

प्रति,

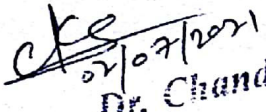
प्राचार्य

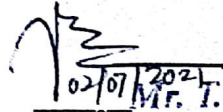
शास. रे.र. मिश्र स्नात. महाविद्यालय सूरजपुर (छ.ग.)

विषय :- महाविद्यालय के प्राणीशास्त्र एवं वनस्पतिशास्त्र विभाग में लघु शोध परियोजना कार्य की अनुमति बावत्।

महोदय,

उपरोक्त विषयान्तर्गत लेख है कि महाविद्यालय के प्राणीशास्त्र विभाग एवं वनस्पतिशास्त्र विभाग द्वारा संयुक्त रूप से एक लघु शोध परियोजना कार्य किया जाना है। जिससे महाविद्यालय में शोध कार्य को प्रोत्साहन मिलेगा एवं आगामी महाविद्यालय NAAC के लिए महत्वपूर्ण है। यह शोध कार्य कृषि एवं भवन में दिमक की रोकथाम के लिए किया जाना है जो आम जन के लिए भी लाभकारी हो सकता है। लघु शोध परियोजना आवेदन इस पत्र के साथ संलग्न है। कृपया इसका अवलोकन कर इस लघु शोध परियोजना कार्य को करने की अनुमति प्रदाय कर अनुमानित आवश्यक राशि (रु. 10,000/-) आबंटित करने का कष्ट करें।


07/07/2021
हस्ताक्षर
Dr. Chandan Kumar
(Asst. Professor)
प्राणीशास्त्र विभाग O. D., Dept. of Zoology
Govt. RRM, P.G. College, Surajpur (C.G.)


07/07/2021
हस्ताक्षर
Mr. T. R. Rahangdale
(Asst. Professor)
वनस्पतिशास्त्र विभाग D., Dept. of Botany
Govt. RRM, P.G. College, Surajpur (C.G.)

H.C.
महा. जनभागीदात्री
समिति के अध्यक्ष महोदय
के समक्ष 22/07/21
C.S.P. / 22/07/21

आवश्यकतानुसार कार्य हेतु
अनुमति है।
प्राथम्य पर ध्यायित है।
शोधकार्य में जो लगाना है उसे
देख कर कृपया कर ले।
डा. रमेश
07/07/21

Seen
C.S.P.
07/07/2021

**SUBMISSION OF PROPOSAL FOR
MINOR RESEARCH PROJECT FROM
GOVT. RRM P.G. COLLEGE JANBHAGIDARI, SURAJPUR (C.G.)**

PART – A

1. Broad Subject : Life Science
2. Area of Specialization : Pest and Crop Protection
3. Duration : 06 months
4. Principal Investigator:-
- i. Name : Dr. Chandan Kumar
- ii. Sex M/F : Male
- iii. Date of Birth : 20.02.1982
- iv. Qualification : Ph.D. (Zoology)
- v. Designation : Assistant professor
- vi. Address : Government RRM P.G. College, Surajpur (C.G.)
- Mobile no. : 7209792982
- E-mail : chandanctri@gmail.com
5. Co – Investigator(s) :
- (i) Name : Mr. Tulsiram Rahangdale
- (ii) Sex: M/F : Male
- (iii) Date of Birth : 18.06.1978
- (iv) Qualification : M.Phil. (Botany)
- (v) Designation : Assistant professor
- (vi) Address : Government RRM P.G. College, Surajpur (C.G.)
- Mobile no. : 9131719195
- E-mail : rahangdaletulsiram78@gmail.com
6. In case of retired teacher, please mention the following information: NA
- a. Date of superannuation: NA
- b. Age at the time of superannuation: NA

c. Whether employed or not: NA

7. Name of the Institution where the project will be undertaken:

(a) Department : **Department of Zoology and Department of Botany**

(b) College/University : **Government RRM P.G. College, Surajpur (C.G.)**

(Please mention the name of affiliating University in case of college)

Sant Gahira Guru Vishwavidyalaya, Ambikapur (C.G.)

(C) Whether the institute is located in rural/backward area: **Semi-Urban**

8.. Whether the College/University is approved under Section 2 (f) and 12 B of the UGC Act

Yes/No: - **Yes**

9. Teaching and Research Experience of Principal Investigator:

(a) Teaching experience: Under Graduate (UG)- **8 years**

Post Graduate (PG)- **4 years**

(b) Research experience: **more than 7 years**

(c) Year of award of Doctoral degree: **2004**

(d) Title of thesis for doctoral degree: **“Studies on antihyperglycemic effect of Terminalia arjuna Roxb. bark on Type-II diabetic albino rats”**

(e) Publications:

Papers- Published : **14**

Books -Published : **00**

(Please enclose the list of papers and books published and/or accepted)

1. **Kumar C., S. Nehar and P Rani (2021) Evaluation of genoprotective and antioxidative potentiality of ethanolic extract of *N. sativa* in streptozotocin induced diabetic albino rats, *Vegetos (Springer)*, **34**, 453-459.**
2. **Kumar C., Kumar R. and Nehar S. (2014) Induction of Type-II diabetes by high fructose diet and low dose of intra-peritoneal injection of streptozotocin in albino rats. *International Journal for Pharmaceutical Research Scholars*, **3(1)**: 196-202.**
3. **Kumar C., Kumar R. and Nehar S. (2013) Hypoglycemic effect of acetone extract of *Terminalia arjuna* Roxb. bark on Type-2 diabetic rats. *The Bioscan*, **8(2)**: 709-712.**
4. **Kumar C., Kumar R. and Nehar S. (2013) Phytochemical properties, Total antioxidant status of acetone and methanol extract of *Terminalia arjuna* Roxb. bark and its hypoglycemic effect on Type-2 diabetic albino rats. *Journal of Pharmacognosy and Phytochemistry*, **2(1)**: 199-208.**
5. **Kumar C., Singh A.K. and Nehar S. (2010) In-vitro propagation and callus formation from seedling of *Terminalia arjuna* Roxb. *The Bioscan*, **2**: 423-429.**

6. Kumar C., Zeenat F., Prabha R., Mamta K. and Nehar S. (2010) Induction of Type-II diabetes by high fructose diet in albino rats. *Biospectra*, 5(1): 23-26.
7. Kumar C., Singh A.K., Mishra R.K. and Nehar S. (2010) Studies on adoption level of improved technologies by tasar farmers in Sunderpahari cluster of Godda district, Jharkhand: a case study. *Biospectra*, 5(2): 293-298.
8. Kumar C., Singh A.K., Sinha M.K., F. Zeenat , Tiwari .K. and Nehar S. (2010) Studies on knowledge and adoption level of improved technologies by Tasar farmers in Shikaripara area of Dumka district, Jharkhand. *Columban Journal of Life Science*, 11(1-2): 37-40.
9. Kumar R., Kumar C., Arvind, Behera P.S., Singh N.K. and Sinha P.R. (2011) Molecular mechanism of anti-carcinogenic potential of Ac-Dahi in DMH induced colon carcinogenesis. *Indian Journal of Dairy Science*, 64(1): 33-38.
10. Nehar S., Kumar C., Mishra K. and Mamta K. (2010) Lead induction alteration in blood profile of air breathing catfish, *C. batrachus* Linn. *The Bioscan*, 2: 335-341.
11. F. Zeenat, Tiwari K., Kumar C. and Nehar S. (2010) Dopamine inhibit the cortisol secretion in the adrenal gland of *Rana Tigrina* (Amphibia, Anura): An evidence of non-classical regulatory mechanism. *Columban Journal of Life Science*, 11(1-2): 71-73.
12. Nehar S., Prabha R., Kumar C., Kauser H. and Alam I. 2015. Evaluation on Cytotoxicity of Ethanolic Extract of *Nigella sativa* Seed. *American Journal of Ethnomedicine*, 2(5): 276-283.
13. Siddique, R. A., Jagan Mohanarao G., Chandan K., Raj Kumar, Anand Kumar, Malik, P.K. and Atreja, S.K. (2011) Spermatozoal abnormalities and sperm DNA fragmentation vis-à-vis male infertility. *Wayamba Journal of animal science*, 3: ISSN: 2012-578X.
14. चंदन कुमार, सुनीता मीना, राज कुमार एवं अरविंद कुमार (2016) मत्स्य पालन: कृषि के संदर्भ में. *गेहूँ एवं जौ स्वर्णिमा (भा.कृ.अनु.प.)*. 8: 124-129.
15. राज कुमार, चंदन कुमार, सुनीता मीना, तुषार कुमार मोहंती एवं मुकेश भक्त (2016-17). कृत्रिम गर्भाधान में हिमिकृत वीर्य का महत्व. *दुग्ध-गंगा, राष्ट्रीय डेयरी अनुसंधान संस्थान (भा.कृ.अनु.प.)*. 6: 1-2.
16. सुनीता मीना, चंदन कुमार एवं राज कुमार (2016-17) पशुपालन और जैव प्रौद्योगिकी. *दुग्ध-गंगा, राष्ट्रीय डेयरी अनुसंधान संस्थान (भा.कृ.अनु.प.)*. 6: 21-22.
17. राज कुमार, चंदन कुमार, सुनीता मीना, तुषार कुमार मोहंती एवं मुकेश भक्त (2016-17). भैंसों में सफल कृत्रिम वीर्यरोपण के लिए महत्वपूर्ण सुझाव. *दुग्ध-गंगा, राष्ट्रीय डेयरी अनुसंधान संस्थान (भा.कृ.अनु.प.)*. 6: 76-77.

PART-B

Proposed Research Work

10. Project Title: - "Study of termicidal effect of different plant extracts"

Introduction: Termites are the most troublesome pest of plants, trees and wooden structures. They severely damage agricultural crops and urban infrastructure. There are about 2,500 species of termites in the world and only 10% have pest status. Termites can attack plants at any stage of development from the seed to the mature plant. They are social insects that live together as a colony in a nest. Termites (*Coptotermes intermedius*) order: Isoptera; family: Termitidae, are the main agricultural pest as well as harmful to stored grains, furniture and building materials. There are many methods to control termites like physical, chemical and biological methods. Under chemical control method many harmful chemicals are used which pollute environment and harm human health. So, the present study is proposed for biocontrol of termite using wild plant extracts like extract of Nepeta, Jatropha, Calotropis, Bhelwa (*Semicarpus spp.*), Dhoban (*Parkia biglobosa*) etc.

Significance of the study: -

1. To prepare termicide solution from different wild plant varieties.
2. To control termites using prepared termicide.
3. To determine dose of termicide to control termites.
4. To enhance post-harvest crop yield using this termicide.

Methodology: -

1. **Collection of plants:** Plants will be collected from local area.
2. **Parts of plant use-** Plant Bark, Leaves, Stem, Root and seeds will be used.
3. **Preparation of extract-** Plant part extract will be prepared through Soxhlet evaporator using alcohol and acetone.
4. **Collection of Termites-** Termites will be collected from college campus
5. **Study of effect-** Termicidal effect of plant extract will be studied in termites found in college campus.

Year wise plan and target to be achieved: -

Collaboration if intended: - Department of Chemistry, Government RRM P.G. College, Surajpur (C.G.)

Financial Assistance: -

S.No	Items	Expenditure	
		1 st Year	Total
1	Chemicals	5000	5000
2	Glasswares	1000	1000
3	Stationary	2000	2000
4	Transport	1000	1000
5	Miscellaneous	1000	1000
Grant Total (Rs.)			10000
(Ten thousand rupees only)			

12. Whether the teacher has received support for the research project from the UGC under Major, Minor, scheme of support for research or from any agency? If so, please indicate: NA
- Name of the agency from which the assistance was approved: NA
 - Sanction letter No. and date under which the assistance was approved: NA
 - Amount approved and utilized: NA
 - Title of the project for which assistance was approved: NA
 - In case the project was completed, whether the work on the project has been published: NA
 - If the candidate was working for the doctoral degree, whether the thesis was submitted and accepted by the University for the award of degree. NA

(A summary of the report/thesis in about 1,000 words may please be attached with the application)

- If the project has not been completed, please state the reasons: NA

13. (a) Details of the project/scheme completed or ongoing with the P.I:

Name of the agency	Year	Total	Equipment/Infrastructural facilities obtained
NA			

(b) Institutional and departmental facilities available for the proposed work:

- Centrifugation machine
- Soxhlet evaporator
- Shaker etc.

Other infrastructural facilities:

1. Test tubes
2. Beakers
3. Flasks
4. Filter papers etc.

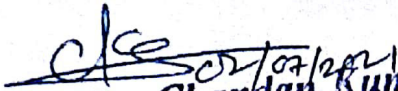
Any other information which the investigator may like to give in support of this proposal which may be helpful in evaluating.

To certify that

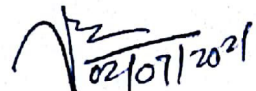
- a. The University/College is approved under Section 2(f) and 12 (B) of the UGC Act and is fit to receive grants from the UGC.
- b. General physical facilities, such as furniture/space etc., are available in the Department/College.
- c. I/We shall abide by the rules governing the scheme in case assistant is provided to me/us from the UGC for the above project.
- d. I/We shall complete the project within the stipulated period. If I/We fail to do so and if the UGC is not satisfied with the progress of the research project, the Commission may terminate the project immediately and ask for the refund of the amount received by me/us.
- e. The above research project is not funded by any other agency.


Name & Signature –

(a) Principal Investigator –


(Signature) **Dr. Chandan Kumar**
(Asst. Professor)
H. O. D., Dept. of Zoology
Govt. R.R.M. P.G. College, Surajpur (C.G.)

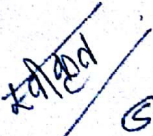
(b) Co-Investigators:

(Signature) 
Mr. S. R. Mahalingam
(Asst. Professor)
H. O. D., Dept. of Botany
Govt. R.R.M. P.G. College, Surajpur (C.G.)

(c) Registrar/Principal

Principal
Govt. R.R.M. College
Surajpur (C.G.)

(Signature with Seal)

Signature of approval authority


7/7/21

प्रति,

प्राचार्य

शास. रे.र. मिश्र स्नात. महाविद्यालय सूरजपुर (छ.ग.)

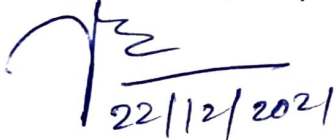
विषय :- लघु शोध परियोजना कार्य के समय को बढ़ाने बावत्।

महोदय,

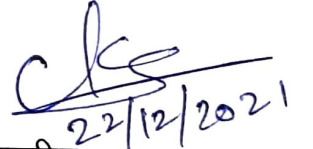
उपरोक्त विषयान्तर्गत लेख है कि महाविद्यालय के प्राणीशास्त्र विभाग एवं वनस्पतिशास्त्र विभाग द्वारा संयुक्त रूप से दिमक के नियंत्रण हेतु लघु शोध परियोजना कार्य किया जा रहा है। यह कार्य प्रगति पर है एवं इसमें और समय लगने की सम्भावना है। कोरोना महामारी के कारण शोध कार्य में विलम्ब हो रहा है। अतः उपरोक्तानुसार परियोजना कार्य की अवधि को छः माह बढ़ाने का कष्ट करें।

भवदीय

लघु शोध परियोजना
सह प्रधान निरीक्षक (Co-PI)

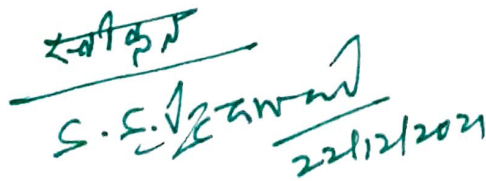

22/12/2021

T.R. Rahangdale
HOD Botany


22/12/2021

भवदीय

लघु शोध परियोजना
प्रधान निरीक्षक (PI)


22/12/2021

Principal
Govt. R.R.M. College
Surajpur (C.G.)