



Department : Zoology		
Academic Year : 2024-25		
Sr. No.	Programme Code	Name of the Programme
01.	310	Masters of Science in Zoology
M.Sc. IV semester		Paper code: ZOPDDD1-Dissertation

Scheme and Syllabus

For

M. Sc. Zoology (CBCS)

Applicable from Session 2021-2022 to onwards

Department of Zoology

School of Life Sciences

Guru Ghasidas Vishwavidyalaya, Bilaspur (CG)



CC 10	ZOPDLT1	Biotechniques	L-4	2	20	30	50
DSE: A	ZOPDTD1	Biochemistry of Intermediary Metabolism and Enzymology	T-3	3	40	60	100
DSE: A	ZOPDLD1	Biochemistry of Intermediary Metabolism and Enzymology	L-4	2	20	30	50
DSE: A	ZOPDTD2	Molecular Biology of Information Pathway: Nucleic Acids	T-3	3	40	60	100
DSE: A	ZOPDLD2	Molecular Biology of Information Pathway: Nucleic Acids	L-4	2	20	30	50
DSE: B	ZOPDTD3	Neuroendocrinology, Non-Classical Hormones and Signaling	T-3	3	40	60	100
DSE: B	ZOPDLD3	Neuroendocrinology, Non-Classical Hormones and Signaling	L-4	2	20	30	50
DSE: B	ZOPDTD4	Mammalian Reproduction, Fertility and Sterility	T-3	3	40	60	100
DSE: B	ZOPDLD4	Mammalian Reproduction, Fertility and Sterility	L-4	2	20	30	50
DSE: C	ZOPDTD5	Fish Anatomy, Physiology and Biotechnology	T-3	3	40	60	100
DSE: C	ZOPDLD5	Fish Anatomy, Physiology and Biotechnology	L-4	2	20	30	50
DSE: C	ZOPDTD6	Fish Culture, Capture Fishery and Fish Pathology	T-3	3	40	60	100
DSE: C	ZOPDLD6	Fish Culture, Capture Fishery and Fish Pathology	L-4	2	20	30	50
DSE: D	ZOPDTD7	Mechanism of Toxicity	T-3	3	40	60	100
DSE: D	ZOPDLD7	Mechanism of Toxicity	L-4	2	20	30	50
DSE: D	ZOPDTD8	Reactive Metabolites and Defense System in Biology	T-3	3	40	60	100
DSE: D	ZOPDLD8	Reactive Metabolites and Defense System in Biology	L-4	2	20	30	50
Dissertation	ZOPDDD1	Based on DSE Elected (I/II/III/IV)	D-14	7	80	120	200
*Certificate		UACE, VAC, CC, OCC and others offered by university					
			35H/W	22	260	390	650


1. Discipline Specific Electives (DSE) in forth semester for each session will be offered to students on the basis of availability of faculty and infrastructure.
2. Offering of DSE in any particular session will be decided after a formal meeting of all faculty members of Department of Zoology.
3. Each student may study any one out of the given electives (A, B, C and D). Elective papers will be distributed among the students on the basis of merit/choice.
4. The project work/dissertation will be carried out in the field of respective elective papers opted by the students.
5. Open Elective Courses will be offered by department in first semester is fundamental of public health / Applied Zoology.

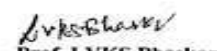
Abbreviations:

CC= Core Course	OE= Open Elective
DSE= Discipline Specific Electives	DSE: I= Biochemistry and Molecular Biology
DSE: II = Mammalian Reproductive Physiology and Endocrinology	
DSE: III= Fish Biology	DSE: IV= Toxicology
CCA= Continuous Comprehensive Assessment	ESE= End-Semester Examinations
UACE= University Additional Credit Electives,	VAC=: Value Added Course
CC= Certificate Courses,	OCC=: Online certificate Courses


Prof. S K Prasad
(External Expert)


Dr. Rohit Seth
(Member)


Dr. S K Verma
(Member)


Prof. LVKS Bhaskar
(HOD)



Programme Name : M. Sc.

Academic Year : 2024-25

List of students undertaking Field Projects/Projects / Internships

Sr. No.	Name of the Student	Title of the Project / Internship along with the Name of the Organization (where Project / Internship was carried out)	Page No.
1.	Aastha Patel	<i>MTHFR</i> polymorphism rs1801133 is contributing to the risk of preeclampsia: A meta -analysis. 2025	1-3
2.	Adyasha Tripathi	Impact of silver nanoparticles on stomach and small intestine of rat : a comparative study	4-6
3.	Alka Patel	Association Between IL1A rs1800587 Polymorphism and Periodontitis Risk: A Meta-Analysis. 2025	7-9
4.	Anil Naik	Protective effect of selenium nanoparticles of ellagic acid against thioacetamide induced injury:	10-12
5.	Chandani Dash	To evaluate the effects of gallic acid on spleen oxidative stress after aspartame administration in rats	13-15
6.	Gajendarpal Khunthey	<i>In vitro</i> and <i>in vivo</i> effects of aspartame on rat's brain	16-18
7.	Hemlata	Impact of aspartame induced oxidative stress in rat brain	19-21
8.	Jiteshwar Sahu	Evaluation of cytotoxic and genotoxic potential of aspartame on rats	22-24
9.	Kajal	Endocrinology of stress and cortisol: Impact on Health and diseases	25-27
10.	Kalyani Patel	Dietary management of hepatic encephalopathy	28-30
11.	Khuspal Verma	Impact of herbicide quinclorac on lipid peroxidation level in fresh water fish <i>Labeo rohita</i>	31-33
12.	Kumar Sathi Rana	To analyze the mitigating effect of thyroxine after Cholpyrifos pesticide treatment in a fresh water teleost, <i>Channa punctatus</i> (Block, 1793)	34-36



13.	Lipsamayee Naik	Assessment of No Observable Adverse Effect Level (NOAEL) of <i>Pycnoporus sanguineus</i> extract on kidney	37–39
14.	Lisha Sankhua	Cardiovascular disease in women: Risk factors and Hormonal Regulation	40–42
15.	Mahima Kushwaha	Association of PNPLA3 gene rs738409 polymorphism and Non alcoholic fatty liver disease: A meta-analysis. 2025	43–45
16.	Monalisha Meher	Comparative study of the mechanism of action of metformin and dorzagliatin in type 2 diabetes mellitus	46–48
17.	Mukesh	Night shift work and Neuro-endocrine dysregulation	49–51
18.	Nibedita Sa	Unlikely the role of IL-17A rs2275913 and IL-17F rs763780 in pathogenesis of Hepatocellular Cancer: A Meta-Analysis. 2025	52–54
19.	Niharika Gilhare	Administration of nanoformulation on biochemical and histological parameters of testicular tissue	55–57
20.	Nikhil Pradhan	Protective effect of silver nanoparticles of caffeic acid against thioacetamide induced injury: An in vitro study	58–60
21.	Nilu Aryan Meher	Therapeutic Role of Acetyl L carnitine in hepatic encephalopathy	62–64
22.	Nishant Nikhil	Protective effect of selenium nanoparticles of caffeic acid against thioacetamide induced injury: An in vitro study	65–67
23.	Nutan Patel	Evaluation of protective role of Melatonin after exposure of Chlorpyrifos in the fresh water teleost, <i>Channa punctatus</i>	68–70
24.	Parul Sidar	Impact of Textile Dyes Waste on Aquatic Environments and Its Treatment	71–73
25.	Parvati Shree Hembrom	Comparative study on the effect of Ca ⁺ and K ⁺ ions on the melanophore response in the fish, <i>Rasbora daniconius</i>	74–76
26.	Prabha Sonwani	Effect of ammonia on Brain and Extracerebral Tissue	77–79
27.	Prachi Nayak	Study on the administration of different doses of silver nano formulation on epididymal tissue of rat	80–82
28.	Pramod Patel	Dose dependent impact of silver nanoparticles on kidney tissue of rat	83–85



29.	Prativa Pradhan	Safety profile of <i>Pycnosorus sanguineus</i> extract on rat liver	86–88
30.	Priyanka Kumari Singh	Alterations in haematological parameters of <i>Labeo rohita</i> exposed to herbicide quinclorac	89–91
31.	Pujarani Sahoo	Herbicide quinclorac caused biochemical changes in fresh water teleost <i>Labeo rohita</i>	92–94
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33.	Rubin Sahu	DNMT1 Polymorphisms (rs2228611, rs2228612, and rs15999693) and the risk of overall Cancer Susceptibility: A Meta-Analysis. 2025	98–100
34.	Sagar Nayak	To evaluate the protective effects of <i>Aegle marmelos</i> (L.) leaf extract against aspartame induced oxidative stress in rat spleen	101–103
35.	Sailesh Kumar Mahananda	Protective effect of propolis extract against thioacetamide induced injury: An in vitro study	104–106
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47.	Tanushree Mishra	Effect of silver nanoparticles on pancreas of male rat	140-142
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49.	Vasundhara Patel	Gut content analysis of an omnivorous fish, <i>Heteropneustes fossilis</i>	146-148

Signature and Seal of the Head


अध्यापिका
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अनु जीव विज्ञान विभाग
Department of Zoology
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Guru Ghasidas Vishwavidyalaya, Bilaspur



**MTHFR Polymorphism rs1801133 is contributing to the
risk of preeclampsia: A Meta-Analysis**

A Project dissertation submitted
In partial fulfilment for the degree of

M.Sc. Zoology

By

Ms. Aastha Patel

Under the Supervision of

Dr. LVKS Bhaskar
(Professor of Zoology)



**DEPARTMENT OF ZOOLOGY
GURU GHASIDAS VISHWAVIDYALAYA
KONI, BILASPUR (C.G.)**

2025



Department Of Zoology
Guru Ghasidas Vishwavidyalaya
(A Central University established by the Central Universities Act 2009, No. 25 of 2009)

CERTIFICATE

This is to certify that Ms. Aastha Patel worked on the dissertation entitled "MTHFR polymorphism rs1801133 is contributing to the risk of preeclampsia: A Meta-Analysis" in partial fulfilment of the requirements for the degree of M.Sc. Zoology, under my supervision from January to May, this work is a bonafide and has not formed the basis for the award of any other similar title. The dissertation represents entirely independent work of the candidate.

Date: 12/5/2025
Place: Bilaspur

LVKS Bhaskar 12/5/2025
Signature of the Supervisor
Prof. LVKS Bhaskar

[Signature]
14.5.25
External Expert

[Signature] 14/5/25
Head of the Department
Prof. Seema Rai
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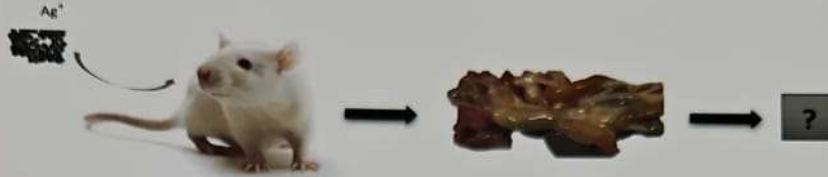


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IMPACT OF SILVER NANOPARTICLES ON STOMACH AND SMALL
INTESTINE OF RAT: A COMPARATIVE STUDY



A Project dissertation submitted
in partial fulfilment for the degree of M.Sc. Zoology

Submitted By

Adyasa Tripathy

Under supervision of

Prof. Seema Rai

Head, Department of Zoology

Dean, School of Studies of Life Sciences



Department of Zoology

Guru Ghasidas Vishwavidyalaya (CG)

2023-25



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Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)
(A Central University established by the Central University Act 2009, No. 25 of 2009)

CERTIFICATE

This is to certify that **Miss Sudeshna Panigrahi, Roll No. 23062142, Enrollment No. GGV/23/03428**, has carried out a postgraduate dissertation project entitled "**Oral Administration of Silver Nanoparticles and Its Impact on Liver Tissues of the Rat Model**" under my supervision from January to May. This work has not formed the basis for the award of any other similar title. The dissertation represents entirely independent work on the part of the candidate.

Date: 13/05/2025
Place: Bilaspur

Signature of Supervisor

Date: 14/05/2025
Place: Bilaspur

Head of Department
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Ghasidas Vishwavidyalaya Bilaspur

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**Association Between IL1A rs1800587 Polymorphism and
Periodontitis Risk: A Meta-Analysis**

A Project dissertation submitted
In partial fulfillment for degree of

M.Sc. ZOOLOGY

By

Ms. Alka Patel

Under the Supervision of

PROFESSOR LVKS BHASKAR

(Professor of Zoology)



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Department Of Zoology

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CERTIFICATE

This is to certify that Ms. Alka Patel worked on the dissertation entitled "Association Association Between IL1A rs1800587 Polymorphism and Periodontitis Risk: A Meta-Analysis" in partial fulfillment of the requirements for the degree of M.Sc. Zoology, under my supervision from January to May, this work is a bonafide and has not formed the basis for the award of any other similar title. The dissertation represents entirely independent work of the candidate.

Date: 13-05-2025

Place: Bilaspur

LVKS Bhaskar 13/5/2025
Signature of the Supervisor
Prof. LVKS Bhaskar

Seema Rai 14-05-2025
Head of the Department
Prof. Seema Rai

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Sant 14-5-21
External Expert



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2. MATERIAL AND METHODS
3. RESULTS
4. SUBGROUP ANALYSIS
5. SENSITIVITY ANALYSIS
6. PUBLICATION BIAS
7. DISCUSSION
8. REFERENCES



**Protective effect of selenium nanoparticles of ellagic acid
against thioacetamide induced injury:**

An in vitro study



Dissertation submitted
in partial fulfilment for degree of
M. Sc. in Zoology

By

Mr. Anil Naik

Under the supervision of
Prof. Monika Bhadauria

Department of Zoology
Guru Ghasidas Vishwavidyalaya
Koni- Bilaspur 495009 (C.G.)

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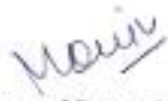
CERTIFICATE

This is to certify that Mr. Anil Naik has worked for M.Sc. (Zoology) dissertation entitled "Protective effect of selenium nanoparticles of ellagic acid against thioacetamide induced injury: An *in vitro* study" under my supervision for about 3 months and this work has not been formed the basis for the award of any other similar title.

It represents entirely an independent work on the part of candidate.

Date: 13/ 05/ 2025

Place: Bilaspur


Signature of Supervisor

~~Date: 13/ 05/ 2025~~


Place: Bilaspur


Head of the Department

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जगु गिणन रिणन
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Guru Ghasidas Vishwavidyalaya, Bilaspur

Date: 13/ 05/ 2025

Place: Bilaspur


External Expert



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**To evaluate the effects of gallic acid on spleen oxidative
stress after aspartame administration in rats**

A Project Dissertation Submitted
In Partial Fulfilment for Degree of

M.Sc. Zoology

By

Ms. Chandini Dash

Under Supervision of

Dr. Gita Mishra

(Asst. Professor of Zoology)



DEPARTMENT OF ZOOLOGY

**GURU GHASIDAS VISHWAVIDYALAYA, KONI,
BILASPUR (C.G.)**

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Department of Zoology
Guru Ghasidas Vishwavidyalaya

(A Central University Established by Act of Parliament 2009 No.25 of 2009)

CERTIFICATE

This is to certify that Ms. Chandini Dash worked on a postgraduate dissertation project entitled "To evaluate the effects of gallic acid on spleen oxidative stress after aspartame administration in rats" under my supervision for 3 months and this work has not been formed the basis for the award of any other similar title. It represents entirely independent work on the part of the candidate.

Date: 13/05/25

Place: Bilaspur

Signature of supervisor

Dr. Gita Mishra

Head of the Department

Prof. Seema Rai

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***In vitro* and *in vivo* effects of aspartame on rats' brain**

A Project Dissertation Submitted
In Partial Fulfilment for Degree of

M.Sc. Zoology

By

Mr. Gajendarpal Khuntay

Under Supervision of

Dr. Gita Mishra

(Asst. Professor of Zoology)



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CERTIFICATE

This is to certify that Mr. Gajendarpal Khuntay worked on a postgraduate dissertation project entitled “*In vitro and in vivo effects of aspartame on rats’ brain*” under my supervision for 3 months and this work has not been formed the basis for the award of any other similar title. It represents entirely independent work on the part of the candidate.

Date: 13/05/2024

Place: Bilaspur

Signature of supervisor

Dr. Gita Mishra

14-5-2024
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Head of the Department

Prof. Seema Rai

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Impact of aspartame induced oxidative stress in rat brain



Dissertation submitted
in partial fulfilment for degree of
M.Sc. in Zoology

By

Ms. Hemlata

Under the supervision of

Dr. Gita Mishra

(Assistant professor)

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CERTIFICATE

This is to certify that Ms. Hemlata has worked for M.Sc. (Zoology) dissertation entitled "**Impact of aspartame induced oxidative stress in rat brain**" under my supervision for about 3 months and this work has not been formed the basis for the award of any other similar title.

It represents entirely an independent work on the part of candidate.

Date: **13**./05/2025

Place: Bilaspur

Date: **13**./05/2025

Place: Bilaspur

Date: **13**./05/2025

Place: Bilaspur

Lital

Signature of supervisor

Devi
14.5.2025

Head of department

HEAD
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External Expert



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Evaluation of cytotoxic and genotoxic potential of aspartame on rats

A Project dissertation submitted
In partial fulfilment for degree of
M.Sc. ZOOLOGY

By

MR. JITESHWAR SAHU

Under the Supervision of
Dr. GITA MISHRA
(Asst. Professor of Zoology)



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2025



Department of Zoology

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CERTIFICATE

This is to certify that **Mr. Jiteshwar Sahu** worked on the dissertation entitled "Evaluation of cytotoxic and genotoxic potential of aspartame on rats" in partial fulfilment of the requirements for the degree of M.Sc. Zoology, under my supervision from January to May, this work is a bonafide and has not formed the basis for the award of any other similar title. The dissertation represents entirely independent work of the candidate.

Date: 13/05/25

Place: Bilaspur

Signature of the Supervisor

Dr. GITA MISHRA

Head of the Department

Prof. Seema Rai

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**Endocrinology of Stress and Cortisol: Impact on Health and
Diseases**

A

Project dissertation submitted

In partial fulfilment for the degree of

M. Sc. in Zoology

By

KAJAL

Under supervision of

Dr. MANISH KUMAR TRIPATHI

(ASSISTANT PROFESSOR)



Department of Zoology

Guru Ghasidas Vishwavidyalaya

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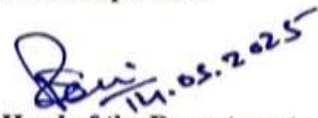
This is to certify that Miss. **KAJAL** has worked on post graduate dissertation project entitled "**Endocrinology of Stress and Cortisol: Impact on Health and Diseases**" under my supervision for 3 months and this work has not been formed the basis for the award of any other similar title.

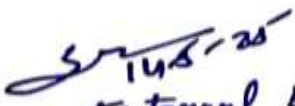
It represents entirely an independent work on the part of the candidate.

Date: 13/05/25


Signature of Supervisor

Place: Bilaspur


Signature of the Head of the Department


External Expert

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Guru Ghasidas Vishwavidyalaya Bilaspur



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“Dietary management of hepatic encephalopathy”

A Project Dissertation

Submitted in Partial Fulfilment

for Degree of

M.Sc. Zoology

By

Ms. Kalyani Patel

Under the Supervision of

Dr. SANTOSH SINGH

(Assistant Professor of Zoology)



DEPARTMENT OF ZOOLOGY

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This is to certify that **Ms. Kalyani Patel** worked on a postgraduate dissertation project entitled "**Dietary management of hepatic encephalopathy**" under my supervision for 3 months and this work has not been formed the basis for the award of any other similar title. It represents entirely independent work on the part of the candidate.

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Place - Bilaspur

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Prof. Seema Rai
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श्री. Ghasidas Vishwavidyalaya Bilaspur

Seema Rai
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**Impact of herbicide quinclorac on Lipid peroxidation level in
fresh water fish *Labeo rohita***



A Dissertation Report

**Submitted in partial fulfillment of the requirements for degree of
Master of Science In Zoology**

By

Khushpal Verma

Under the supervision of

**Dr. Sushant Kumar Verma
(Assistant Professor)**



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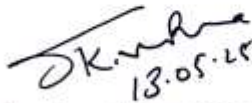
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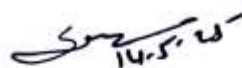
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It represents entirely independent work on the part of the candidate.


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To analyze the mitigating effect of thyroxine after Chlorpyrifos pesticide treatment in a
fresh water teleost, *Channa punctatus* (Bloch, 1793)



A project dissertation submitted

In partial fulfilment for the degree of

M. Sc. Zoology

By

Mr. Kumar Sathi Rana

Under the supervision of

Dr. Manish Kumar Tripathi

(Assistant Professor)



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**Assessment of No Observable Adverse Effect Level (NOAEL)
of *Pycnopus sanguineus* extract on kidney**



**Dissertation submitted
in partial fulfilment for degree of
M. Sc. in Zoology**

By

Ms. Lipsamayee Naik

Under the supervision of

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Cardiovascular Disease in Women: Risk Factors and Hormonal Regulation

A project dissertation submitted in partial fulfillment for

degree of M.Sc. Zoology

By

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**Association of PNPLA3 gene rs738409 polymorphism and
non-alcoholic fatty liver disease : A Meta-Analysis**

A Project dissertation submitted
In partial fulfilment for degree of

M.Sc. ZOOLOGY

By

MS. MAHIMA KUSHWAHA

Under the Supervision of
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This is to certify that Ms. Mahima Kushwaha worked on the dissertation entitled "Association of PNPLA3 gene rs738409 polymorphism and non-alcoholic fatty liver disease : A Meta-Analysis" in partial fulfilment of the requirements for the degree of M.Sc. Zoology, under my supervision from January to May, this work is a bonafide and has not formed the basis for the award of any other similar title. The dissertation represents entirely independent work of the candidate.

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**Comparative study of the mechanism of action of
Metformin and Dorzagliatin in Type 2 Diabetes mellitus**

A Project Dissertation Submitted
In Partial Fulfilment for Degree of

M.Sc. Zoology

By

Ms. Monalisha Meher

Under Supervision of

Dr. Santosh Singh

(Professor of Zoology)



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This is to certify that Ms. Monalisha Meher worked on a postgraduate dissertation project entitled "Comparative study of the mechanism of action of metformin and dorzagliatin in type 2 diabetes mellitus" under my supervision for 3 months and this work has not formed the basis for the award of any other similar title. It represents entirely independent work on the part of the candidate.

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4. Effectiveness in glycaemic control
5. Therapeutic approaches
6. Discussion
7. Conclusion
8. References



Night shift work and Neuro-endocrine dysregulation

A

Project dissertation submitted

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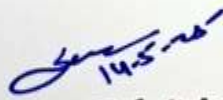
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It represents entirely an independent work on the part of the candidate.

Date: 13/05/25


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**Unlikely the role of IL-17A rs2275913 and IL-17F
rs763780 in pathogenesis of Hepatocellular Cancer: A
Meta-Analysis**

A Project dissertation submitted
In partial fulfillment for degree of

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Administration of nanoformulation on biochemical and histological parameters of testicular tissue



A Project dissertation submitted in partial fulfillment for the degree of
M. Sc. Zoology IVth Semester

By
Niharika Gilhare

Roll Number- 23062120
Enrolment Number – GGV/20/03334

Under supervision of

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Head, Department of Zoology
Dean, School of studies of Life Science



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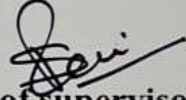
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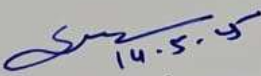
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**Protective effect of silver nanoparticles of caffeic acid
against thioacetamide induced injury: An *in vitro* study**



**Dissertation submitted
in partial fulfilment for degree of
M. Sc. in Zoology**

By

Mr. Nikhil Pradhan

Under the supervision of

Prof. Monika Bhadauria

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This is to certify that **Mr. Nikhil Pradhan** has worked for M.Sc. (Zoology) dissertation entitled "**Protective effect of silver nanoparticles of caffeic acid against thioacetamide induced injury: An *in vitro* study**" under my supervision for about 3 months and this work has not been formed the basis for the award of any other similar title.

It represents entirely an independent work on the part of candidate.

Date: 13/ 05/ 2025

Place: Bilaspur

Monika

Signature of Supervisor

Prof. Monika Bhadauria
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**Therapeutic Role of Acetyl L Carnitine in Hepatic
Encephalopathy**

A Project dissertation submitted
In partial fulfillment for the degree of

M.Sc. Zoology

By

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Under Supervision of

Dr. Santosh Singh

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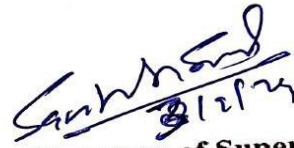
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This is to certify that Mr. Nilu aryan Meher worked on a postgraduate dissertation project entitled 'Therapeutic role of Acetyl L carnitine in Hepatic Encephalopathy' under my supervision for 3 months and this work has not been formed the basis for the award of any other similar title. It represents entirely independent work on the part of the candidate.

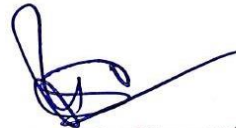
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3.9.24



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**Protective effect of selenium nanoparticles of caffeic acid
against thioacetamide induced injury:**

An in vitro study



**Dissertation submitted
in partial fulfilment for degree of**

M. Sc. in Zoology

By

Mr. Nishant Nikhil



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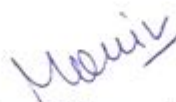
CERTIFICATE

This is to certify that **Mr. Nishant Nikhil** has worked for M.Sc. (Zoology) dissertation entitled "**Protective effect of selenium nanoparticles of caffeic acid against thioacetamide induced injury: An *in vitro* study**" under my supervision for about 3 months and this work has not been formed the basis for the award of any other similar title.

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**Evaluation of Protective Role of Melatonin after Exposure of Chlorpyrifos in the
Fresh Water Teleost, *Channa punctatus***



**A project dissertation submitted
in partial fulfilment for the degree of**

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गुरु घासीदास वि.वि., बिलासपुर

in Ghasidas Vishwavidyalaya Bilaspur

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IMPACT OF TEXTILE DYES WASTE ON AQUATIC ENVIRONMENTS AND ITS TREATMENT



A

**Project dissertation submitted
In partial fulfilment for
Degree of M. Sc Zoology**

Submitted By

PARUL SIDAR

Under supervision of

Dr. NEHA JAIN

(Assistant Professor)



**DEPARTMENT OF ZOOLOGY
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2025**




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This is to certify that **Parul Sidar** has worked on postgraduate dissertation project entitled "**Impact of textile dyes waste on aquatic environments and its treatment**" under my supervision for 3 months and this work has not been formed the basis for award of any similar title. It represents entirely an independent work on the part of candidate.

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**Comparative study on the effect of Ca^{2+} and K^+ ions on the melanophore
response in the fish, *Rasbora daniconius***



**A Project dissertation submitted
in partial fulfillment for degree of
M.Sc. Zoology**

By

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Safety profile of *Pycnoporus sanguineus* extract on rat liver



Dissertation submitted
in partial fulfilment for degree of

M. Sc. in Zoology

By

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Under the supervision of

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**Herbicide Quinclorac caused biochemical changes in freshwater
teleost *Labeo rohita***



A

**Dissertation Report Submitted
in partial fulfillment for degree of
Master of Science in Zoology**

By

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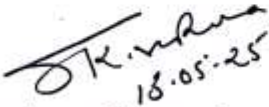
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Effect of Ammonia on Brain and Extracerebral Tissue

A Project dissertation submitted
In partial fulfillment for degree of

M.Sc. ZOOLOGY

By

KU PRABHA SONWANI

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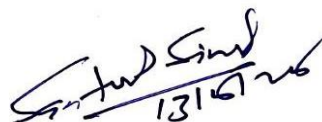
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This is to certify that Ku Prabha Sonwani worked on the dissertation entitled "Effect of ammonia on brain and extracerebral tissue" in partial fulfillment of the requirements for the degree of M.Sc. Zoology, under my supervision from January to May, this work is a bonafide and has not formed the basis for the award of any other similar title. The dissertation represents entirely independent work of the candidate.

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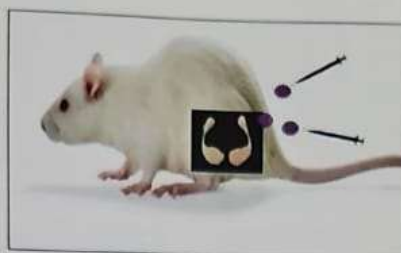


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**Study on the administration of different doses of silver nano
formulation on epididymal tissue of rat**



A Project dissertation submitted
in partial fulfilment for degree of
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By

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Roll no. 23062126

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DOSE DEPENDENT IMPACT OF SILVER NANOPARTICLES ON KIDNEY TISSUE OF MALE RAT



A Project dissertation submitted
in partial fulfilment for degree of
M.Sc. Zoology

Submitted By

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Alterations in hematological parameters of *Labeo rohita* exposed to herbicide quinclorac



A Dissertation Report

**Submitted in partial fulfillment of the requirements for degree of
Master of Science in Zoology**

By

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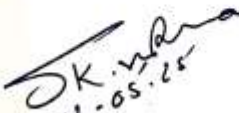
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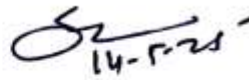
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This is to certify that Ms. Priyanka Kumari Singh, has worked on an experiment entitled "Alterations in hematological parameters of *Labeo rohita* exposed to herbicide quinclorac" for the completion of M.Sc. (Zoology) degree under my supervision and this experiment has not formed the basis for the award of any other degree.

It represents entirely independent work on the part of the candidate.


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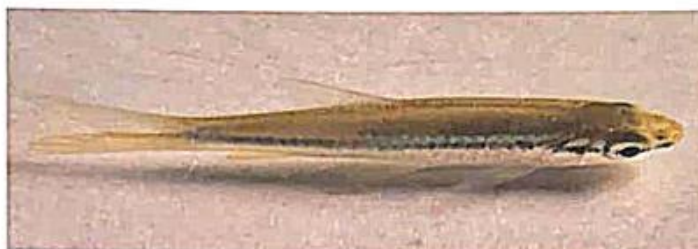


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**Comparative study on the effect of Na⁺ and Mg⁺⁺ ions on the
xanthophore response in the fish, *Rasbora daniconius***



**A Project dissertation submitted
in partial fulfillment for degree of
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By

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This is to certify that **Ms. Rishika Hore** has on postgraduate dissertation project entitled “Comparative study on the effect of Na^+ and Mg^{++} ions on the xanthophore response in the fish, *Rasbora daniconius*”

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It represents entirely an independent work on the part of candidate.


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**DNMT1 Polymorphisms (rs2228611, rs2228612, and rs16999593)
and the risk of overall Cancer Susceptibility: A Meta-Analysis**

A Project dissertation submitted
In partial fulfilment for degree of

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**To evaluate the protective effects of *Aegle marmelos* (L.) leaf extract
against aspartame induced oxidative stress in rat spleen**



**Dissertation submitted
in partial fulfilment for degree of**

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**Protective effect of propolis extract against thioacetamide
induced injury: An *in vitro* study**



Dissertation submitted
in partial fulfilment for degree of
M. Sc. in Zoology

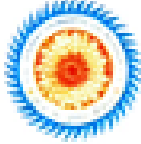
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ROLE OF HORMONES IN OBESITY

A project dissertation submitted in

partial fulfilment for degree of

M. Sc. Zoology

By

Sajan Tiwari

Under supervision of

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Department of Zoology

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This is to certify that **Mr. Sajan Tiwari** has worked on a postgraduate dissertation project entitled "Role of hormones in obesity" under my supervision for 3 months and this work has not been formed the basis for the award of any other similar title.

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THERAPEUTIC ROLE OF MEDICINAL PLANTS ON FISHES



A

Project dissertation submitted
In partial fulfillment for
Degree of M.Sc. Zoology

Submitted By

SANTOSHI KASHYAP

Under supervision of

Dr. NEHA JAIN

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This is to certify that **Santoshi Kashyap** has worked on postgraduate dissertation project entitled "Therapeutic role of medicinal plants on fishes" under my supervision for 3 months and this work has not been formed the basis for award of any similar title. It represents entirely an independent work on the part of the candidate.

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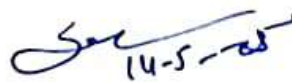
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**ANTIBIOTIC RESISTANCE ON MICROORGANISMS
ASSOCIATED WITH HEPATIC ENCEPHALOPATHY**

A Project dissertation submitted
In partial fulfillment for degree of

M.Sc. ZOOLOGY

By

MS.SHEERSA PRADHAN

Under the Supervision of

Dr.SANTOSH SINGH

(Professor of Zoology)



**DEPARTMENT OF ZOOLOGY
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KONI, BILASPUR (C.G.)**

2024-2025



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This is to certify that Ms. Sheersa Pradhan worked on the dissertation entitled "Antibiotics Resistance on Microorganisms associated with Hepatic Encephalopathy" in partial fulfillment of the requirements for the degree of M.Sc. Zoology, under my supervision from January to May, this work is a bonafide and has not formed the basis for the award of any other similar title. The dissertation represents entirely independent work of the candidate.

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**DIABETIC ENCEPHALOPATHY: CAUSES,
EFFECTS AND TREATMENT**

A Project dissertation submitted in partial fulfilment for degree of

M.Sc. Zoology

By

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This is to certify that **Miss Shree Jaya Laxmi** has worked on a postgraduate dissertation project entitled “**Diabetic Encephalopathy: Causes, Effects, and Treatment**” under my supervision for 3 months, and this work has not formed the basis for the award of any other similar title.

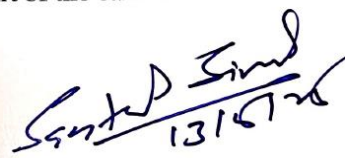
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**SUSTAINABLE AQUACULTURE AND GLOBAL FOOD
SECURITY: INNOVATIONS, IMPACTS, AND FUTURE
PROSPECTS**



A

Project dissertation submitted in partial fulfillment for

Degree of M.Sc. Zoology

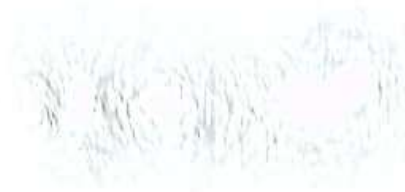
Submitted By

SUBHAM BADAJENA

Under supervision of

Dr. NEHA JAIN

(Assistant Professor)



DEPARTMENT OF ZOOLOGY

GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)

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**Genetic damage induced by herbicide quinclorac in major Indian
carp *Labeo rohita***



A Dissertation Report

**Submitted in partial fulfillment of the requirements for degree of
Master of Science In Zoology**

By

Sonali Subhadarshinee Khuntia

Under the supervision of

**Dr. Sushant Kumar Verma
(Assistant Professor)**



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This is to certify that Ms. Sonali Subhadarshinee Khuntia, has worked on an experiment entitled "Genetic damage induced by herbicide quinclorac in major Indian carp *Labeo rohita*" for the completion of M.Sc. (Zoology) degree under my supervision and this experiment has not formed the basis for the award of any other degree.

It represents entirely independent work on the part of the candidate.


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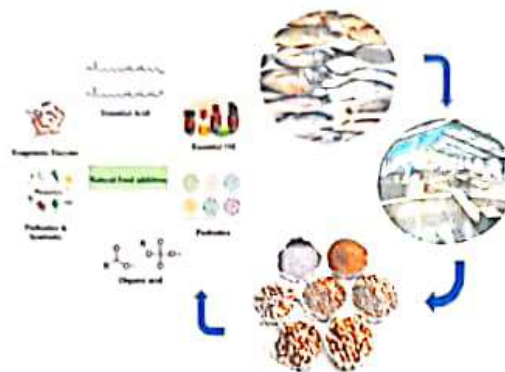


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**HERBAL FEED ADDITIVES: BENEFITS OF MEDICINAL
PLANTS AS DIETARY SUPPLEMENTS IN FISH FEED**



A

project dissertation submitted in partial fulfilment for
Degree of M.sc Zoology

Submitted By

SUBHASIS KUMAR TRIPATHY

Under supervision of

Dr. NEHA JAIN

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Oral Administration of Silver Nanoparticles and Its Impact on Liver Tissues of the Rat Model

A Project dissertation submitted in partial
fulfilment for the degree of

M.Sc. Zoology
By

Sudeshna Panigrahi

Roll no.23062142

Enrollment no. GGV/23/03428

Under the supervision of

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Head, Department of Zoology

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**Effect of Insulin resistance in Non-alcoholic Fatty Liver
Disease**

A Project dissertation submitted
In partial fulfilment for the degree of

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By

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**Protective role of DNMT3B rs1569686 Polymorphisms
against overall Cancer risk: A Meta-Analysis**

A Project dissertation submitted
In partial fulfilment for degree of

M.Sc. ZOOLOGY

By

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Under the Supervision of
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**ANALYSIS OF GUT CONTENTS OF A PLANKTIVOROUS
FISH, *Labeo rohita***



A

Project dissertation submitted

In partial fulfillment for degree of

M.Sc. Zoology

By

Sushil Kumar Pradhan

Under Supervision of

Dr. Naresh Chandra Agrawal

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Department of Zoology

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This is to certify that **Mr. Sushil Kumar Pradhan** has on postgraduate dissertation project entitled "*Analysis of gut contents of a planktivorous fish, Labeo rohita*" under my supervision for 3 months and this work has not been formed the basis for the award of any other similar title.

It represents entirely an independent work on the part of candidate.

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**Effect of Silver Nanoparticles on Pancreas of male
Rat**

A Project dissertation
submitted in partial
fulfilment for degree of
M.Sc. Zoology

By

Tanushree Mishra

Under supervision of

Prof. Seema Rai

Head, Department of Zoology
Dean, School of Studies of Life Science



Department of Zoology
Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

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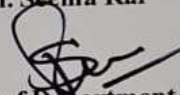
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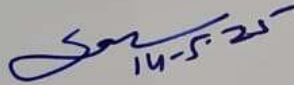
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**Alcohol and Its Impact on the Gut-Brain Axis during
Hepatic Encephalopathy**

A Project dissertation submitted
In partial fulfillment for degree of

M.Sc. ZOOLOGY

By

MR. TARUN CHAUHAN

Under the Supervision of

Dr. SANTOSH SINGH

(Professor of Zoology)



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CERTIFICATE

This is to certify that **Mr. Tarun Chauhan** worked on the dissertation entitled “**Alcohol and its impact on the Gut-Brain Axis during Hepatic Encephalopathy**” under my supervision from January to May in partial fulfillment of the requirements for the degree of M.Sc. Zoology. This work is bonafide and has not formed the basis for the award of any other similar title. The dissertation represents entirely independent work of the candidate.

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Place: Bilaspur

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Asst. Prof. Santosh Singh

External expert

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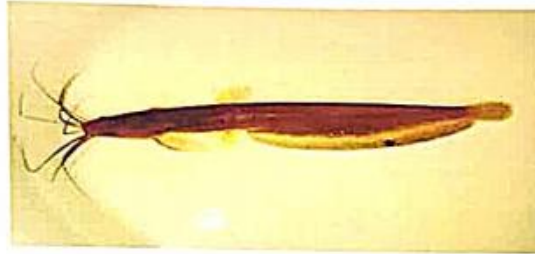


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GUT CONTENT ANALYSIS OF AN OMNIVOROUS FISH,

Heteropneustes fossilis



A Project dissertation submitted
In partial fulfillment for degree of
M.Sc. Zoology

By

Vasundhara Patel

Under the supervision of
Dr. Naresh Chandra Agrawal
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Department of Zoology

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This is to certify that Ms. Vasundhara Patel has worked on postgraduate dissertation project entitled "*Gut content analysis of an omnivorous fish, Heteropneustes fossilis*" under my supervision for 3 months and this work has not been formed the basis for the award of any other similar title. It represents entirely an independent work on the part of candidate.

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