

# RAIGANJ UNIVERSITY

P.O.: Raiganj, Dist.: Uttar Dinajpur, West Bengal, Pin: 733134



## DEPARTMENT OF ZOOLOGY

### Curriculum vitae of the Faculty members



**Name of the faculty member:**

**KAUSHIK CAKRABORTY**

**Designation:**

Professor

**Contact information :**

Department of Zoology, Raiganj University,  
Raiganj, Uttar Dinajpur, West Bengal, 733134

**e-mail account:** Kaushik\_apdcollege@regiffmail.com

**Cell no:** 9434983950

**Specialization :**

Entomology

**Academic Qualification:**

M.Sc,B.Ed,Ph.D

**Specialization**

**Entomology**

**Skills and ability:**

Region specific Insect pest management (IPM),  
Generation of insect pest forecasting equation,  
Assessment on host plant-insect pest  
interaction study, bio- ecology of insect  
pests management.

**Administrative Assignments:**

Former Head, Department of Zoology,  
University of Gour Banga, Malda, W.B

Head, Department of Zoology, Raiganj University  
(from 05.02.2020)

Programme co-ordinator, NSS unit, Raiganj  
University.

Member, Student Welfare board, Raiganj  
University.

**Research interests:**

My research interest is to assess the periodicity  
of the insect pests in the agro-ecosystem,  
Assessment on the extent and degree of  
damage by insect pests, Phyto-chemistry  
of the different plant products and their

effect on insect pest periodicity, Design of suitable pest calendar, Development of region specific insect pest management strategy, Low input sustainable agriculture.

**Research Experience:**

Experience in agro-ecological techniques , biochemical analysis on some selected phytochemical compounds, Hands on knowledge on insect pest rearing, insect pest forecasting.

**Research Guidance:**

M.Sc term papers and project papers in elective course

Demonstration in field training programme

M.Phil Students: 05 (**awarded**)

Ph.D students: 04 (**awarded**)

**Subjects Taught**

Entomology, Biochemistry, Ecology, Evolution, Non-Chordate biology, Histology

**Courses/ Programme attended**

**74th Orientation Course** for 28 days (03.03.2010-30.03.2010) [Attendance felt short by 96 hours in 74th OP which was completed in 80<sup>th</sup> OP] organized by Academic Staff College University of Burdwan.

**3<sup>rd</sup> Orientation Course** for 28 days (03.08.2010 - 30.08.10) organized by Academic Staff College, University of North Bengal, Rajarammohanpur.

**Workshop on Statistical methods** for 8-days (16.03.2011 - 23.03.2011) organized by Raiganj University College, Raiganj.

**Workshop on scanning electron microscopy** for 4-days (26.07.11-29.07.11) organized by University Science instrumentation centre, University science instrumentation centre.

**1st Refresher Course in Life science** (inter disciplinary) for 21 days (08.09.11-28.09.2011)

organized by University of North Bengal,  
Rajarammohanpur

**Workshop on the importance of statistical methods: an interdisciplinary approach** for 7-days (05.09.12-11.09.12) organized by Raiganj Surendranath Mahavidyalaya (participate as an organizer).

**Workshop on Basic technique of Molecular Biology** for 7-days (14.05.14-21.05.14) organized by Department of Botany, University of Calcutta.

**Refresher Course in Life science (inter-disciplinary)** for 21 days (19.11.2014-09.12.2014) organized by University of North Bengal, Rajarammohanpur.

#### **Recent Publications (last five years) .**

- Mondal, E, Chakraborty,K. 2016. *Azadirachta indica*- A tree with multifaceted applications: an overview. **Journal of Pharmaceutical Science and Research**. 8(5) 299-306 [ISSN-0975-1459].
- Mondal, E, Chakraborty,K.2016. Report on *Sitophilus oryzae* as a carrier of fungal pathogen of rice grain with a note on the nature of grain damage at upper Gangetic plains of West Bengal. **World Journal of Pharmaceutical and Medical Research**. 2(5):139-145. [ISSN-2455-3301].
- Bhattacharya, A. and Chakraborty, K.2016. Defecation behavior of great Indian one horned rhinoceros (*Rhinoceros unicornis*, Linn.). **International Journal of Science and Research**.5 (7):923-928. [ISSN-2319-7064].
- Sarkar,S.K., Moitra, M., Chakraborty,K. 2016. A comparative study on population of soil microarthropods at two different habitats at Uttar Dinajpur, West Bengal, India. **International**

- Mondal, I, H and **Chakraborty, K. 2016** Relative efficiency of some selected insecticide formulations on yellow stem borer, *Scirpophaga incertulus* (Walk.) in rice field at Murshidabad, West Bengal, India, **Journal of Entomology and Zoology Studies**. 4(6):417-477 [Online ISSN: 2320-7078, Print ISSN: 2349-6800] [5.53(NAAS) ,ICV: 80.67(2016),RJIF(5.48)]
- Pal, S and **Chakraborty, K. 2016** Quantification of Zooplankton from two selected freshwater bodies of Cooch Behar district of West Bengal. **Elixir Applied Zoology**. 2016,101 :44085-44088. [ISSN 2229-712X (Online)] [78.6 ICV(2016), 6.8 PIF (2016).
- Mandal, T, Ghosh, S.K and **Chakraborty, K. 2016**. Seasonal incidence of Thrips (*Thrips tabaci* L.) infesting som plant leaves (*Machilus bombycina* King.) and their management using bio-pesticide, **International Journal of Science, Environment and Technology**. 5(4) 2245-2256 [ISSN 2278-3687 (Online)]
- Ghosh, S.K, Mandal, T and **Chakraborty, K. 2016**. Population fluctuation of aphid (*Aphis craccivora* Koch.) infesting som plant leaves (*Machilus bombycina* King) and its management **Journal of Entomological Research**, 40(3): 235-241. [ISSN: 0378-9519(Print) 0974-4576(Online)].
- Sadat, A, Hore, M. **Chakraborty, K**, Roy, S. **2017**. Phytochemical analysis and antioxidant activity of methanolic extract of leaves of *Corchorus olitorius* **International Journal of Current Pharmaceutical Research** 9(5).59-63 [ISSN: 0975-7066]
- Miraj, A, Pal, S, Bhattacharya, S. K and **Chakraborty, K. 2017** Observation on the TDS

and EC Values of Different Water Bodies at Cooch Behar, West Bengal, India. **International Journal of Theoretical & Applied Sciences** 9(2). 106-113 [ISSN: 0975-1718(Print) 2249-3247(Online)]

- Sadat,A, ,**Chakraborty, K.** Estimation of jute leaf chlorophyll content and dynamics of semi looper in relation to nitrogen topdressing **Journal of Entomology**, 2017 (14), 176-185 [ISSN: 1812-5689 (Print) 1812-5670 (Online)]
- Sadat,A, ,**Chakraborty, K.** 2017 Farmers' knowledge, perceptions and practices in jute insect pest management and cultural strategy in the upper *Gangetic* plains of West Bengal, India. **Indian Journal of Agricultural Research**, 51(4), 320-326 [ISSN: 0976-058X (Print) 0367-8245 (Online)] [4.86 (NAAS),0.259(SJR)]
- Mondal, I. H., **Chakraborty, K.** 2017 Observation on the impact of environmental parameters on rice yellow stem borer, *Scirpophaga incertulas* (Walker) and its natural enemies at Murshidabad , West Bengal, **Journal of Entomology and Zoology Studies** 2017 5(6), 1656-1663 [Online ISSN: 2320-7078, Print ISSN: 2349-6800] [5.53(NAAS) ,ICV80.67(2016),RJIF(5.48)]
- Pal,S and **Chakraborty,K** Different Aspects of Chloride in Freshwater: A Review **International Journal of Current Trends in Science and Technology** 2017, 7(8), 20295-20303.[ISSN (print); 0976-9498; ISSN (online); 0976-9730]
- Mondal, E, and **Chakraborty,K.** 2017. Studies on the extent of grain damage by rice weevil with respect to the presence of few phyto-chemicals in the rice grain. **Research Journal of Life**

sciences, Bioinformatics, Pharmaceutical and Chemical Sciences 3(3): 249-268. [e-ISSN : 2454-6348]

- Bhattacharya,A and **Chakraborty, K** Why do Indian Rhinos eat elephant grasses, **International Journal of Trend in Research and Development** 2017, 4(5), 355-357
- Sadat,A, and **Chakraborty, K.**2017 Spatial variation of leaf chlorophyll and consequences of leaf damage by *Anomis abulifera* Guen. In jute field **International Journal of food, Agriculture and Veterinary Sciences.**,7(3): 17-25 [ISSN: 2277-209X (online)]
- Sadat,A, and , **Chakraborty, K** Impact of training on knowledge and adoption of jute technology in Uttar Dinajpur District of West Bengal, India, **Indian research Journal of Extended Education**, 2017,17(2):73-77.[ISSN 0537- 1996 print & ISSN 2454-552X online
- Das,T and. **Chakraborty,K.** Seasonal occurrence and record of alternative host plant of mango mealy bug, *Drosicha mangiferae* in relative to climatic parameters at Malda, West Bengal **The Pharma innovation**, 2018 7(9):55-61. [ISSN (Online)2277-7695 · ISSN (Print) 2349-8242(5.03 ) NAAS]
- Das,T and. **Chakraborty,K.**2018 A preliminary review on mango mealy bug *Drosicha mangiferae* (green) a notorious pest to mango orchards,2018 8(2):555-561 **International Journal of Pharmacy and Biological sciences.**2018. 8(2) 555-561 e-ISSN, 2230-7605, P-ISSN- 2321-3272 **Impact Factor 0.888**
- Sadat, A, and ,**Chakraborty, K.**2019 Life cycle of jute semilooper (*Anomis sabulifera* L.) and generation of pest calendar in Uttar

Dinajpur District **The Pharma innovation** ,2019,  
8(2): 150-154 [ISSN (Online)2277-7695  
· ISSN (Print) 2349- 8242(5.03 ) NAAS]

- Sarkar, A, Hore, M., Chakraborty, K and Roy,S  
Phytochemical screening and determination of  
antioxidant activity of *Lakhanbhog* and *Langra*  
mango of Malda district, West Bengal **The  
Pharma innovation** 7(10):511-515154  
[ISSN (Online)2277-7695 · ISSN (Print) 2349-  
8242(5.03 ) NAAS]
- Sadat, A.,Bhattacharyya,S., Roy,S and **Chakrab  
orty,K.2019** Defensive response of *Corchorus  
olitorius* in relation to infestation of *Anomis  
sabulifera* **Journal of Entomology** 16(1):23-29  
[ISSN (Online) 18125689, · ISSN (Print)  
18125670]
- Sarkar, S., Babu, A.,**Chakraborty, K.** and Deka,  
B. **2019.** Study on the Biology, Feeding  
Behaviour and predatory Potential of  
*Sycanuscollaris* (Fabricius) (Heteroptera:  
Reduviidae), a new Predator of *Hyposidra talaca*  
(Walk.) (Lepidoptera: Geometridae), a major Tea  
pest and mass Rearing on  
*Corcyra Cephalonica* (Stainton) in Laboratory'.  
**International Journal of  
Current Advanced Research**, 08(06), 19258-  
19262. ISSN (Print) 2319 - 6475 ISSN (Online)  
2319 - 6505]
- Nandi, P.S., Mandal, P, Pal, A and  
**Chakraborty,K.** Morphological and molecular  
and molecular characterization of fungi  
associated with mango mealy bug secreted  
honey dew in mango tree leaves and twig.  
**International Journal of science and  
Technology.** 9(3):5887-5891 [ISSN (Online) :  
2250-141X · ISSN (Print)]
- Sarkar,S., Babu, A **Chakraborty, K** and Deka, B  
**2019.** Predatory behaviour of *Eocanthecona*

*fucellata* (hemiptera:Pentanomidae) feeding on larvae of *Hyposidra talaca* (Lepidoptera: Geometridae), a major tea pest of North-east India. **International Journal of Scientific Research** 9(3):68-70 [ISSN NO 2277 - 8179]

- Sarkar,S., Babu, A **Chakraborty**, K and Deka,B. 2019 Study on the biology, feeding behaviour and predatory potential of *Scanus collaris* (fabricius) (Heteroptera: Reduviidae), a new predator of *Hyposidra talaca* (Walk.) (Lepidoptera: Geometridae), a major tea pest and mass rearing on *Corcyra cephalonica* (station) in laboratory **International Journal of Current Advanced Research** 8(6D):19252-19262
- Sarkar, A., and **Chakraborty**,K. Mango red banded caterpillar, *Autocharis albizonalis* Hapson, A destructive insect pest of mango orchards at upper *Gangetic* plains of West Bengal: a comprehensive analysis **International Journal of Current Advanced Research** 9(4B):21868-21772. [ISSN (Print) 2319 - 6475 ISSN (Online) 2319 - 6505]
- Sarkar, S.,Babu, A., **Chakraborty**, K. and Deka, B. 2020. Biology and life history of *Cotesiaruficrus* (Hymenoptera: Braconidae) a potential parasitoid of *Hyposidra talaca* (Lepidoptera: Geometridae) larvae, a major tea pest. **Journal of Biopesticides**, 13(1):79-84.
- Sarkar, A., Sarkar, S. and **Chakraborty**, K. 2020. Seasonal Incidence of Mango Red Banded Caterpillar, *Autocharis Albizonalis* Hampson (Pyralidae, Lepidoptera) in Consideration of Agro-Climatic Factors at Malda District of West Bengal, India. **International Journal of Current Advanced Research**, 09(03): 21704-21708.
- Sarkar, S., Babu, A., **Chakraborty**, K. and Deka, B. 2020. Predatory behaviour of *Eocanthecona furcellata*((Hemiptera: Pentatomidae) feeding on

larvae of *Hyposidra talaca* (Lepidoptera: Geometridae), a major tea pest of North East India. **International Journal of Scientific Research**, 9(3):68-70.

- Nandi, P.S., Mandal, P., Pal, A., **Chakraborty, K.** 2020. Morphological and molecular characterization of fungi associated with mango mealy bug secreted honey dew in mango tree leaves and twigs **International Journal of Scientific and Technology Research** 9(3):5887-5891.
- **Nandi, P.S.**, Roy, S., Bhattacharya, S., Pal, A and **Chakraborty, K.** 2020. Biochemical factors associated with mango mealy bug (*Drosicha mangiferae* G) infestation in different mango cultivars at Manda, West Bengal. **Journal of Applied Horticulture** 22(3):230-239.
- Sarkar, S., Babu A., **Chakraborty, K.**, Deka, B., and Roy, S. 2021. *Eocanthecona furcellata* (Wolf) (Hemiptera: Pentatomidae), a potential biocontrol agent of the black inch worm, *Hyposidra talaca* Waker (Lepidoptera: Geometridae) infesting tea. *Phytoparasitica*. <http://doi.org/10.1007/s1200-021-00888-x>

#### List of book chapters:

- **Chakraborty, K.**, Deb, D. C, Dutta, S, Pal, P. 2008. Simulated local model for paddy cultivation with an emphasis on the efficacious and the sustainable soil conservation and pest suppression. In Ed: B. Singh, S.D.D. Roy H.G. Deva Kumar Samuel, V. Dhanbal Singh, G. D. Biji. Land Use, Bio-Diversity and Tourism Development, Nesamony Memorial Christian College, Marthandam, Taminnadu, India. Vol. 2. Page no: 223-230. [ISBN: 13:978-81-908283-2-1].
- Pal, S., Das, D., **Chakraborty, K.** 2015. Studies on the Physico-Chemical Characteristics and Zooplankton diversity of the 'Panishala Beel': A wetland in Cooch Behar District, West Bengal.

In Ed: Sailen Debnath, Bhaskar Bagchi and Subhra Mishra. Modern Trends in Social and Basic Sciences. Reader services, Kolkata, W. B. Page no. 143-157. [ISBN: 978-93-82623-51-9].

- Sarkar, S. K., Moitra, M. N., **Chakraborty, K.** 2015. A comparative study on Population of Soil Micro-Arthropods at Two different habitats at Uttar Dinajpur, West Bengal, India. In Ed: Sailen Debnath, Bhaskar Bagchi and Subhra Mishra. Modern Trends in Social and Basic Sciences. Reader services, Kolkata, W. B. Page no. 159-163. [ISBN: 978-93-82623-51-9].
- Pal, S., **Chakraborty, K.** 2016. An overview on present scenario of studies on freshwater ichthyofauna diversity at northern part of Bengal, India in proceedings of the UGC sponsored national Seminar on ' Biodiversity-n prospects and Threats: present Scenario held on 26-27 February, 2016. Organized by Tufanganj Mahavidyalaya in collaboration with Cooch Behar College. Page no. 104-112. [ISBN: 978-93-5258-521-1]
- Bhowmik, S., Pal, S., Das, Debashis, **Chakraborty, K.** 2016. Ichthyofaunal diversity at lower part of sub-himalayan terai region of West Bengal in proceedings of the UGC sponsored national Seminar on ' Biodiversity-n prospects and Threats: present Scenario held on 26-27 February, 2016. Organized by Tufanganj Mahavidyalaya in collaboration with Cooch Behar College. Page no. 26-39. [ISBN: 978-93-5258-521-1]

**Paper presented in Conference/Workshop Organization/ Presentations(last two years):**

- **3rd Regional science and Technology Congress (December 18-19, 2018),** Organized by Bidhannagar College, Government of West Bengal and Department of Science and Technology and Biotechnology, Government of West Bengal. The paper entitled '*Evaluation of the efficacy of some selected insecticide on the*

*incidence of mango insct pests at the upper Gangetic plains of West Bengal.*

- **International Conference** on Sustainability tea challenges and way forward (**February 22-23, 2019**) Organized by Toklai Tea research Institute, Tea Research Association, Jorhat, Assam The paper entitled '*Important parameters to be considered to check insect pest infestation to tea pests*'.

#### **Organization of Conference/Workshop Organization/ Presentations(last two years):**

- Online special lecture on occasion of World Diabetic Day dated 14th November 2020
- Online special lecture on occasion of World AIDS Day dated 1st December 2020
- Online special lecture on occasion of World Wetlands Day dated 2<sup>nd</sup> February 2021 in collaboration with NSS Unit-I, RGU.

**Special Distinctions** Performed as Member of  
**(i)** UG-BOS, Zoology, RU.**(ii)** BRS, Zoology, UGB.**(iii)** Member of Laboratory Safety Committee, UGB.**(iv)** Member of Animal Ethical Committee, UGB, **(v)** Member of Animal Ethical Committee, **(vi)** Ex-Member of Dissection Monitoring Committee, UGB.

#### **Other Activities:**

- Performing as a member of **(i)** UG-BOS &PG-BOS, Zoology, RGU.**(ii)** Ex-member BRS, Zoology, UGB.**(iii)** Ex-member of Laboratory Safety Committee, UGB.**(iv)** Ex-member of Animal Ethical Committee, UGB, **(v)** Ex-member of Animal Ethical Committee, UGB **(vi)** Ex-member of Dissection Monitoring Committee, UGB.