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(केन्द्रीय विश्वविद्यालय अधिनियम 2009 क्र. 25 के अंतर्गत स्थापित केन्द्रीय विश्वविद्यालय)
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Academic Year : 2022-2023		
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A DISSERTATION ON

**Effect of different biotic and abiotic factors
on growth and development of *Phaseolus
vulgaris***



SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE DEGREE OF
BACHELOR OF SCIENCE IN BOTANY

By

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Under the supervision of

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A DISSERTATION ON
FACTOR AFFECTING GROWTH AND DEVELOPMENT OF TOMATO
(Lycopersicon esculentum)



Submitted in partial fulfillment of the requirement for the award of the degree
BACHELOR OF SCIENCE

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A REVIEW ON EXTRA FLORAL NECTARIES
(FAMILY ADOXACEAE TO FAMILY XANTHORRHOEACEAE)

Dissertation Report Submitted for the partial fulfillment
of the degree of
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This is to certify that the project report entitled "A Review on Extra Floral Nectaries (Family Adoxaceae to Family Xanthorrhoeaceae)" is an authentic record of work done by Shruti Soni, Student of B.Sc. Botany VI Semester of Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

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BIODIESEL PRODUCTION

A DISSERTATION REPORT SUBMITTED FOR THE FULFILMENT THE DEGREE OF
BACHELOR OF SCIENCE IN BOTANY



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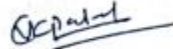
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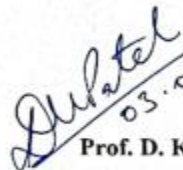
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ABSTRACT

The scarceness of fossil-based fuels and the environmental impact produced by the conventional sources of energy over the planet, has lead new research work to seek the sustainable sources of clean energy. Biofuel is committed to becoming a worldwide leader in the development and deployment of renewable energy resources. Biodiesel is an alternative fuel, made from renewable biological sources. Biodiesel can also be produced from microbial sources like algae, bacteria and fungi. Here, we present an overview of biological living things used in the biodiesel production and recent advances. The mono-alkyl esters, most commonly the methyl esters, of vegetable oils, animal fats or other materials consisting mainly of triacylglycerols, often referred to as biodiesel, are an alternative to conventional petro diesel for use in compression-ignition engines. The fatty acid esters that thus comprise biodiesel largely determine many important fuel properties. In turn, the composition of the biodiesel depends on the composition of the parent feedstock because feedstock's with widely varying. The use of different feedstock is also significant under aspects of increasing biodiesel supply and socio-economic issues. In this article, biodiesel production is briefly described, followed by the different biological sources used for biodiesel production.



**DIFFERENT ENVIRONMENTAL FACTORS AFFECTING, GROWTH
AND PRODUCTION OF GROUNDNUT (*Arachis hypogaea*).**

A Dissertation Report

Submitted to the Guru Ghasidas Vishwavidyalaya

Bilaspur - 495001 (C.G.)

For the partial fulfilment of the award of the degree of

BACHELOR OF SCIENCE

IN

BOTANY



BY

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The work presented in the project report is original and has not been submitted anywhere else for this or any other degree.

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**ARSENIC CONTAMINATION OF GROUNDWATER IN SOUTHEAST
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**A Dissertation report
SUBMITTED
FOR THE PARTIAL FULFILMENT OF THE DEGREE
OF
BACHELOR OF SCIENCE
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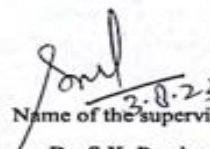


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“Pollution In River Ganga: A Review Paper”

A Review Paper

SUBMITTED

FOR THE PARTIAL FULFILMENT OF THE DEGREE

OF

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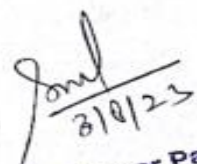
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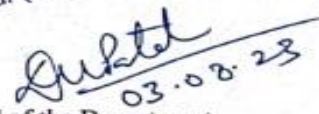
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**STATUS OF *TRICHODERMA* IN AGRICULTURE AND ITS
APPLICATION AS BIOCONT AGENT**

DISSERTATION REPORT

**SUBMITTED
FOR THE PARTIAL FULFILLMENT OF THE DEGREE
OF
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IN
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4. Conclusion

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INDUSTRIAL APPLICATIONS OF *ASPERGILLUS*

DISSERTATION REPORT
SUBMITTED
FOR THE PARTIAL FULFILLMENT OF THE DEGREE
OF
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IN
BOTANY



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- 2. Review of literature**
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 - 2.2 Steps included in industrial enzyme production**
 - 2.3 Microbial enzyme production overview**
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 - 2.5 Fungal secondary metabolites**
 - 2.6 Ecology and environmental interaction**
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 - 2.10 Pharmaceutical industry**
 - 2.11 Bioremediation of aspergillus**
 - 2.12 Phylogeny and taxonomy**
- 3. Conclusion**
- 4. Reference**



**A DISSERTATION ON
"HERBS SPECIENS OF GGV CAMPUS-I"**



**Submitted in partial fulfillment of the requirement for the award of the
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BACHELOR OF SCIEN**

**By
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B.Sc. Botany (Hons) 6th Semester"**

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Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.)



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A REVIEW ON EXTRA FLORAL NECTARIES
(FAMILY ACANTHACEAE TO FAMILY VOCHYSIACEAE)

Dissertation Report Submitted for the partial fulfillment
of the degree of
BACHELOR OF SCIENCE IN BOTANY



By

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A DISSERTATION ON
“TREE SPECIES OF GGV CAMPUS-I”



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for the award of the degree of
BACHELOR OF SCIENCE**

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**BIO-DIVERSITY OF BACTERIA IN IRON MINE (A
STRESSED ECOSYSTEM)**

A Dissertation Report submitted for the partial fulfilment of the requirement of

Award of Degree

OF

BACHELOR OF SCIENCE IN BOTANY

At

GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)



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INDUSTRIAL APPLICATIONS OF PENICILLIN

**DISSERTATION REPORT
SUBMITTED
FOR THE PARTIAL FULFILLMENT OF THE DEGREE
OF
BACHELOR OF SCIENCE
IN
BOTANY**



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This is to certify that dissertation entitled "Industrial applications of Penicillin" is based on review done by Karan Pradhan (Enrollment no. GGV/20/03626) Department of Botany, Guru Ghasidas Vishwavidyalaya, Bilaspur and this has not previously formed the basis of the award of any degree, diploma, associate ship and any other similar title and it represent entirely an independent work on the part of the candidate.

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A COMPREHENSIVE REVIEW ON
Hedychium coronarium j.koenig

A Dissertation Report

SUBMITTED

FOR THE PARTIAL FULFILMENT OF THE DEGREE

OF

BACHELOR OF SCIENCE BOTANY



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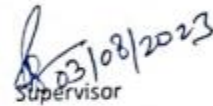


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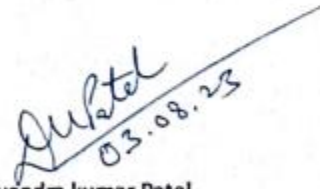
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Documentation on biodiversity and climate change

A Dissertation Report
SUBMITTED FOR THE PARTIAL FULFILMENT OF THE DEGREE
OF
BACHELOR OF SCIENCE
IN
BOTANY



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UNPLANNED DEFORESTATION

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A DISSERTATION ON

**The effect of different environmental conditions
on the growth and development of stomata,
stomatal frequency and stomatal index**



Submitted in partial fulfillment of the requirement
for the award of the degree of

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**EFFECT OF DIFFERENT PHYSIOLOGICAL CONDITION ON
BIOFILM FORMATION IN GRAM POSITIVE PATHOGENIC
BACTERIA**

A Dissertation Report submitted for the partial fulfilment of the requirement of

Award of Degree

OF

BACHELOR OF SCIENCE IN BOTANY

At

GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)



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**CROP GROWTH IMPROVEMENT THROUGH PLANT TISSUE
CULTURE : A REVIEW**

A Dissertation Report submitted for the partial fulfillment of the requirement of the

Award of Degree

OF

BACHELORS OF SCIENCE IN BOTANY

At

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This is certify that dissertation "Crop growth improvement through plant tissue culture: A review", is based on review of literature work done by Hemnandani Gendre (Enrollment no. GGV/20/03621), Department of Botany, Guru Ghasidas Vishwavidyalaya, Bilaspur, C.G. and this has not previously formed the basis of the award of any degree, diploma, associate ship and any other similar title and it represent entirely an independent work on the part of the candidate.

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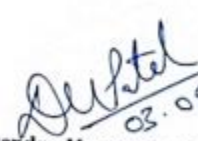
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A REVIEW ON CARBON SEQUESTRATION

**A DISSERTATION REPORT SUBMITTED FOR THE FULFILMENT THE DEGREE OF
BACHELOR OF SCIENCE**

IN

BOTANY



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A REVIEW DISSERTATION WORK ON:
MEDICINAL PLANTS *AZADIRACTA INDICA*
For partial fulfillment of the degree of
BACHELOR OF SCIENCE IN BOTANY



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A DISSERTATION ON
MEDICINAL ATTRIBUTES OF THE
***Emblica officinalis* (AMLA)**

DISSERTATION REPORT SUBMITTED FOR THE PARTIAL
FULFILLMENT OF THE DEGREE OF
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A DISSERTATION ON
MEDICINAL PROPERTIES OF THE
Calotropis procera

Submitted in partial fulfillment of the requirement for the award of
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A REVIEW DISSERTATION WORK ON:

MEDICINAL PLANT *Ocimum sanctum*

For partial fulfilment of the degree of
BACHELOR OF SCIENCE IN BOTANY



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OIL SPILL AND OCEAN ECOSYSTEM

(A DISSERTATION REPORT SUBMITTED FOR THE FULFILMENT THE DEGREE OF)
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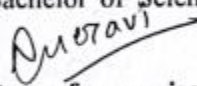


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Abstract

The population of the world is currently 7 billion, and it is growing at a 1.1% annual rate. The world's usage of fossil fuels rapidly increased during the twentieth century. Fossil fuels account for 80% of all energy (oil and gas 63%, coal 27%, respectively). The average annual increase in global demand for crude oil was 1.76 percent. Consumption of oil and gas is critical to maintaining economic growth in developed countries and to the advancement of developing countries on the path to prosperity. The oil and gas sector genuinely spans the globe; it can be found anywhere from the Arctic to the desert, from tropical rainforest to temperate timber land, from mangrove to offshore, and from Alaska to Australia and Peru to China. From Between 2000 and 2010, the world's oil consumption increased by 13%, while daily output rose from 76.6 million to 86.3 million barrels. The International Energy Association (IEA) predicts that non-OECD (Organization for Economic Co-Operation and Development) nations' demand will drive the world oil demand to 90 mbpd by 2016.

The oil and gas business is one of the most environmentally harmful industries, which is just one side of the coin. Every step of the process, from exploration to production, refinement, and distribution, pollutes the air, soil, and water. Both the economy and ecological equilibrium are harmed. This essay discusses the specifics of marine environment oil spill pollution. Offshore oil drilling has major consequences, including marine oil spills. Blowouts, pipeline breaks, collisions with or grounding of ships, and tanker overfilling. Damage from oil spills is done to marine life. Each year, more than 3 million metric tons of oil pollutes the seas. They have a negative impact on the environment along the coast. Booms, skimmers, sorbents, dispersants, and controlled burning procedures are used to control spills.



ENVIRONMENTAL PROBLEMS (Flood) In CHHATTISGARH

A DISSERTATION REPORT SUBMITTED FOR THE FULFILMENT THE DEGREE OF

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- 3] Major action to be taken during flood
- 4] Risk management
- 5] Conclusion
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A DISSERTATION ON
"IMPACT OF ENVIRONMENTAL POLICIES
IN INDIA"



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A Dissertation report

on

“Bioethanol production with future prospective and challenges”

BACHELOR OF SCIENCE IN BOTANY



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Microbial Remediation of pesticides

DISSERTATION REPORT

**SUBMITTED
FOR THE PARTIAL FULFILMENT OF THE DEGREE
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This is to certify that dissertation report entitle "**Microbial Remediation of Pesticides: Harnessing Nature's Allies for Eco-Friendly Solutions**" is based on original work done by **Narsingh Yadav**, student of B.Sc. Botany of department of botany session 2020-2023, Roll No. : 20203032, Enrollment No. : GGV/20/03638

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3.8.23

Signature of supervisor



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ROLE OF NANOTECHNOLOGY IN SOIL REMEDIATION

**A Dissertation Report
submitted
FOR THE PARTIAL FULLFILLMENT OF THE DEGREE
OF
BACHELOR OF SCIENCE IN BOTANY**



**GURU GHASIDAS VISHWAVIDYALAYA
(A CENTRAL UNIVERSITY)**

**BY
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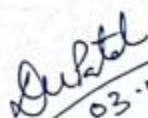

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A DISSERTATION ON
“BIOACCUMULATION OF HEAVY METALS”



**Submitted in partial fulfillment of the requirement
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**MICROBES AS BIOFERTILIZER: A SUSTAINABLE DEVELOPMENT
APPROACH**

DISSERTATION REPORT

**SUBMITTED
FOR THE PARTIAL FULFILMENT OF THE DEGREE
OF
BACHELORS OF SCIENCE
IN
BOTANY**



**BY
BHUHESH OGRE**

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Recent Advances in Phytoremediation: Harnessing Plant Power for Environmental Cleanup

**A dissertation report
submitted
For the partial fulfillment of degree of
Bachelor of science
in Botany**



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NITROGEN FIXATION : A REVIEW

A DISSERTATION REPORT SUBMITTED FOR THE FULFILMENT THE
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- Nitrification
- Denitrification

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5. REFERENCE



A DISSERTATION ON
“EXTREME WEATHER EVENTS IN INDIAN
SUBCONTINENTS”



Submitted in partial fulfillment of the requirement
for the award of the degree of

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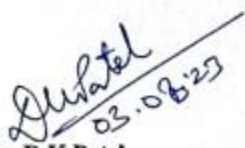
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TRANSGENIC PLANTS : A Review

A DISSERTATION REPORT SUBMITTED FOR THE FULFILMENT THE DEGREE OF
BACHELOR OF SCIENCE

IN

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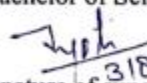


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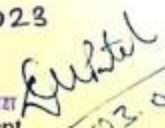
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A DISSERTATION ON
“GLOBAL WARMING AND OCEAN ACIDIFICATION”



Submitted in partial fulfilment of the requirement for
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The work demonstrated exceptional research skills, critical analysis, and dedication to addressing the challenges posed by global environmental changes. The findings of the dissertation contribute significantly to the field of science and have been evaluated and approved by the examination committee.

On behalf of Department of botany, we congratulate Aman kumar patel, for the successful completion of this important academic milestone. We commend the effort, knowledge, and commitment displayed throughout the research journey.

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**MYCOREMEDIATION OF DIFFERENT
ENVIRONMENTAL POLLUTANT: A REVIEW**

DISSERTATION REPORT

**SUBMITTED
FOR THE PARTIAL FULFILMENT OF THE DEGREE
OF
BACHELORS OF SCIENCE
IN
BOTANY**



**BY
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**UNDER THE SUPERVISION OF
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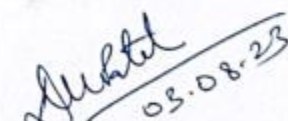
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**A REVIEW ON POLLINATION ECOLOGY OF SELECTED
SPECIES IN TRIBE PHASEOLEAE OF FAMILY
LEGUMINOSAE**

**Dissertation Report Submitted for the partial fulfillment
of the degree of
BACHELOR OF SCIENCE IN BOTANY**



By

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STUDY OF ETHNOBOTANICAL, MAGICAL HERB *Tinospora cordifolia* (Willd.)
Miers

A DISSERTATION REPORT

SUBMITTED

FOR THE PARTIAL FULFILLMENT OF THE DEGREE

OF

BACHELOR OF SCIENCE

IN

BOTANY



BY

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ENROLLMENT NO. GGV/20/03618, ROLL NO. 20203014

UNDER THE SUPERVISION OF

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BILASPUR. - 495009 (CG)

2023



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**USE OF MICROBE IN PRODUCTION OF INDUSTRIAL
PRODUCT: A REVIEW**

DISSERTATION REPORT

**SUBMITTED
FOR THE PARTIAL FULFILMENT OF THE DEGREE
OF
BACHELORS OF SCIENCE
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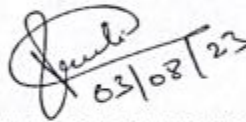
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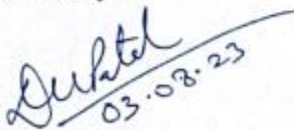
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A DISSERTATION ON
“TREE SPECIES OF GGV CAMPUS-I”



Submitted in partial fulfillment of the requirement
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BACHELOR OF SCIENCE

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A Review on Medicinal Properties of *Reuwolfia serpentina* (L.) Benth.

**A DESERTATION REPORT
SUBMITTED
For the fulfillment of the degree
of
BACHELOR OF SCIENCE
IN
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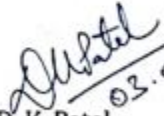
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**“MEDICINAL PLANTS OF KHARSIA
(RAIGARH), CHHATTISGARH”**

In partial fulfilment of the degree of UG
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Documentation on Air Pollution in Delhi

A Dissertation Report

SUBMITTED FOR THE PARTIAL FULFILMENT OF THE DEGREE

OF

BACHELOR OF SCIENCE

IN

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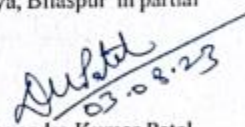
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"PARTICULATE MATTER AND ITS HEALTH EFFECT IN INDIA"

A Dissertation report
SUBMITTED
FOR THE PARTIAL FULFILMENT OF THE DEGREE
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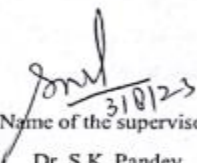


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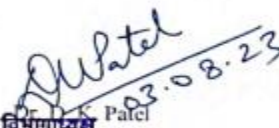
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A DISSERTATION ON
"SHRUB SPECIES OF GGV CAMPUS"

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A review on Status of natural dyes and dye-yielding
plant (FLAME OF FOREST -Butea monosperma)

**A DESSERTATION REPORT
SUBMITTED
For the fulfillment of the degree
of
BACHELOR OF SCIENCE
IN
BOTANY**



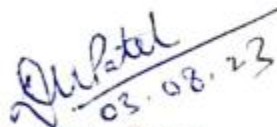
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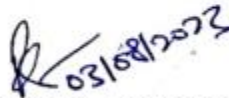


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This is to certify that Shalini Kashyap, Bachelor of science in Botany
Has done dissertation under my supervision. The title of her work
is Status of natural dyes and dye-yielding plants. She has collected
Various data and prepared her research report. She has used all
scientific methods in her work. My best wishes are with her at her
Successful attempt of this work.

Forwarded to controller of examination, Bilaspur
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CHAPTERIZATION

Certificate

Declaration by the student

Acknowledgement

EXTRACTION OF NATURAL DYE FROM PETALS OF FLAME
OF FOREST (Butea monospema) FLOWER BY USING
RESPONSE SURFACE METHODOLOGY.

- INTRODUCTION
- HISTORY
- BOTANICAL CLASSIFICATION
- CHEMICAL CONSTITUENTS
- USES AND ACTIVITY
- RESULTS AND DISCUSSIONS
- CONCLUSION
- REFERENCES



**Recent Advances in Phytoremediation Techniques for
Hydrocarbon Removal: A Green Approach to Environmental
Restoration**

DISSERTATION REPORT

**SUBMITTED
FOR THE PARTIAL FULFILMENT OF THE DEGREE
OF
BACHELORS OF SCIENCE
IN
BOTANY**



**BY
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A

Dissertation Project

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A REVIEW ON BIOREMEDIATION

In partial fulfillment of the degree of UG

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- 1) INTRODUCTION
- 2) WHY BIOREMEDIATION IS REQUIRED
- 3) TYPES OF BIOREMEDIATION
 - a) IN SITU BIOREMEDIATION
 - b) EX SITU BIOREMEDIATION
- 4) MICROBES INVOLVE IN BIOREMEDIATION
 - a) ANAEROBIC
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 - c) AEROBIC
 - d) METHYLOTROPHS
- 5) SIGNIFICANCE OF BIOREMEDIATION
- 6) CONCLUSION
- 7) REFERENCES



MICROBIAL DESSERTATION OF PLASTIC

A DISSERTATION REPORT SUBMITTED FOR THE FULFILMENT THE DEGREE OF
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ABSTRACT

Wide variety of high molecular weight organic polymers known as plastic is the most common sources of hydrocarbons and petroleum derivatives. Due to excessive industrial and domestic use, plastic is now being used and produced at a very high rate. Except for a few, a large number of polymers are not biodegradable and the main threats to our environment because of its poor waste management, excessive usage and the relaxed behavior of the community against proper disposal. Some policies and advance approaches for plastic waste management include practice of biodegradable polymers in wrapping and public education about their appropriate disposal, are introduced by the investors. Chemical, photo, thermal and biological methods are also involved in the current polymer degradation policies. But for environmental, economic and health advantages; the practice of biodegradable plastics are the attractive options. In the current review, classification of plastics with distinct prominence on the biodegradable plastics and their coherent usage, recognized methods, microbes tangled and the present visions in the research of degradable plastics are highlighted. In the future prospective microbe's friendly plastic is safe for environment and it can reduce the plastic waste from earth. Further studies are under investigation and it will be having great applications in future because of its low cost and environment friendly



**A REVIEW ON POST COVID SUSCEPTIBILITY: THE
LONG-TERM EFFECT ON THE IMMUNE SYSTEM**

A Dissertation Report submitted for the partial fulfilment of the requirement of

Award of Degree

OF

BACHELOR OF SCIENCE IN BOTANY

At

GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)



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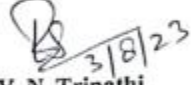
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A
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On

**“STUDIES ON PHOSPHATE SOLUBILIZING RHIZOSPHERIC
BACTERIA ON CHHATTISGARH”**

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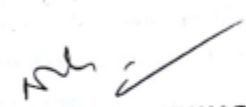
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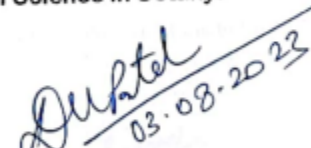
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2.1	Isolation
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5.	Conclusion
6.	References



**A REVIEW OF THE LEGUME SUB-FAMILY
CAESALPINIOIDEAE WITH SPECIAL EMPHASIS
ON SEED DISPERSAL MECHANISM**

Dissertation Report Submitted for the partial fulfillment
of the degree of

BACHELOR OF SCIENCE IN BOTANY



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