF SARS CORONA VIRUS 2 WUHAN-HU-1 ISOLATE AND INDIAN (KERALA) ISOLATE**" submitted by Ms.R. Aishwarya, **Mrs.G.Keerthi**, Ms.R.Saranya., Ms.G.Suganya and Ms.B. Deepa Prabha for the degree of bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the Post Graduate Department of Zoology, Fatima College (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree.

Date: **30.03.2021**

Station: Madurai

Guide  
  
(Dr. A. Tamil Selvi)

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

## DECLARATION

We do hereby declare that this work has been originally carried out by us under the guidance and supervision of Dr. A. Tamil Selvi, Assistant Professor & Head in the Post Graduate Department of Zoology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for any other degree.

Date: 30.03.2021

Station: Madurai

R. Aishwarya  
Ms. Aishwarya. R

G. Keerthi  
Mrs. Keerthi. G

R. Saranya  
Ms. Saranya. R

G. Suganya  
Ms. Suganya. G

B. Deepaprabha.  
Ms. Deepa Prabha. B



# **STUDY ON HUMAN ACID SPHINGOMYELINASE USING BIOINFORMATICS TOOLS**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
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**Submitted By**

**Ms. AKSHAYA R (2018Z02)**

**Ms. MAHADEVI S (2018Z15)**

**Ms. SARMILA M (2018Z25)**

**Ms. TAMILTHAI A (2018Z35)**

**Mrs. FAYISHA J (2015Z14)**

**Under the Guidance of  
Dr.Mrs. Antony Amala Jayaseeli,  
M.Sc, Ph.D, B.Ed, PGDBI, SLET**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**

## CERTIFICATE

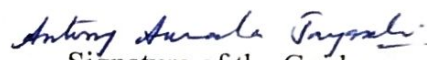
Dr.Mrs. Antony Amala Jayaseeli,  
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Assistant Professor in Zoology,  
Fatima College (Autonomous),  
Madurai - 625 018.

This is to certify that this Project entitled "COMPARITIVE STUDY ON HUMAN ACID SPHINGOMYELINASE – USING BIOINFORMATICS TOOLS" submitted by for the degree of Bachelor of Science is based on the results of studies carried out by me under my guidance and supervision in FATIMA COLLEGE (AUTONOMOUS) at the DEPARTMENT OF ZOOLOGY, MADURAI – 18. This project has not been submitted elsewhere for any other degree.



Head of the Department

(Dr. A. Tamil Selvi)

  
Signature of the Guide

(Dr.Mrs. Antony Amala Jayaseeli)

**Dr. A. TAMIL SELVI**  
Head, Dept. of Zoology  
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MADURAI-625 018  
Station: Madurai

Date: 30.03.2021



## DECLARATION

I do hereby declare that this dissertation entitled “**STUDY ON HUMAN ACID SPHINGOMYELINASE USING BIOINFORMATICS TOOLS**” has been originally carried out by her under the guidance and supervision of **Dr. Mrs. Antony Amala Jayaseeli** 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** 13.03.2021

**Signature of the Student**

R. Akshaya  
Mahadevi S  
M. Sarmila  
Tamithai A.  
Fayisha J

# **“A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA”**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MISS. J. AROCKIA VICTORIYA (2018Z03)**

**MISS. M. MUTHUMEENAKSHI (2018Z16)**

**MISS. S. SATHYADIVYADHARSHINI (2018Z27)**

**MISS. S. THENMOZHI (2018Z36)**

**Under the Guidance of**

**Dr. N. MALATHI**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**

## CERTIFICATE

This is to certify that this dissertation entitled “A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA” submitted by MS. J. Arockia Victoriya (2018Z03), MS. M. Muthumeenakshi (2018Z16), MS. S. Sathyadiviyadharshini (2018Z27) and MS. S. Thenmozhi (2018Z36) as a partial fulfillment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by her under my guidance and supervision during the academic year 2020-2021 in Fatima College (Autonomous), Department of Zoology, 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**  
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MADURAI-625 018



Signature of the Supervisor  
and Guide  
(Dr. Mrs. N. Malathi)

STATION: MADURAI

DATE: 30-03-2021.

## DECLARATION

I do hereby declare that this dissertation entitled "A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA" has been originally carried out by her 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.

1. J. Arockia victoriya
2. M. Muthu meenakshi
3. S. Sathyadivyaadharshini
4. S. Thenmozhi

STATION: MADURAI

Signature of the Student

DATE: 30-03-2021

J. Arockia Victoriya (2018Z03)

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S. Sathyadivyaadharshini (2018Z27)

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# **A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**Ms. ASNA FATHIMA. S (2018Z04)**

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**Ms. SATHYA. U (2018Z28)**

**Ms. THILAGAVATHI. E (2018Z37)**

**Under the Guidance of**

**Ms. T. MALAR MEENAKSHI**



**DEPARTMENT OF ZOOLOGY  
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**March, 2021**

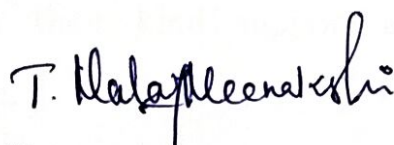


## CERTIFICATE

This is to certify that this Project entitled “A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES” submitted by Ms.S.Asna Fathima, Ms.A.Nancy Dayana, Ms.U.Sathya and Ms.E.Thilagavathi for the degree of Bachelor of Science is based on the results of studies carried out by them under my guidance and supervision in FATIMA COLLEGE (AUTONOMOUS) at the has not been submitted elsewhere for any other degree.

**Station: Madurai**

**Date:** 30.3.2021



**Signature of the Project Guide**

**(T. MALAR MEENAKSHI)**



**Signature of the Head of the Department**

**(Dr.A.TAMILSELVI)**

**Dr. A. TAMIL SELVI**  
Head, Dept. of Zoology  
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MADURAI-625 018

## DECLARATION

We do hereby declare that this dissertation entitled "A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES" submitted in partial fulfilment of Degree of Bachelor of Science in Zoology is a research work that has been originally done by us under the guidance and supervision of T. Malar Meenakshi, Assistant Professor in the 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: 30.3.2021**

### Signature of students

Ms. ASNA FATHIMA. S (2018Z04) *(Asna Fathima)*  
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Ms. SATHYA. U (2018Z28) *Sathya.U.*  
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**“BIODIVERSITY OF INSECTS  
(MADURAI AND SIVAGANGAI DISTRICT)”**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MS. T BOOMADEVI (2018Z05)**

**MS. P. NITHYA (2018Z18)**

**MS. T. SELVA PRIYA (2018Z29)**

**MS. M. VIDHYA NIVASHINI (2018Z38)**

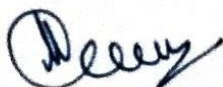
**Under the Guidance of  
DR. SR. BIJI CYRIAC, M. Sc., B. Ed., M. Phil., Ph.D**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**

## CERTIFICATE

This is to certify that this dissertation entitled "**Biodiversity of Insects (Madurai and Sivagangai District)**" submitted by Ms. T. Booma devi, **Ms. P. Nithya** Ms. T. Selva Priya, and Ms. M. Vidhya Nivashini as a partial fulfilment for the degree of Bachelor 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, during the academic year 2020 - 2021. This project work has not been submitted elsewhere for any other degree.



Head of the Department

(DR. A. TAMIL SELVI)



Signature of the Guide

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**Dr. A. TAMIL SELVI**  
FAT Head, Dept. of Zoology  
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MADURAI-625 018  
STATION: MADURAI

DATE: 13.03.2021



## DECLARATION

We do here by declare that this dissertation entitled “**BIODIVERSITY OF INSECTS (MADURAI AND SIVAGANGAI DISTRICT)**” has been originally carried out by us under the guidance and supervision of Dr. Sr. BijiCyriac, 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: 13.03.2021

By,

Ms. T. Boomadevi (2018Z05) T. Boomadevi

Ms. P. Nithya (2018Z18) P. Nithya

Ms. T. Selva Priya (2018Z29) Selva Priya T.

Ms. M. Vidhya Nivashini (2018Z38) M. Vidhya Nivashini



**A STUDY ON INSECT DIVERSITY IN  
SATHYA MOORTHY NAGAR, VADIPATTI,  
MADURAI**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
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**MS. R. BRINDHAA (2018Z06)**

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**Dr. V. BHARATHY**



**DEPARTMENT OF ZOOLOGY  
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MADURAI- 625018**

**March, 2021**

## CERTIFICATE

This is to certify that this dissertation entitled "A STUDY ON INSECT DIVERSITY IN SATHIYA MOORTHY NAGAR, VADIPATTI, MADURAI" submitted by R. Brindhaa (2018Z06), R. Pavithra (2018Z19), P. Vijithra (2018Z39) and T. Sevugapriya (2018Z30) as a partial fulfillment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in 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. TAMILSELVI)

**Dr. A. TAMIL SELVI**  
Head, Dept. of Zoology  
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MADURAI-625 018



Signature of the guide

(Dr. V. Bharathy)

STATION: MADURAI

DATE: 30.3.2021

## DECLARATION

I do here by declare that this dissertation entitled A STUDY ON INSECT DIVERSITY IN SATHIYA MOORTHY NAGAR, VADIPATTI MADURAI Submitted to Fatima college. Madurai in partial fulfilment of requirement of the award of MASTER SCIENCE IN ZOOLOGY. Is a record of original project work done by me.I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

Place: Madurai

Signature of the candidate

*Brindhha*  
R.BRINDHAA ( 2018Z06 )

*R. Pavithra*  
R. PAVITHRA (2018Z19 )

*P. Vijithra*  
P. VIJITHRA ( 2018Z39 )

*Selvapriya*  
T.SEVUGAPRIYA ( 2018Z30 )

Date :30 .03.2021

# **BIODIVERSITY ASSESSMENT IN THE SELECTED SITES OF SOUTH TAMIL NADU**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**ELAVENI R (2018Z08)**

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**VIMALA C (2018Z40)**

**Under the Guidance of**

**Dr. N. NAGARANI**



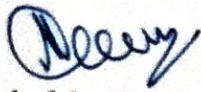
**DEPARTMENT OF ZOOLOGY  
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**MADURAI- 625018**

**March, 2021**

## CERTIFICATE

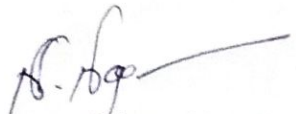
This is to certify that this dissertation entitled "**BIODIVERSITY ASSESSMENT IN THE SELECTED SITES OF SOUTH TAMIL NADU**" submitted by Elaveni R (2018Z08) **Prinsla Y (2018Z20)**, Shalini S (2018Z31), Vimala C (2018Z40) as a partial fulfilment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in 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. TAMILSELVI)

**Dr. A. TAMIL SELVI**  
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Signature of the guide

(DR. N. NAGARANI)

STATION: MADURAI

DATE: 13.03.2021



## DECLARATION

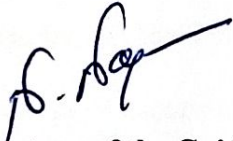
I do hereby declare that this dissertation entitled "**Biodiversity Assessment in the selected sites of South Tamil Nadu**" Submitted to Fatima college, Madurai in Partial fulfillment of requirement of the award of **BACHELOR OF SCIENCE IN ZOOLOGY**, is a record of original project work done by me. I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

**Place: Madurai**

**Date: 13.03.2021**

**Signature of the candidate**

R. Elavani  
Y. Prinsla  
S. Shalini  
C. Vimala.



**Signature of the Guide**

# **EFFECTIVE NEEM LITTER RECYCLING THROUGH VERMICOMPOSTING**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**KARTHIKA S (2018Z10)**

**RAJESHWARI S (2018Z22)**

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**MARIYA LINO LITISYA M (2018Z41)**

**Under the Guidance of**

**Dr. S. BARATHY**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018**

**March, 2021**

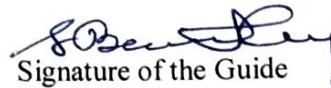
## CERTIFICATE

---

This is to certify that this dissertation entitled “Effective neem litter recycling through vermicomposting” submitted by S. Karthika, **S. Rajeshwari**, R. Sharmila and M. Mariya Lino Litisya, as a partial fulfillment for the Degree of Bachelor of Science in Zoology is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020 in Fatima College (autonomous), Department of Zoology, Madurai-18. This project has not been submitted elsewhere for any other degree.

Station: Madurai

Date : 30.03.2021

  
Signature of the Guide

**Dr. S. Barathy**

  
Signature of the HOD

**Dr. A. Tamil Selvi**

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

## DECLARATION

---

We do hereby declare that this dissertation entitled “**Effective neem litter recycling through vermicomposting**” has been originally carried out by us under the guidance and supervision of **Dr. S. Barathy**, 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

By

Date : 30.03.2021

1. S. Karthika.
2. S. Rajeshwari
3. R. Sharmila
4. M. Mariya Lino Litiya

# **A STUDY ON BUTTERFLY FAUNA AT FATIMA COLLEGE CAMPUS**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

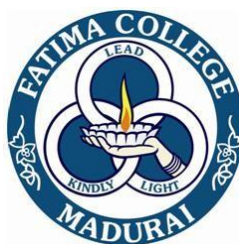
**T.M KARTHIKA (2018Z11)**

**P. REVATHY (2018Z23)**

**S. SUBASRI (2018Z33)**

**Under the Guidance of**

**Mrs. J. THELMA**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018**

**March, 2021**



## CERTIFICATE

This is to certify that this dissertation entitled "A STUDY ON BUTTERFLY FAUNA AT FATIMA COLLEGE CAMPUS" submitted by T.M Karthika(2018Z11), P.Revathy(2018Z23) and S.Subasri(2018Z33) as a partial fulfillment for the degree of Bachelor of Science in Zoology is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.



Signature of the Department Head

**Dr. A. TAMIL SELVI**  
Head, Department of Zoology  
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MADURAI - 625 018

(DR.A. TAMILSELVI)

Signature of the guide



(Mrs. J. THELMA)

STATION: MADURAI

DATE: 30.3.2021

## DECLARATION

We do hereby declare that this dissertation entitled "A STUDY ON BUTTERFLY FAUNA AT FATIMA COLLEGE CAMPUS" submitted to Fatima college, Madurai in Partial fulfillment of requirement of the award of **BACHELOR OF SCIENCE IN ZOOLOGY**, is a record of original project work done by us. We also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

STATION: MADURAI

DATE: 30.3.2021

Signature of the Student

T.M. Karthika.

(T.M.Karthika2018Z11)

P. Revathy

(P.Revathy2018Z23)

S. Subasri

(S.Subasri2018Z33)

**SIMILARITY ANALYSIS OF SARS CORONA VIRUS  
WUHAN-HU-1 ISOLATE AND INDIAN (KERALA)  
ISOLATE**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**Ms. AISHWARYA. R (2018Z01)**

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**Ms. SARANYA. R (2018Z24)**

**Ms. SUGANYA. G (2018Z34)**

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MADURAI- 625018**

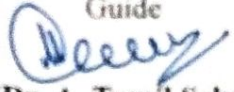
**March, 2021**

## CERTIFICATE

This is to certify that this project entitled "**SIMILARITY ANALYSIS OF SARS CORONA VIRUS 2 WUHAN-HU-1 ISOLATE AND INDIAN (KERALA) ISOLATE**" submitted by Ms.R. Aishwarya, Mrs.G.Keerthi, **Ms.R.Saranya**, Ms.G.Suganya and Ms.B. Deepa Prabha for the degree of bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the Post Graduate Department of Zoology, Fatima College (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree.

Date: **30.03.2021**

Station: Madurai

Guide  
  
(Dr. A. Tamil Selvi)

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

## DECLARATION

We do hereby declare that this work has been originally carried out by us under the guidance and supervision of Dr. A. Tamil Selvi, Assistant Professor & Head in the Post Graduate Department of Zoology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for any other degree.

Date: 30.03.2021

Station: Madurai

R. Aishwarya  
Ms. Aishwarya. R

G. Keerthi  
Mrs. Keerthi. G

R. Saranya  
Ms. Saranya. R

G. Suganya  
Ms. Suganya. G

B. Deepaprabha.  
Ms. Deepa Prabha. B



# **STUDY ON HUMAN ACID SPHINGOMYELINASE USING BIOINFORMATICS TOOLS**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

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**Ms. MAHADEVI S (2018Z15)**

**Ms. SARMILA M (2018Z25)**

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**Mrs. FAYISHA J (2015Z14)**

**Under the Guidance of  
Dr.Mrs. Antony Amala Jayaseeli,  
M.Sc, Ph.D, B.Ed, PGDBI, SLET**



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FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**

## CERTIFICATE

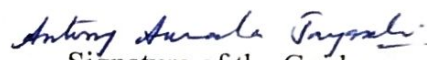
Dr.Mrs. Antony Amala Jayaseeli,  
M.Sc, Ph.D, B.Ed, PGDBI, SLET  
Assistant Professor in Zoology,  
Fatima College (Autonomous),  
Madurai - 625 018.

This is to certify that this Project entitled "COMPARITIVE STUDY ON HUMAN ACID SPHINGOMYELINASE – USING BIOINFORMATICS TOOLS" submitted by for the degree of Bachelor of Science is based on the results of studies carried out by me under my guidance and supervision in FATIMA COLLEGE (AUTONOMOUS) at the DEPARTMENT OF ZOOLOGY, MADURAI – 18. This project has not been submitted elsewhere for any other degree.



Head of the Department

(Dr. A. Tamil Selvi)

  
Signature of the Guide

(Dr.Mrs. Antony Amala Jayaseeli)

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

Date: 30.03.2021

## DECLARATION

I do hereby declare that this dissertation entitled “**STUDY ON HUMAN ACID SPHINGOMYELINASE USING BIOINFORMATICS TOOLS**” has been originally carried out by her under the guidance and supervision of **Dr. Mrs. Antony Amala Jayaseeli** 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** 13.03.2021

**Signature of the Student**

R. Akshaya  
Mahadevi S  
M. Sarmila  
Tamithai A.  
Fayisha J

# **“A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA”**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MISS. J. AROCKIA VICTORIYA (2018Z03)**

**MISS. M. MUTHUMEENAKSHI (2018Z16)**

**MISS. S. SATHYADIVYADHARSHINI (2018Z27)**

**MISS. S. THENMOZHI (2018Z36)**

**Under the Guidance of**

**Dr. N. MALATHI**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**

## CERTIFICATE

This is to certify that this dissertation entitled "**A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA**" submitted by MS. J. Arockia Victoriya (2018Z03), MS. M. Muthumeenakshi (2018Z16), **MS. S. Sathyadiviyadharshini (2018Z27)** and MS. S. Thenmozhi (2018Z36) as a partial fulfillment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by her under my guidance and supervision during the academic year 2020-2021 in Fatima College (Autonomous), Department of Zoology, 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  
**FATIMA COLLEGE (AUTONOMOUS)**  
MADURAI-625 018



**Signature of the Supervisor  
and Guide**  
(Dr. Mrs. N. Malathi)

**STATION: MADURAI**

**DATE: 30-03-2021.**



## DECLARATION

I do hereby declare that this dissertation entitled "A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA" has been originally carried out by her 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.

1. J. Arockia victoriya
2. M. Muthu meenakshi
3. S. Sathyadivyaadharshini
4. S. Thenmozhi

STATION: MADURAI

Signature of the Student

DATE: 30-03-2021

J. Arockia Victoriya (2018Z03)

M. Muthumeenakshi (2018Z16)

S. Sathyadivyaadharshini (2018Z27)

S. Thenmozhi (2018Z36)

# **A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**Ms. ASNA FATHIMA. S (2018Z04)**

**Ms. NANCY DAYANA. A (2018Z17)**

**Ms. SATHYA. U (2018Z28)**

**Ms. THILAGAVATHI. E (2018Z37)**

**Under the Guidance of**

**Ms. T. MALAR MEENAKSHI**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018**

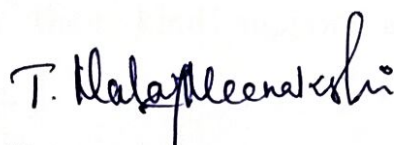
**March, 2021**

## CERTIFICATE

This is to certify that this Project entitled “A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES” submitted by Ms.S.Asna Fathima, Ms.A.Nancy Dayana, Ms.U.Sathya and Ms.E.Thilagavathi for the degree of Bachelor of Science is based on the results of studies carried out by them under my guidance and supervision in FATIMA COLLEGE (AUTONOMOUS) at the has not been submitted elsewhere for any other degree.

**Station: Madurai**

**Date:** 30.3.2021



**Signature of the Project Guide**

**(T. MALAR MEENAKSHI)**



**Signature of the Head of the Department**

**(Dr.A.TAMILSELVI)**

**Dr. A. TAMIL SELVI**  
Head, Dept. of Zoology  
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MADURAI-625 018

## DECLARATION

We do hereby declare that this dissertation entitled "A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES" submitted in partial fulfilment of Degree of Bachelor of Science in Zoology is a research work that has been originally done by us under the guidance and supervision of T. Malar Meenakshi, Assistant Professor in the 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: 30.3.2021**

### Signature of students

Ms. ASNA FATHIMA. S (2018Z04) *(Asna Fathima)*  
Ms. NANCY DAYANA. A (2018Z17) *Nancydiana*  
Ms. SATHYA. U (2018Z28) *Sathya.U.*  
Ms. THILAGAVATHI. E (2018Z37) *Thilagavathi*

**“BIODIVERSITY OF INSECTS  
(MADURAI AND SIVAGANGAI DISTRICT)”**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MS. T BOOMADEVI (2018Z05)**

**MS. P. NITHYA (2018Z18)**

**MS. T. SELVA PRIYA (2018Z29)**

**MS. M. VIDHYA NIVASHINI (2018Z38)**

**Under the Guidance of  
DR. SR. BIJI CYRIAC, M. Sc., B. Ed., M. Phil., Ph.D**

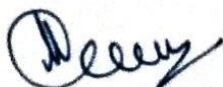


**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**



## CERTIFICATE

This is to certify that this dissertation entitled "**Biodiversity of Insects (Madurai and Sivagangai District)**" submitted by Ms. T. Booma devi, Ms. P. Nithya, **Ms. T. Selva Priya**, and Ms. M. Vidhya Nivashini as a partial fulfilment for the degree of Bachelor 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, during the academic year 2020 - 2021. This project work has not been submitted elsewhere for any other degree.



Head of the Department

(DR. A. TAMIL SELVI)



Signature of the Guide

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**Dr. A. TAMIL SELVI**  
FAT Head, Dept. of Zoology  
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MADURAI-625 018  
STATION: MADURAI

DATE: 13.03.2021

## DECLARATION

We do here by declare that this dissertation entitled “**BIODIVERSITY OF INSECTS (MADURAI AND SIVAGANGAI DISTRICT)**” has been originally carried out by us under the guidance and supervision of Dr. Sr. BijiCyriac, 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: 13.03.2021

By,

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Ms. P. Nithya (2018Z18) P. Nithya

Ms. T. Selva Priya (2018Z29) Selva Priya T.

Ms. M. Vidhya Nivashini (2018Z38) M. Vidhya Nivashini

**A STUDY ON INSECT DIVERSITY IN  
SATHYA MOORTHY NAGAR, VADIPATTI,  
MADURAI**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MS. R. BRINDHAA (2018Z06)**

**MS. R. PAVITHRA (2018Z19)**

**MS. T. SEVUGAPRIYA (2018Z30)**

**MS. M. VIJITHRA (2018Z39)**

**Under the Guidance of**

**Dr. V. BHARATHY**



**DEPARTMENT OF ZOOLOGY  
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MADURAI- 625018**

**March, 2021**

## CERTIFICATE

This is to certify that this dissertation entitled "A STUDY ON INSECT DIVERSITY IN SATHIYA MOORTHY NAGAR, VADIPATTI, MADURAI" submitted by R. Brindhaa (2018Z06), R. Pavithra (2018Z19), P. Vijithra (2018Z39) and T. Sevugapriya (2018Z30) as a partial fulfillment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in 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. TAMILSELVI)

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



Signature of the guide

(Dr. V. Bharathy)

STATION: MADURAI

DATE: 30.3.2021

## DECLARATION

I do here by declare that this dissertation entitled A STUDY ON INSECT DIVERSITY IN SATHIYA MOORTHY NAGAR, VADIPATTI MADURAI Submitted to Fatima college. Madurai in partial fulfilment of requirement of the award of MASTER SCIENCE IN ZOOLOGY. Is a record of original project work done by me.I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

Place: Madurai

Signature of the candidate

*Brindhha*  
R.BRINDHAA ( 2018Z06 )

*R. Pavithra*  
R. PAVITHRA (2018Z19 )

*P. Vijithra*  
P. VIJITHRA ( 2018Z39 )

*Selvapriya*  
T.SEVUGAPRIYA ( 2018Z30 )

Date :30 .03.2021



# **BIODIVERSITY ASSESSMENT IN THE SELECTED SITES OF SOUTH TAMIL NADU**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**ELAVENI R (2018Z08)**

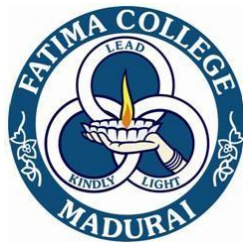
**PRINSLA Y (2018Z20)**

**SHALINI S (2018Z31)**

**VIMALA C (2018Z40)**

**Under the Guidance of**

**Dr. N. NAGARANI**



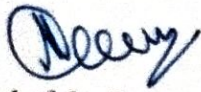
**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)**

**MADURAI- 625018**

**March, 2021**

## CERTIFICATE

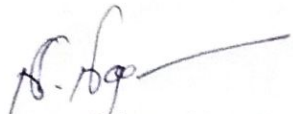
This is to certify that this dissertation entitled "**BIODIVERSITY ASSESSMENT IN THE SELECTED SITES OF SOUTH TAMIL NADU**" submitted by Elaveni R (2018Z08) Prinsla Y (2018Z20), **Shalini S (2018Z31)**, Vimala C (2018Z40) as a partial fulfilment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in 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. TAMILSELVI)

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



Signature of the guide

(DR. N. NAGARANI)

STATION: MADURAI

DATE: 13.03.2021

## DECLARATION

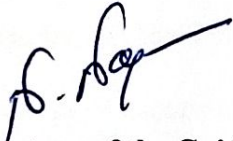
I do hereby declare that this dissertation entitled "**Biodiversity Assessment in the selected sites of South Tamil Nadu**" Submitted to Fatima college, Madurai in Partial fulfillment of requirement of the award of **BACHELOR OF SCIENCE IN ZOOLOGY**, is a record of original project work done by me. I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

**Place: Madurai**

**Date: 13.03.2021**

**Signature of the candidate**

R. Elavani  
Y. Prinsla  
S. Shalini  
C. Vimala.



**Signature of the Guide**

# **EFFECTIVE NEEM LITTER RECYCLING THROUGH VERMICOMPOSTING**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**KARTHIKA S (2018Z10)**

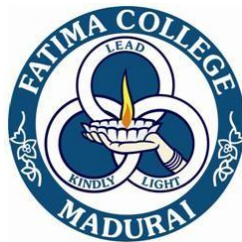
**RAJESHWARI S (2018Z22)**

**SHARMILA R (2018Z32)**

**MARIYA LINO LITISYA M (2018Z41)**

**Under the Guidance of**

**Dr. S. BARATHY**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018**

**March, 2021**

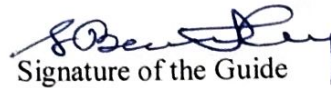
## CERTIFICATE

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This is to certify that this dissertation entitled “Effective neem litter recycling through vermicomposting” submitted by S. Karthika, S. Rajeshwari, **R. Sharmila** and M. Mariya Lino Litisya, as a partial fulfillment for the Degree of Bachelor of Science in Zoology is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020 in Fatima College (autonomous), Department of Zoology, Madurai-18. This project has not been submitted elsewhere for any other degree.

Station: Madurai

Date : 30.03.2021

  
Signature of the Guide

**Dr. S. Barathy**

  
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**Dr. A. Tamil Selvi**

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



## DECLARATION

---

We do hereby declare that this dissertation entitled “**Effective neem litter recycling through vermicomposting**” has been originally carried out by us under the guidance and supervision of **Dr. S. Barathy**, 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

By

Date : 30.03.2021

1. S. Karthika.
2. S. Rajeshwari
3. R. Sharmila
4. M. Mariya Lino Litiya

# **A STUDY ON BUTTERFLY FAUNA AT FATIMA COLLEGE CAMPUS**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**T.M KARTHIKA (2018Z11)**

**P. REVATHY (2018Z23)**

**S. SUBASRI (2018Z33)**

**Under the Guidance of**

**Mrs. J. THELMA**

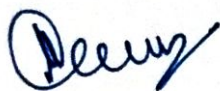


**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018**

**March, 2021**

## CERTIFICATE

This is to certify that this dissertation entitled "A STUDY ON BUTTERFLY FAUNA AT FATIMA COLLEGE CAMPUS" submitted by T.M Karthika(2018Z11), P.Revathy(2018Z23) and S.Subasri(2018Z33) as a partial fulfillment for the degree of Bachelor of Science in Zoology is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.



Signature of the Department Head

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

(DR.A. TAMILSELVI)

Signature of the guide



(Mrs. J. THELMA)

STATION: MADURAI

DATE: 30.3.2021

## DECLARATION

We do hereby declare that this dissertation entitled "A STUDY ON BUTTERFLY FAUNA AT FATIMA COLLEGE CAMPUS" submitted to Fatima college, Madurai in Partial fulfillment of requirement of the award of **BACHELOR OF SCIENCE IN ZOOLOGY**, is a record of original project work done by us. We also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

STATION: MADURAI

DATE: 30.3.2021

Signature of the Student

T.M. Karthika.

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(P.Revathy2018Z23)

S. Subasri

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# **SIMILARITY ANALYSIS OF SARS CORONA VIRUS WUHAN-HU-1 ISOLATE AND INDIAN (KERALA) ISOLATE**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**Ms. AISHWARYA. R (2018Z01)**

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**Ms. DEEPA PRABHA. B(2017Z10)**

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**Dr. A. TAMIL SELVI**



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**March, 2021**

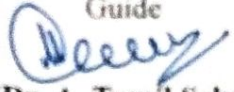


## CERTIFICATE

This is to certify that this project entitled "**SIMILARITY ANALYSIS OF SARS CORONA VIRUS 2 WUHAN-HU-1 ISOLATE AND INDIAN (KERALA) ISOLATE**" submitted by Ms.R. Aishwarya, Mrs.G.Keerthi, Ms.R.Saranya., Ms.G.Suganya and Ms.B. Deepa Prabha for the degree of bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the Post Graduate Department of Zoology, Fatima College (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree.

Date: 30.03.2021

Station: Madurai

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Dr. A. TAMIL SELVI  
Head, Dept. of Zoology  
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## DECLARATION

We do hereby declare that this work has been originally carried out by us under the guidance and supervision of Dr. A. Tamil Selvi, Assistant Professor & Head in the Post Graduate Department of Zoology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for any other degree.

Date: 30.03.2021

Station: Madurai

R. Aishwarya  
Ms. Aishwarya. R

G. Keerthi  
Mrs. Keerthi. G

R. Saranya  
Ms. Saranya. R

G. Suganya  
Ms. Suganya. G

B. Deepaprabha.  
Ms. Deepa Prabha. B

# **STUDY ON HUMAN ACID SPHINGOMYELINASE USING BIOINFORMATICS TOOLS**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

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**Ms. TAMILTHAI A (2018Z35)**

**Mrs. FAYISHA J (2015Z14)**

**Under the Guidance of  
Dr.Mrs. Antony Amala Jayaseeli,  
M.Sc, Ph.D, B.Ed, PGDBI, SLET**



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MADURAI- 625018  
March, 2021**

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M.Sc, Ph.D, B.Ed, PGDBI, SLET  
Assistant Professor in Zoology,  
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This is to certify that this Project entitled "COMPARITIVE STUDY ON HUMAN ACID SPHINGOMYELINASE – USING BIOINFORMATICS TOOLS" submitted by for the degree of Bachelor of Science is based on the results of studies carried out by me under my guidance and supervision in FATIMA COLLEGE (AUTONOMOUS) at the DEPARTMENT OF ZOOLOGY, MADURAI – 18. This project has not been submitted elsewhere for any other degree.



Head of the Department

(Dr. A. Tamil Selvi)



Signature of the Guide

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

Date: 30.03.2021

## DECLARATION

I do hereby declare that this dissertation entitled “**STUDY ON HUMAN ACID SPHINGOMYELINASE USING BIOINFORMATICS TOOLS**” has been originally carried out by her under the guidance and supervision of **Dr. Mrs. Antony Amala Jayaseeli** 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** 13.03.2021

**Signature of the Student**

R. Akshaya  
Mahadevi S  
M. Sarmila  
Tamithai A.  
Fayisha J



# **“A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA”**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MISS. J. AROCKIA VICTORIYA (2018Z03)**

**MISS. M. MUTHUMEENAKSHI (2018Z16)**

**MISS. S. SATHYADIVYADHARSHINI (2018Z27)**

**MISS. S. THENMOZHI (2018Z36)**

**Under the Guidance of**

**Dr. N. MALATHI**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**

## CERTIFICATE

This is to certify that this dissertation entitled “A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA” submitted by MS. J. Arockia Victoriya (2018Z03), MS. M. Muthumeenakshi (2018Z16), MS. S. Sathyadiviyadharshini (2018Z27) and MS. S. Thenmozhi (2018Z36) as a partial fulfillment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by her under my guidance and supervision during the academic year 2020-2021 in Fatima College (Autonomous), Department of Zoology, 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  
FATIMA COLLEGE (AUTONOMOUS)  
MADURAI-625 018



Signature of the Supervisor  
and Guide  
(Dr. Mrs. N. Malathi)

STATION: MADURAI

DATE: 30-03-2021.

## DECLARATION

I do hereby declare that this dissertation entitled "A COMPREHENSIVE STUDY ON THE PREVALENCE OF COVID ACROSS DIFFERENT STATES OF INDIA" has been originally carried out by her 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.

1. J. Arockia victoriya
2. M. Muthu meenakshi
3. S. Sathyadivyaadharshini
4. S. Thenmozhi

STATION: MADURAI

Signature of the Student

DATE: 30-03-2021

J. Arockia Victoriya (2018Z03)

M. Muthumeenakshi (2018Z16)

S. Sathyadivyaadharshini (2018Z27)

S. Thenmozhi (2018Z36)

# **A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**Ms. ASNA FATHIMA. S (2018Z04)**

**Ms. NANCY DAYANA. A (2018Z17)**

**Ms. SATHYA. U (2018Z28)**

**Ms. THILAGAVATHI. E (2018Z37)**

**Under the Guidance of**

**Ms. T. MALAR MEENAKSHI**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018**

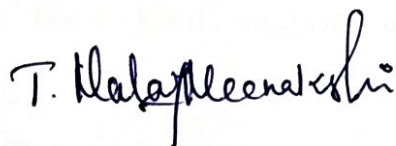
**March, 2021**

## CERTIFICATE

This is to certify that this Project entitled “A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES” submitted by Ms.S.Asna Fathima, Ms.A.Nancy Dayana, Ms.U.Sathya and Ms.E.Thilagavathi for the degree of Bachelor of Science is based on the results of studies carried out by them under my guidance and supervision in FATIMA COLLEGE (AUTONOMOUS) at the has not been submitted elsewhere for any other degree.

**Station: Madurai**

**Date:** 30.3.2021



**Signature of the Project Guide**

**(T. MALAR MEENAKSHI)**



**Signature of the Head of the Department**

**(Dr.A.TAMILSELVI)**

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



## DECLARATION

We do hereby declare that this dissertation entitled "A STUDY ON THE IMPACT OF EARTHWORMS IN THE DECOMPOSITION OF SOLID WASTES" submitted in partial fulfilment of Degree of Bachelor of Science in Zoology is a research work that has been originally done by us under the guidance and supervision of T. Malar Meenakshi, Assistant Professor in the 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: 30.3.2021**

### Signature of students

Ms. ASNA FATHIMA. S (2018Z04) *(Asna Fathima)*  
Ms. NANCY DAYANA. A (2018Z17) *Nancydiana*  
Ms. SATHYA. U (2018Z28) *Sathya.U.*  
Ms. THILAGAVATHI. E (2018Z37) *Thilagavathi*

**“BIODIVERSITY OF INSECTS  
(MADURAI AND SIVAGANGAI DISTRICT)”**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MS. T BOOMADEVI (2018Z05)**

**MS. P. NITHYA (2018Z18)**

**MS. T. SELVA PRIYA (2018Z29)**

**MS. M. VIDHYA NIVASHINI (2018Z38)**

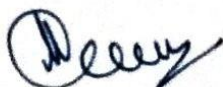
**Under the Guidance of  
DR. SR. BIJI CYRIAC, M. Sc., B. Ed., M. Phil., Ph.D**



**DEPARTMENT OF ZOOLOGY  
FATIMA COLLEGE (Autonomous)  
MADURAI- 625018  
March, 2021**

## CERTIFICATE

This is to certify that this dissertation entitled "**Biodiversity of Insects (Madurai and Sivagangai District)**" submitted by Ms. T. Booma devi, Ms. P. Nithya, Ms. T. Selva Priya, and **Ms. M. Vidhya Nivashini** as a partial fulfilment for the degree of Bachelor 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, during the academic year 2020 - 2021. 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. Sr. BIJI CYRIAC)

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STATION: MADURAI

DATE: 13.03.2021

## DECLARATION

We do here by declare that this dissertation entitled “**BIODIVERSITY OF INSECTS (MADURAI AND SIVAGANGAI DISTRICT)**” has been originally carried out by us under the guidance and supervision of Dr. Sr. BijiCyriac, 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: 13.03.2021

By,

Ms. T. Boomadevi (2018Z05) T. Boomadevi

Ms. P. Nithya (2018Z18) P. Nithya

Ms. T. Selva Priya (2018Z29) Selva Priya T.

Ms. M. Vidhya Nivashini (2018Z38) M. Vidhya Nivashini

**A STUDY ON INSECT DIVERSITY IN  
SATHYA MOORTHY NAGAR, VADIPATTI,  
MADURAI**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

**MS. R. BRINDHAA (2018Z06)**

**MS. R. PAVITHRA (2018Z19)**

**MS. T. SEVUGAPRIYA (2018Z30)**

**MS. M. VIJITHRA (2018Z39)**

**Under the Guidance of**

**Dr. V. BHARATHY**



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March, 2021**



## CERTIFICATE

This is to certify that this dissertation entitled "A STUDY ON INSECT DIVERSITY IN SATHIYA MOORTHY NAGAR, VADIPATTI, MADURAI" submitted by R. Brindhaa (2018Z06), R. Pavithra (2018Z19), P. Vijithra (2018Z39) and T. Sevugapriya (2018Z30) as a partial fulfillment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.



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Signature of the guide

(Dr. V. Bharathy)

STATION: MADURAI

DATE: 30.3.2021

## DECLARATION

I do here by declare that this dissertation entitled A STUDY ON INSECT DIVERSITY IN SATHIYA MOORTHY NAGAR, VADIPATTI MADURAI Submitted to Fatima college. Madurai in partial fulfilment of requirement of the award of MASTER SCIENCE IN ZOOLOGY. Is a record of original project work done by me.I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

Place: Madurai

Signature of the candidate

*Brindhha*  
R.BRINDHAA ( 2018Z06 )

*R. Pavithra*  
R. PAVITHRA (2018Z19 )

*P. Vijithra*  
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T.SEVUGAPRIYA ( 2018Z30 )

Date :30 .03.2021

# **BIODIVERSITY ASSESSMENT IN THE SELECTED SITES OF SOUTH TAMIL NADU**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

**Submitted By**

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**PRINSLA Y (2018Z20)**

**SHALINI S (2018Z31)**

**VIMALA C (2018Z40)**

**Under the Guidance of**

**Dr. N. NAGARANI**



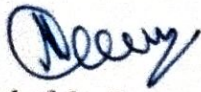
**DEPARTMENT OF ZOOLOGY  
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**MADURAI- 625018**

**March, 2021**

## CERTIFICATE

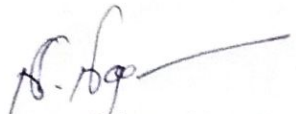
This is to certify that this dissertation entitled "**BIODIVERSITY ASSESSMENT IN THE SELECTED SITES OF SOUTH TAMIL NADU**" submitted by Elaveni R (2018Z08) Prinsla Y (2018Z20), Shalini S (2018Z31), **Vimala C (2018Z40)** as a partial fulfilment for the degree of **Bachelor of Science in Zoology** is based on the results of studies carried out by them under my guidance and supervision during the academic year 2020-2021 in Fatima College (Autonomous), Department of Zoology, Madurai-18. This project work has not been submitted elsewhere for any other degree.



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## DECLARATION

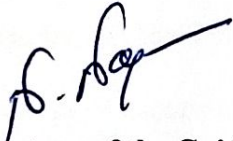
I do hereby declare that this dissertation entitled "**Biodiversity Assessment in the selected sites of South Tamil Nadu**" Submitted to Fatima college, Madurai in Partial fulfillment of requirement of the award of **BACHELOR OF SCIENCE IN ZOOLOGY**, is a record of original project work done by me. I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

**Place: Madurai**

**Date: 13.03.2021**

**Signature of the candidate**

R. Elavani  
Y. Prinsla  
S. Shalini  
C. Vimala.



**Signature of the Guide**



# **EFFECTIVE NEEM LITTER RECYCLING THROUGH VERMICOMPOSTING**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
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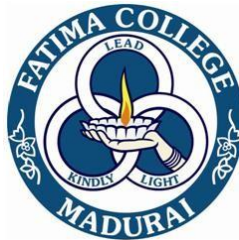
**RAJESHWARI S (2018Z22)**

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**MARIYA LINO LITISYA M (2018Z41)**

**Under the Guidance of**

**Dr. S. BARATHY**



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**March, 2021**

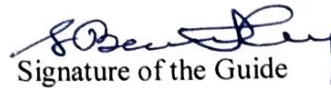
## CERTIFICATE

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This is to certify that this dissertation entitled “Effective neem litter recycling through vermicomposting” submitted by S. Karthika, S. Rajeshwari, R. Sharmila and M. Mariya Lino Litisya, as a partial fulfillment for the Degree of Bachelor of Science in Zoology is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020 in Fatima College (autonomous), Department of Zoology, Madurai-18. This project has not been submitted elsewhere for any other degree.

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## DECLARATION

---

We do hereby declare that this dissertation entitled “**Effective neem litter recycling through vermicomposting**” has been originally carried out by us under the guidance and supervision of **Dr. S. Barathy**, 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

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Date : 30.03.2021

1. S. Karthika.
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3. R. Sharmila
4. M. Mariya Lino Litiya

# **SIMILARITY ANALYSIS OF SARS CORONA VIRUS WUHAN-HU-1 ISOLATE AND INDIAN (KERALA) ISOLATE**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

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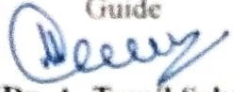
**March, 2021**

## CERTIFICATE

This is to certify that this project entitled "**SIMILARITY ANALYSIS OF SARS CORONA VIRUS 2 WUHAN-HU-1 ISOLATE AND INDIAN (KERALA) ISOLATE**" submitted by Ms.R. Aishwarya, Mrs.G.Keerthi, Ms.R.Saranya., Ms.G.Suganya and Ms.B. Deepa Prabha for the degree of bachelor of science is based on the result of studies carried out by them under my guidance and supervision in the Post Graduate Department of Zoology, Fatima College (Autonomous), Madurai-18. This project has not been submitted elsewhere for any other degree.

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## DECLARATION

We do hereby declare that this work has been originally carried out by us under the guidance and supervision of Dr. A. Tamil Selvi, Assistant Professor & Head in the Post Graduate Department of Zoology, Fatima College (Autonomous), Madurai-18 and this work has not been submitted elsewhere for any other degree.

Date: 30.03.2021

Station: Madurai

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Ms. Aishwarya. R

G. Keerthi  
Mrs. Keerthi. G

R. Saranya  
Ms. Saranya. R

G. Suganya  
Ms. Suganya. G

B. Deepaprabha.  
Ms. Deepa Prabha. B

# **STUDY ON HUMAN ACID SPHINGOMYELINASE USING BIOINFORMATICS TOOLS**

**Project submitted to Fatima College (Autonomous), Madurai -18  
In Partial Fulfilment of the requirements of the Award of  
The Degree of Bachelor of Science in Zoology**

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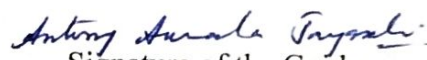
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This is to certify that this Project entitled "COMPARITIVE STUDY ON HUMAN ACID SPHINGOMYELINASE – USING BIOINFORMATICS TOOLS" submitted by for the degree of Bachelor of Science is based on the results of studies carried out by me under my guidance and supervision in FATIMA COLLEGE (AUTONOMOUS) at the DEPARTMENT OF ZOOLOGY, MADURAI – 18. This project has not been submitted elsewhere for any other degree.



Head of the Department

(Dr. A. Tamil Selvi)

  
Signature of the Guide

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MADURAI-625 018  
Station: Madurai

Date: 30.03.2021

## DECLARATION

I do hereby declare that this dissertation entitled “**STUDY ON HUMAN ACID SPHINGOMYELINASE USING BIOINFORMATICS TOOLS**” has been originally carried out by her under the guidance and supervision of **Dr. Mrs. Antony Amala Jayaseeli** 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** 13.03.2021

**Signature of the Student**

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Mahadevi S  
M. Sarmila  
Tamithai A.  
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