

PROJECT SUBMITTED TO UNIVERSITY OF PUNE

"TO STUDY DIVERSITY OF NOCTURNAL INSECTS FOUND IN WADZIRE VILLAGE, NASHIK, MAHARASHTRA, INDIA"

FOR

THE PARTIAL FULLFILMENT OF DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

YEAR

2021-2022



BY

MISS.AARATI CHANDRAKANT SANAP

UNDER GUIDENCE OF

Mrs. JAYSHREE SUDAMRAO SHINDE

P.G.DEPARTEMENT OF ZOOLOGY
G.M.D.COLLEGE SINNAR
SINNAR, NASHIK



CERTIFICATE

G.M.D.ARTS, B.W.COMMERCE, AND SCIENCE, COLLEGE, SINNAR

UNIVERSITY OF PUNE

This is to Certified that the Project

Work entitled

"TO STUDY DIVERSITY OF NOCTURNAL INSECTSFOUND IN WADZIRE VILLAGE, NASHIK ,MAHARASHTRA, INDIA"

Was satisfactorily carried out by Miss. Aarati Chandrakant Sanap of M.S.C. 2 under my supervision and guidance during the academic year 2021-2022. The present project is submitted for the partial fulfilment of M.S.C. Degree of the University of Pune.

Mrs. Jayshree S. Shinde

Project Guide

Examiner

DR.P.R. Kokate

Head, Dept. of Zoology

ACKNOWELEDGEMENT

It is a moment of great pleasure of me, in venturing out to present project. I would like to express my deep sense of gratitude toward my project guide *Mrs.* Jayshree Sudamrao Shinde for advice, encouragement and discussion throughout project work, which was very valuable.

I would also like to extent my gratitude towards our respected principle P.V.Rasal for providing facilities.

I am equally thankful to our Head Of Dept. Dr. P. R. Kokate for providing laboratory facilities during the project work.

I can't forget the help provided by respected family members, specially my brother.

P.G.Department of Zoology

Sinnar College, Sinnar

Miss.Sanap Aarati Chandrakant.



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SAVITRIBAI PHULE UNIVERSITY, PUNE

FOR THE FULFILLMENT OF DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

STUDY OF DUNG BEETLE (Scarabaeidae) AND ASSOCIATED INSECTS IN COW DUNG.

BY Miss. ARKHADE RUPALI DATTATRAY

UNDER THE GUIDANCE OF

Smt. D. V. Jangam

J. S. hin de

Place of research work



P.G. DEPARTMENT OF ZOOLOGY G.M.D ARTS,AND B.W. COMMERS AND SCIENCE COLLAGE SINNAR

APRIL 2021-2022



CERTIFICATE

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

This is to certify that the work incooperated in the dissertation entitled

STUDY OF DUNG BEETLE (<u>Scarabaeidae</u>) ASSOCIATED INSECTS IN COW DUNG

We satatisfactioly carried out by miss. ARKHADE RUPALI DATTATRAY Of MscII she is bonafied student iof this collage. She has completed this project under my supervision and guidance during year 2021-2022 this project work submitted by her is original and scientific information obatained other source have been acknowledged.

Joinald 25-10512022 J.S. Shinde Smt. D. V. Jangam

examiner

Associated professor

G.M.D. Are the Commerce and Science College, Sinnat

Head of dept. of zoology

Project guide

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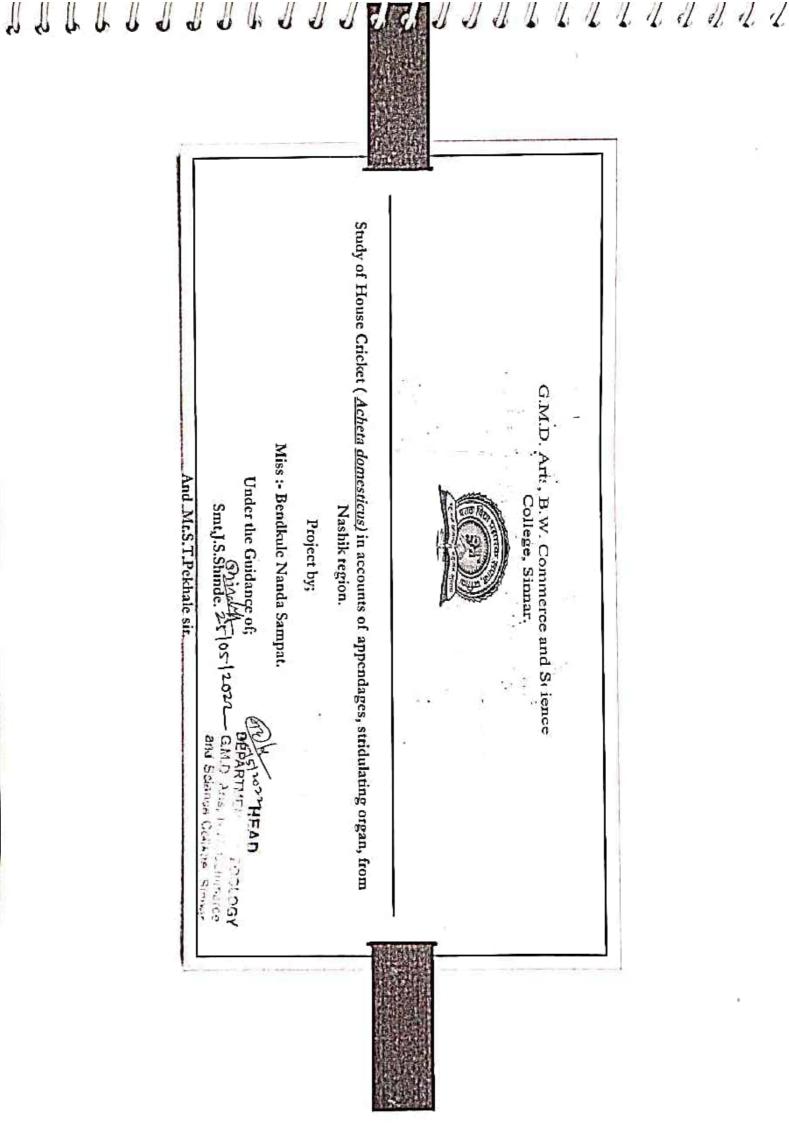
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A PROJECT REPORT ON STUDY OF THE LUMPY SKIN DISEASE ANIMAL

Submitted by

Mr.Borhade Vishal Bharat

(Under the guidance mr.chandore sir.)

In partial fulfillment for the award of the degree

Qf

Master of science in Zoology

G.M.D. Arts, B.W. Commerce and science collage

Sinner, Nashik



Savitribai phule pune university, Pune 411 007

2021-22



G.M.D. Arts, B.W. Commerce and Science College Sinnar, Nashik

DEPARTMENT OF ZOOLOGY

CHERRINALATE

CERTIFICATE This is to certify that this project report study of the lumpy skin disease animal is the bonfire work of Mr Borhade Vishal Bharat of M.Sc. II during the academic year 2021-2022 who carried out the project work under my supervision.

PROJECT GUIDE

Mr. Chandore siz 5 los 122

SMT. J.s ohinde

INTERNAL EXAMINER

Department of Zoology

Dr. s.t pekhie

AMD. Arts, 6 W. Common and Science College, Sin

EXTERNAL EXAMINER



SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE FOR THE FULFILLMENT OF DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

EFFECT OF ALTERED TEMPERATURE ON PREDATORY BEHAVIOUR OF LADY BIRD BEETLE (Hippodamia Variegata)

BY MISS. GADAKH POOJA ARJUN

UNDER THE GUIDANCE OF Smt. D.V. Jangam

Place of research work



P.G. Department of Zoology
G.M.D. ARTS, B.W. COMMERCE AND SCIENCE
COLLEGE SINNAR

APRIL 2021-22



CERTIFICATE

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

This is to certify that the work incorporated in the dissertation entitled

EFFECT OF ALTERED TEMPERATURE ON PREDATORY BEHAVIOUR OF LADY BIRD BEETLE

(Hippodamia Variegata)

We satisfactory carried out by Miss. Gadakh Pooja Arjun of MSCII she is bonafied student of this collage. She has completed this project under my supervision and guidance during year 2021-22 this project work submitted by her is original and scientific information obtained other source have been acknowledged.

Smt. D.V. Jangam

Project Guide

Examiner

S.T. Pekhale

(Associate Fasser)

Head of depto of Zoology

G.M.D. Art. B.W. Commerce and Science College, Sinnar

Certificate

G.M.D.Arts, B.W.Commerce and Science College, Sinnar

Maharashtra 422103

Pune university

This is to certify that the project work entitled

"Type of Snail of Shells"

Was satisfactorily carried out by Ms. Gangurde Shweta Mohanrao of M.Sc. II under my supervision and guidance during the academic year 2021-22. The present project is submitted for the partial fulfillment of M.Sc. Degree of the University of Pune.

Prof. L. S. Chandore

Project guide

Examiner

Dr. P. R. Kokate

DEPARTMENT OF ZOON OGY

G.M.D. Aris, B.W. Commerce

Acknowledgement

It is the movement of great pleasure for me, in venturing out to present project. I would like to express my deep sense of gratitude towards my project guide for advice, encouragement and discussion throughout the project work, which was valuable

I would also like to extend my gratitude our respected principal Dr. P.V. Rasal for providing facilities.

I am equally thankful to our Head of the Dr. P. R.Kokate for providing laboratory facilities during the project work.

I can't forget the sincere help extended by our respected professors L. S. Chandore of zoology Department. I would also like to thank to my classmates & laboratory staff for their king help & cooperation.

I can't forget the help provided by my respected family members.

P.G. Department of zoology

G.M.D.Arts, B.W.Commerce and Science College, Sinnar

Ms. Gangurde Shweta Mohanrao

Declaration

I hereby declare that. The project entitled is an outcome of own efforts under the guidance of Prof. L. S. Chandore The project is submitted to the university of pune. For the partial fulfillment of the Master of science examination on 2021-22.

I also declare that this project report has not been previously submitted to any other university.

Date: -

Place: -

Ms. Gangurde Shweta Mohanrao

A PROJECT REPORT ON STUDY OF LIFE CYCLE OF CROP PEST

Submitted by

Mr. Jadhav krishna vitthal

(Under the guidance Smt J.S.shinde)

In partial fulfillment for the award of the degree

Of

Master of science in Zoology

G.M.D. Arts , B.W. Commerce and science collage

Sinner, Nashik



Savitribai phule pune university, Pune 411 007

APRIL 2021-2022



G.M.D. Arts, B.W. Commerce and Science College Sinnar, Nashik

DEPARTMENT OF ZOOLOGY

CRETTURECATE

of crop pest" is the bonfire work of "Mr Jadhav krishna vitthal" of M.Sc. II during the academic year 2021-2022 who carried out the project work under my supervision.

PROJECT GUIDE

Smt .J .s.shinde

INTERNAL EXAMINER

Department of Zoology

Prof.S.T.Pekhale

DEPARTMENT OF ZOOLOGY C.M.D. Aris, B.W. Commerce and Science College, Singar

EXTERNAL EXAMINER



SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

FOR THE FULFILLMENT OF

"COMPARATIVE STUDY OF PHYSICOCHEMICAL PARAMETER OF VARIOUS WATER BODY IN SINNAR TAHASIL, NASHIK (M.S) INDIA"

DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

BY

MS. Jayshri Madhukar Daware

UNDER THE GUIDANCE OF

Prof.V.S.Varpe

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PLACE OF RESEARCH WORK

P.G.DEPARTMENT OF ZOOLOGY

G.M.D ARTS, AND B.W. COMMERCE AND SCIENCE COLLEGE, NASHIK.

APRIL 2021-2022



SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

CERTIFICATE

This is certify that the work incorporated in the dissertation entitled "COMPARATIVE STUDY OF PHYSICOCHEMICAL PARAMETER OF VARIOUS WATER BODY IN SINNAR TAHASIL, NASHIK (M.S.) INDIA" Was satisfactorily carried out by Ms. Jayshri Madhukar Daware. Of M.Sc. II. She is bonafide student of this college. She has completed this project under the my supervision and guidance during academic year 2021-2022. This project work submitted by her original and the scientific information's obtained from other sources have been duly acknowledged.

Prof.V.S.Varpe

Project Guide

Examiner

DEPARTMENTEDE OF OCULOGY
G.M.D. Arts, B.W. Commerce
and Science College, Sinnar

ACKNOWLEDGMENT

It gives me great pleasure to take the opportunity to express my sincere thanks to my research

guide Prof. V.S.Varpe. for his encouragement, guidance, his constructive suggestions and all sorts

of help ever since the very inception of the study.

I am thankful to Dr. P.V.Rasal, Principal, G.M.D.College, Sinnar for providing necessary

facilities to carry out project work. I equally thankful to the Dr.P.R.Kokate Head of the Department

of Zoology for providing laboratory facilities and guidance in completing the project work. I express

my thanks to all my respected teachers and non-teaching staff of Department of Zoology for all the

help and kind co-operation during the project.

I am very thankful to all my classmate specially Shubhangi Khute, Prachi Sonawane,

Kajal Avhad, Rohini Gadekar for their continuous support and enjoyable help throughout the

year.

I am greatly indebted to my parents for their continuous support, wholehearted

encouragement, funding all my education and project work and constant source of inspiration in

each step of my life.

Finally, here I take an opportunity of thanks to all wishes for their compliments.

Place: P.G.Dept.of Zoology

G.M.D. College, Sinnar

Date: 23.05.2022

Ms. Jayshri Madhukar Daware

M.Sc.II (Zoology)

3



SAVITRIBAI PHULE PUNE UNIVERSITY, PUNEFOR THE FOR THE FULLFILMENT OF

DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

"STUDY ON MORPHOLOGICAL ASPECTS AND LIFE CYCLE STAGES OF SQUASH BUG FROM VILLAGE JAMGOAN, SINNAR TAHSIL"

BY

MS.KAJAL SHIVAJI AVHAD

UNDER THE GUIDANCE OF

ASSOCIATE PROF.S.T.PEKHALE

PLACE OF REASEARCH WORK

P.G. DEPARTMENT OF ZOOLOGY

G.M.D ARTS, B.W.COMMERCE AND SCIENCE COLLEGE,

NASHIK

APRIL 2021-2022



CERTIFICATE

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

dissertation This is to certify that the work incorporated the in **OF** entitled"STUDIES **ASPECTS BEHAVIOURAL** AND FRESHWATER **SARADWADI OSTRACODA FROM** JAMGOAN DAM, (SINNAR TAHSHIL)"Was satisfactorily carried out by Ms.Rohini Popat Gadekar. of M.Sc.IIShe is bonafide student of this college. She has completed this project under thesupervision and guidance during academic year 2021- 2022. This projectwork submitted by her original and the scientific information's obtained fromother sources have been duly acknowledgement.

Prof. S.T. Pekhale

(Associate professor)

Project guide

Examiner

Dr.P.R.Kokate

Head Dept of Zoology

ACKNOWLEDGMENT

It gives me great pleasure to take the opportunity to express my sincere thanks to my research guide **Associate.prof.S.T.Pekhale** for his encouragement, guidance his constructive suggestion and all sorts of help ever since the very inception of the study.

Iamthankfulto Dr.P.V.Rasal, principal, G.M.DArtsB.W.Commer ceAnd Science College, Sinnar for providing necessary facilities to carry out project work. I equally thankful to the Dr.P.R.Kokate, Head of the Department of Zoology for providing laboratory facilities and guidance in completing the project work. I express my thanks to all my respected teachers and staff of Department of Zoology for all the help and kind co-operation during the project.

I am very thankful to all my classmates for their continuous support and enjoyable help throughout the year.

I am greatly indebted to my parents for their continuous support, wholehearted encouragement, funding all my education and project work and constant source of inspiration in each step of my life.

Finally, here I take an opportunity of thanks to all wishes for their compliments.

Place: P.G.Deptof Zoology

G.M.D.College, Sinnar

Date: 23.05.2022

Ms.kajal Shivaji Avhad M.Sc.II(Zoology)



SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

FOR THE FULFILLMENT OF

DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

"FRESHWATER ORGANISM BIODIVERSITY OF SARDWADI DAM IN NASHIK DISTRICT MAHARASHTRA, INDIA"

BY

MS. KHUTE SHUBHANGI RAJENDRA

UNDER THE GUIDANCE OF

Smt. J. S. Shinde

PLACE OF RESEARCH WORK



P.G.DEPARTMENT OF ZOOLOGY

G.M.D ARTS, AND B.W. COMMERCE AND SCIENCE COLLEGE, NASHIK.

APRIL 2021-2022

ACKNOWLEDGMENT

It gives me great pleasure to take the opportunity to express my sincere thanks to my research guide Smt. T.S. Shinde. for his encouragement, guidance, his constructive suggestions and all sorts of help ever since the very inception of the study.

I am thankful to **Dr. P.V.Rasal**, Principal, G.M.D College, Sinnar for providing necessary facilities to carry out project work. I equally thankful to the **Associate. Prof. S.T.Pekhale**, Head of the Department of Zoology for providing laboratory facilities and guidance in completing the project work. I express my thanks to all my respected teachers and non-teaching staff of Department of Zoology for all the help and kind co-operation during the project.

I am greatly indebted to my parents for their continuous support, wholehearted encouragement, funding all my education and project work and constant source of inspiration in each step of my life.

Finally, here I take an opportunity of thanks to all wishes for their compliments.

Place: P.G.Dept.of Zoology

G.M.D. College, Sinnar

Date: 19.05.2022

Ms.Khute Shubhangi Rajendra

M.Sc.II(Zoology)

A PROJECT REPORT ON

Lady Bug Beetle; A friend of farmar a survey study

Submitted by

Mr. Murkute Tushar Namdev

(Under the guidance of Ms. Arati Tidame)

In partial fulfillment for the award of the degree

Of

Master of science in Zoology

G.M.D. Arts , B.W. Commerce and science collage

Sinner, Nashik



Savitribai phule pune university, Pune 411 007

2021-2022



G.M.D. Arts, B.W. Commerce and Science College Sinnar, Nashik

DEPARTMENT OF ZOOLOGY

CERTIFICATE

of Lady Bug Beetle" is the bonfire work of "Mr Murkute Tushar Namdev of M.Sc. II during the academic year 2020-2021 who carried out the project work under my supervision.

PROJECT GUIDE

Ms. Arati Tidame

INTERNAL EXAMINER

Department of Zoology

Ass.prof S.I. Phekhale

DEPARTMENT OF ZOOLOGY G.M.D. Arts, b. W. Commerce and Science College, Sinnar

EXTERNAL EXAMINER

STUDIES ON APHIDS, THE MOST DESTRUCTIVE INSECT PEST OF CROP PLANT

PROJECT SUBMITTED TO SAVITRIBAI PHULE PUNE UNIVERSITY



FOR THE PARTIAL FULFILLMENT OF DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

YEAR **2021 – 2022**

BY
MISS. PATHADE KAJAL BANDU

UNDER GUIDANCE OF SMT. J. S. SHINDE



P.G. DEPARTMENT OF ZOOLOGY G.M.D COLLEGE SINNAR SINNAR, NASHIK



CERTIFICATE

G.M.D. Arts, Commerce B.W. Science College Sinnar

SAVITRIBAI PHULE PUNE UNIVERSITY

This is to certify that the project work entitled

STUDIES ON APHIDS, THE MOST DESTRUCTIVE INSECT PEST OF CROP PLANT

Was satisfactorily carried out by Miss. Pathade Kajal Bandu of M.Sc. II under my supervision and guidance during the academic year 2021-2022. The present project is submitted for the partial fulfillment of M.Sc. Degree of the University Of Pune.

Asst. Prof.. J. S. S

Project Guide

Examiner

DEPARTMENT OF ZOOLOGY GWeld, ADept. of Zoologyce and Science College, Sinnar

"STUDY OF SOME ASPECTS OF OLEANDRE APHID (Aphis nerii) TREATED WITH CAMPHOR OIL"

Project Submitted To



SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

For The Fulfillment of

Degree of Master of Science in ZOOLOGY

By

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Miss. Prachi Sharad Sonawane

Under The Guidance Of

Smt. Deepika Vishwanath Jangam

Center



G. M. D. ARTS, B.W. COMMERCE AND SCIENCE COLLEGE SINNAR
April May 2022

CERTIFICATE

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

This is to certify that the work incorporated in the dissertation

"STUDY OF SOME ASPECTS OF OLEANDER APHID (Aphis nerii) TREATED BY CAMPHOR OIL."

Was satisfactorily carried out by Miss. Prachi Sharad Sonawane

Of M.Sc.II. She is bonafide student of this collage. She has completed this project under my supervision and guidance during year 2021-2022. This project work submitted by her is original and the scientific information obtained other sources have been acknowledged.

Project Guide

and Science College, Sinnar

<u>ACKNOWLEDGEMENT</u>

It gives me a great pleasure to take the opportunity to express my sincere thanks to my project guide, **Smt. D. V. Jangam.** For her encouragement, guidance, her constructive suggestions and all sorts of help since the very inception of study.

I am thankful to **Dr. P. V. Rasal**, principle of G. M. D. Arts B.W. Commerce, and Science Collage, Sinnar for providing necessary facilities to carry out project work. I equally thankful to the **Dr. P. R. Kokate**, Head of Department of Zoology for providing laboratory facilities and guidance in completing the above project work. I express my thanks to all my respected teacher and non-teaching staff of Department of Zoology for all the help and kind co-operating during the project time.

I am very thankful to my friends specially Kute Shubhangi, Gadekar Rohini and Daware Jayshri for their continuous support and enjoyable help throughout the year.

I am greatly thankful to my parents for their continuous support, encouragement, funding all my education and project work and constant source of inspiration in each step of my life.

Place: P.G.Dept. of Zoology

G.M.D. Collage, Sinnar.

Miss. Sonawane Prachi Sharad

Date:

M.Sc.II (Zoology)



SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

FOR THE FOR THE FULLFILMENT OF DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

"STUDIES ON BEHAVIOURIAL ASPECTS OF FRESHWATER OSTRACODA FROM SARADWADI AND JAMGOAN DAM, (SINNAR TAHSIL)"

BY

MS.ROHINI POPAT GADEKAR

UNDER THE GUIDANCE OF

ASSOCIATE PROF.S.T.PEKHALE

PLACE OF REASEARCH WORK

P.G. DEPARTMENT OF ZOOLOGY
G.M. D ARTS, B.W. COMMERCE AND SCIENCE COLLEGE,

APRIL 2021-2022

NASHIK



CERTIFICATE

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

dissertation to certify that the work incorporated the in This is **ASPECTS** OF **BEHAVIOURAL** entitled"STUDIES OF **SARADWADI** AND FROM FRESHWATER **OSTRACODA** JAMGOAN DAM, (SINNAR TAHSHIL)"Was satisfactorily carried out by Ms.Rohini Popat Gadekar, of M.Sc. II She is honafide student of this college. She has completed this project under thesupervision and guidance during academic year 2021- 2022. This projectwork submitted by her original and the scientific information's obtained fromother sources have been duly acknowledgement.

Prof. S.T. Pekhale

(Associate professor)

Project guide

Examiner

Dr. P. R. Kokate

Head Dept of Zoology

ACKNOWLEDGMENT

It gives me great pleasure to take the opportunity to express my sincere thanks to my research guide Associate.prof.S.T.Pekhale for his encouragement, guidance his constructive suggestion and all sorts of help ever since the very inception of the study.

B.W.Commerce And Science College, Sinnar for providing necessary facilities to carry out project work. I equally thankful to the Dr.P.R.Kokate, Head of the Department of Zoology for providing laboratory facilities and guidance in completing the project work. I express my thanks to all my respected teachers and staff of Department of Zoology for all the help and kind co-operation during the project.

I am very thankful to all my classmates specially **Kajal Avhad**, **Shubhangi Khute**, for their continuous support and enjoyable help throughout the year.

I am greatly indebted to my parents for their continuous support, wholehearted encouragement, funding all my education and project work and constant source of inspiration in each step of my life.

Finally, here I take an opportunity of thanks to all wishes for their compliments.

Place: P.G.Deptof Zoology

G.M.D.College, Sinnar

Date: 23.05.2022

Ms.Rohini Popat Gadekar M.Sc.II(Zoology)

G.M.D. Arts, B.W. Commerce and Science College, Sinnar.



This is to certify that the work incorporated in the Dissertation entitled "To study House Cricket (AchetoDomesticus)" Was satisfactorily carried out by Mrs. Sanap Saras wati Rameshof MSc II Degree of Savitribai Phule Pune University.

She is bonafied student of this college. She has completed this project under my supervision and guidance during academic year 2021-22. This project work submitted by her original and the scientific information's obtained from other sources have been duly acknowledgement.

Mrs. Jayshree S. Shinde

Project Guide

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External Examiner

P. R. Kokate

HOD

ACKNOWLEDGEMENT

I would like to express my special thanks of gratitude and deep regards to my guide Mrs. Jayshree S. Shinde, who gave me the golden opportunity to pursue this dissertation entitled "To study House Cricket (Acheto Domesticus)". I have tried my best in this dissertation; however, she provided an exemplary guidance, monitoring and constant encouragement throughout the course. My deepest sense of gratitude to God, who guided and gave me the strength and abilities to complete this project work successfully.

I am also extremely grateful to Dr. P. R. Kokate, HOD, Department of Zoology for the technical guidance. I also thank Principal Dr. P. V. Rasalfor motivation to do this work.

Surve

Mrs. Saraswati Ramesh Sanap

P. G. Zoology Department Sinnar College Sinnar.

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SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

FOR THE FULFILLMENT OF
DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

"ESTIMATION OF PROTEIN FROM VARIOUS BODY PART OF MACROBRANCHIUM ROSENBERGII"

BY

MS. SATPUTE JYOTI CHANDRABHAN

UNDER THE GUIDANCE OF ASSI. PROF. S. S. BHAMARE

PLACE OF RESEARCH WORK



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P.G. DEPARTMENT OF ZOOLOGY
G.M.D ARTS, AND B.W. COMMERCE AND SCIENCE COLLEGE,
NASHIK.

APRIL 2021-2022



G.M.D ARTS, AND B.W. COMMERCE AND SCIENCE COLLEGE, NASHIK.

CERTIFICATE

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

This is certify that the work incorporated in the dissertation entitled

"ESTIMATION OF PROTEIN FROM VARIOUS BODY PART OF MACROBRANCHIUM ROSENBERGII"

Was satisfactorily carried out by Ms Satpute Jyoti Chandrabhan. Of M.Sc. II. She is bonafide student of this college. She has completed this project under the supervision and guidance during academic year 2021-2022. This project work submitted by her original and the scientific information's obtained from other sources have been duly acknowledged.

Assi. prof. S. S.Bhamare

Project Guide

Only Williams 27/05/2012 Examiner Asso.Prof.S.T.Phekhale

G.M.D. Arts, E.W. Commerce and Science College, Sinnar

ACKNOWLEDGMENT

It gives me great pleasure to take the opportunity to express my sincere thanks to my research guide Assi. prof. S.S Bhamare for his encouragement, guidance, his constructive suggestions and all sorts of help ever since the very inception of the study.

I am thankful to **Dr. P.V.Rasal**, Principal, G.M.D College, Sinner for providing necessary facilities to carry out project work. I equally thankful to the **Assoc.Prof.S.T.Phekhale**, Head of the Department of Zoology for providing laboratory facilities and guidance in completing the project work. I express my thanks to all my respected teachers and non-teaching staff of Department of Zoology for all thehelp and kind co-operation during the project.

I am greatly indebted to my parents for their continuous support, wholehearted encouragement, funding all my education and project work and constant source of inspiration in each step of my life.

Finally, here I take an opportunity of thanks to all wishes for their compliments.

Place: P.G.Dept.of Zoology

G.M.D. College, Sinnar

Date: 14.05.2022

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Ms. Satpute Jyoti Chandrabhan
M.Sc.II(Zoology)



SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

CERTIFICATE

This is certify that the work incorporated in the dissertation entitled GTUDY ON MORPHOLOGICAL ASPECT OF DRUG STORE BEETLE (STEGOBIUM

PANICEUM, FAMILY ANOBIIDAE) was satisfactority carried out by MassirsAT
SHITAL DIPAK Of M.Sc. II. She is bonafide student of this college. She has completed this
project under the supervision and guidance during academic year 2021-2022. This project
work submitted by her original and the scientific information's obtained from other sources
have been duly acknowledged.

O Prof. S.T.Pekhale

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G

Project Guide

Grand Tron

Dr. P.R.Kokate

G.M.D. Arts, b.v. Commerce and Science College, Sinnar

ACKNOWLEDGEMENT

It gives me great pleasure to take the opportunity to express my sincere thanks to my research guide **prof. S.T. Pekhale sir.** For his encouragement guidance his constructive suggestions and all sorts help ever since the very inception of the study

I am thankful to **Dr.P.V Rasal**, **principal**, G.M.D college sinnar for providing necessary facilities to carry out project work I equally thankful to the **Dr.P.R.kokate** head of the department of zoology for providing laboratory facilities and guidance vin completing the project work. I express my thanks to all my respect techers and non teaching staff of department of zoology for all the help and kind co operation during the project

I am thankful to my entire classmate specially jayshri Daware, kajal Avhad , Rohini Gadekar for their continuous support and enjoyable help throughout the year.

I am greatly indebted to my parents for their continuous support wholehearted encouragement , funding all my education and project work and constant source of inspiration in each step of my life .

Finally, here I take an opportunity of thanks to all wishes for their compliment

Place : P.G. Dept. Of Zoology

G.M.D college sinnar

Date: 23/5/2022

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Ms.Sirsat Shital Dipak M.Sc.II Zoology



SAVITRIBAI PHULE UNIVERSITY, PUNE FOR THE FULFILAMENT DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

STUDY OF ROLE OF VERIOUS TYPE OF NOCTARNAL INSECT, POLLINATION

BY

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MISS UGALE KANCHAN KERU UNDER THE GUIDANCE OF

Shr. L.C Chandore

Place of research work



P.G DEPARTMENT OF ZOOLOGY

G.M.D ARTS B.W COMMERCE AND SCIENCE COLLAGE,

SINNAR

APRIL 2021-2022



CERTIFICATE

G.M D . ARTS ,B.W .COMMERCE & SCIENCE COLLEGE SINNAER,

UNIVERSITY OF PUNE

This is to certify that the project work entitled.

"THE ROLE OF NOCTORNAL INSECT IN **POLLINATION** "

Was satisfactorily carried out by Mr...L.S Chandore sir of M.SC II under my supervision and guidance during the academic year 2021-2022. The present project is submitted for the partial fulfilment of M.SC Degree of the University of Pune

L.S. Chandore

Project guide

DR.PR.KOKATE

Head . dept .of zoology

" A STUDY OF COVID-19 IMPACT VARIOUS SECTOR IN SINNAR TAHASIL"



SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

FOR THE FULFILLMENT OF
DEGREE OF MASTER OF SCIENCE IN ZOOLOGY
BY

MS. VAISHNAV KAJAL SUNIL
UNDER THE GUIDANCE OF
ASST. PRO. I.S.GHUMARE
PLACE OF RESEARCH WORK



PG DEPARTMENT OF ZOOLOGY

G.M.D. ARTS AND B.W. COMMERCE AND SCIENCE COLLEGE, NASHIK

APRIL 2021- 2022



G.M.D. ARTS, AND B.W. COMMERCE AND SCIENCE COLLEGE, NASHIK

CERTIFICATE

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

This is to certify that the work incorporated in the dissertation entitled

"A STUDY OF COVID-19 IMPACT ON VARIOUS SECTOR IN SINNAR TAHASIL."

was satisfactorily carried out by **Ms. Vaishnav Kajal Sunil** of MSc II she is a bonafidestudent of this college. she has completed this project under my supervision and guidance during the academic year 2021 - 2022 this project work submitted by her original and the scientific information obtained from other sources have been duly acknowledged.

Asst. Prof. I.S. Ghumare

Project Guide

examiner

Dr. P.R.Kokate

G.M.D. Arts, B.W. Commerce

and Science College, Sinnar

ACKNOWLEDGEMENT

It gives me great pleasure to take the opportunity to express my sincere thanks to my research guide assistant professor I.S.Ghumare for her encouragement guidance is constructive suggestions and all sorts of help ever since the very Inception of the study.

I am thankful to DR. P.V.RASAL principal G.M.D. ARTS, AND B.W. COMMERCE AND SCIENCE COLLEGE, NASHIK for providing necessary facilities to carry out project work equally thankful to the DR. P.R. KOKATE head of the department of zoology for providing laboratory facilities and guidance in completing the project work I express my Thanks to all my respected teachers and non teaching staff of department of zoology for all the help and kind co-operation during the project.

I am greatly indebted to my parents for their continued support wholehearted encouragement, funding for all my education and project work and a constant source of inspiration in each step of my life.

Finallyhere I take an opportunity of Thanks to all wishes for their compliments

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Ms.Vaishanav Kajal Sunil

M.Sc. II (Zoolagy)