***CURRICULUM VITAE**



DR. Y. RAJASHEKAR

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A. PERSONAL DATA

I. Date of Birth:	25/06/1977
II. Gender:	Male
III. Nationality:	Indian
IV. Present Address:	Department of Food Protectants &
	Infestation Control
	CSIR-Central Food Technological Research
	Institute (CFTRI)

Mysuru, Karnataka, India-570 020

V. Present Position:

Principal Scientist

VI.	EDUCATIONAL DETAILS (GRADUATION ONWARDS)						
S. No.	Institution	Degree Year Field of Awarded		Field of Study			
1	University of Mysore (CSIR-CFTRI)	Ph.D.,	2011	Biotechnology			
2	University of Mysore	M.Sc.,	2003	Zoology			

	Bangalore University	B.Sc.,	1999	Chemistry,					
3				Zoology,					
				Microbiology					
VII.	PROFESSIONAL CAREER (STARTING WITH THE MOST RECENT EMPLOYMENT)								
S. No.	Institution	Position	From (Date)	To (Date)					
	CSIR-Central Food	Principal	10-05-2024	Till date					
1	Technological Research	Scientist							
	Institute (CFTRI)								
	DBT-Institute of	Scientist-E	01/07/2022	09-05-2024					
2	Bioresources and								
2	Sustainable								
	Development (IBSD)								
	DBT-Institute of	Scientist-D	26/03/2018	30/06/2022					
3	Bioresources and								
3	Sustainable								
	Development (IBSD								
	DBT-Institute of	Scientist-C	26/03/2013	25/03/2018					
4	Bioresources and								
+	Sustainable								
	Development (IBSD								
VIII Specialization Isolation and identification of plant									

VIII. Specialization Isolation and identification of plant bioactive compounds. Analysis of isolated compound bioactive insecticides as against grain insect pests. stored Development of Herbal pesticide or biofumigant compatible with organic, as well conventional (synthetic), as to enhance shelf life of food commodities.

IX. Expertise

Stored Product Entomology

Biofumigation/Biopesticides Chemical Ecology Toxicology

X. Research Interest:

A. Development of natural fumigants against stored grain insect pests

The current research focus on stored grain pest management from natural origin. Biodiversity conservation events focus mostly on plant and animals, but a mind-boggling scale of stored grain insect pest control from botanicals is yet to be uncovered and exploited for human welfare. However, insect pest control from natural origin is neglected. The ethnic people of India practiced plants derived products as grain protectants or fumigants. These traditional practice for pest management is major tool for explore natural sources for discovering new insecticides in order to address the problem of environmental and human health hazards and, to combat the evolution of insect resistance. In view of the priority for non-synthetic chemicals (Biopesticides) from plant origin, novel bioactive molecule will be isolated, characterized and evaluated, that could lead to the development of a new, eco-friendly, biodegradable safer bio-fumigant for stored grain insect pest control.

B. Exploration of insect as food and medicine

The usage of insects as traditional medicine was recorded in many parts on the countries (Brazil, Africa, China, South Korea, etc.) including India since time immemorial. These ethno-medicinal insects are used for various aspects of health ailment of metabolic disorder, alimentary tract, relief of gastric trouble, mental relief, common cold and cough etc. Such tradition has also been practiced in India. Therefore, the present research aims to document the traditional knowledge; collection of the selected insect; molecular characterization; nutraceutical analysis and isolation, purification, and characterization of bioactive insect-derived substances with medicinally relevant biological properties.

XI. PUBLICATIONS

Books chapter: **02** Original Reviews/Papers in Peer-Reviewed International Journals): **72** Patents: **05** International Conference: 10 National Conference: 22 Total Citation: **1727** H-Index- **22** i10-index: **37** Home Page Google Scholar ResearchGate

- Hijam, A. C., Tongbram, Y. C., Nongthombam, P. D., Meitei, H. N., Koijam, A. S., **Rajashekar, Y.,** & Haobam, R. (2024). Neuroprotective potential of traditionally used medicinal plants of Manipur against rotenone-induced neurotoxicity in SH-SY5Y neuroblastoma cells. *Journal of Ethnopharmacology*, 330, 118197. IF: 5.4
- Bonysana, R., Singh, K. D., Devi, W. D., Koijam, A. S., Kapesa, K., Kalita, J., Mukherjee, P. K., & Rajashekar, Y* (2024). Ethnoentomotherapeutic and metabolite profiling of *Coridius chinensis* (Dallas), a traditional edible insect species of North-East India. *Scientific Reports*, 14(1), 6545. IF: 4.6
- Devi, W.D., Bonysana, R., Singh, K.D. Kapesa, K., Mukherjee, P. K., & Rajashekar, Y* (2024) Bio-economic potential of ethno-entomophagy and its therapeutics in India. *npj Science of Food* 8, 15. IF: 6.4

- Koijam, A. S., Singh, K. D., Nameirakpam, B. S., Haobam, R., & Rajashekar, Y* (2024) Drug addiction and treatment: An epigenetic perspective. *Biomedicine & Pharmacotherapy*, 170, 115951. IF: 7.5
- Devi, M. R., Koijam, A. S., Brockmann, A., & Rajashekar, Y* (2024) Heteropterans: a treasure trove of therapeutic proteins. *Journal of Insects as Food and Feed*, 1(aop), 1-26. IF: 5.7
- 6. Shahni, K., Rajashekar, Y., Haobam, B., Rajan, J. P., & Singh, K. B. (2024). Rare and unexplored traditional waste food processing and fermentation methods of the meitei-pangal community of Manipur: A northeastern state of India. *Journal of Asian Scientific Research*, 14(3), 301-316. IF:
- Muni, N., Chakravorty, J., & Rajashekar, Y* (2024). Electrophysiological and behavioural responses of Anomala dimidiata to three host plant's volatiles. Indian Journal of Entomology, 44-49. IF: 0.189
- 8. Muni, N., Bhadra, P., Moyong, M., Borah, S., Rajashekar, Y., & Chakravorty, J. (2024). Screening of Bioactive Compounds, Antioxidant and Antimicrobial Properties in the Leaf Extracts of Two Castanopsis Species. *Journal of Herbs, Spices & Medicinal Plants*, 1-14. IF:
- Devi, M. R., Ummalyma, S. B., Brockmann, A., Raina, V., & Rajashekar, Y* (2023) Nutritional properties of giant water bug, Lethocerus indicus a traditional edible insect species of North-East India. *Bioengineered*, 14(1), 2252669. IF: 6.89
- Saini, M., Rajashekar, Y* (2023) Antifeedant effects of Crofton weed, Ageratina adenophora extracts and their phytochemical compounds against three cabbage insect pest species. Entomologia Experimentalis et Applicata, 171(8), 603-610. IF: 2.43
- **11.** Muni, N., **Rajashekar, Y.**, Chakravorty, J. (2023) Traditional knowledge of pest management and entomophagy: Perspective on the

kiwi crop management by the Apatani tribe of Arunachal Pradesh. *Current Science*, 124(12), 1473-1475. **IF :1.16**

- Muni, N., Rajashekar, Y., Chakravorty, J. (2023) Electrophysiological and Behavioural Responses of Anomala Dimidiata to Three Host Plant's Volatiles. *Indian Journal of Entomology*. 01-06. IF: 0.18
- Devi, M. L., Singh, N. B., Sharma, K. C., Rajashekar, Y., Mishra, A., Das, S. (2023). Volatile Compound Profile Analysis of Seasonal Flower, Fruit, Leaf, and Stem of *Zanthoxylum armatum* DC. from Manipur Using HS-SPME-GC-MS. *Chemosensors*, 11(5), 273. IF: 4.22
- 14. Devi, W. D., Bonysana, R., Kapesa, K., Mukherjee, P. K., & Rajashekar, Y* (2023). Edible insects: As traditional medicine for human wellness. *Future Foods*, 100219. IF: 5.7
- Singh, N. B., Devi, M. L., Biona, T., Sharma, N., Das, S., Chakravorty, J., ... & Rajashekar, Y* (2023). Phytochemical Composition and Antimicrobial Activity of Essential Oil from the Leaves of Artemisia vulgaris L. Molecules, 28(5), 2279. IF:4.98
- 16. Kabrambam, D. S., Arunkumar, S. K., Bharali, R., Rajashekar, Y* (2023) Insecticidal and biochemical effects of Dillenia indica L. leaves against three major stored grain insect pests *Frontiers in Plant Science*, 14, 1135946 IF:6.68
- 17. Devi, W. E., Devi, C. P., Sharma, S. K., Roy,... Rajashekar, Y & Sahoo,
 M. R. (2023) Reactive Oxygen Species Turnover, Phenolics Metabolism, and Some Key Gene Expressions Modulate Postharvest Physiological Deterioration in Cassava Tubers. Frontiers in Microbiology, 14, 567. IF:6.09
- 18. Chaudhary, S. K., Keithellakpam, O. S., Lalvenhimi, S., Chanda, J., Bhowmick, S., Kar, A. Rajashekar Y., ... & Mukherjee, P. K. (2023). Chemo diversity of ginger-a potent crop in Manipur and its acetylcholinesterase (AChE) inhibitory potential. *Biochemical Systematics and Ecology*, 106, 104560. IF:1.46

- 19. Devi, T. B., Sarita, J., Biswajit, .P, Singh, K. D., Saurabh, C., Vishakha, R., Koijam, A. S., Parida, A., & Rajashekar, Y* (2022) Acute and sub-acute toxicity evaluation of Dihydro-p-coumaric acid isolated from leaves of *Tithonia diversifolia* Hemsl. A. Gray in BALB/c mice. *Frontiers in Pharmacology*. 184,105116 IF:5.98
- 20. Devi, Y. R., Lourembam, D. S., Modak, R., Shantibala, T., Subharani, S., & Rajashekar Y* (2022). Comparison of Gut Microbiota between Midgut of Healthy and Tiger Band Disease Infected Oak Tasar Silkworm, Antheraea proylei J. Entomology and Applied Science Letters, 9(3), 1-11. IF:1.9
- 21. Singh, K. D., Jena, S., Patra, B., Devi, T. B., Chawla, S., Bharali, R., ... & Rajashekar, Y* (2022). Safety evaluation of enriched fraction from leaves of *Dillenia indica* L. in BALB/c mice. *Toxicology Reports* 9, 1142-1149. IF:4.8
- 22. Devi, W.D., Bonysana, R., Kapesa, K., Mukherjee, P. K., & Rajashekar, Y* (2022). Ethnotherapeutic practice of entomophagy species by the ethnic community of Tangkhul, Mao and Poumai community of Manipur, NER India. *Journal of Ethnic Foods*, 9(1), 1-9. IF:2.68
- 23. Adesina, J. M., Onwubiko, A. J., Rajashekar, Y., Mobolade-Adesina, T. E., & Adesina, F. P. (2022). Susceptibility and reproductive capability of Callosobruchus maculatus (Coleoptera: Bruchidae) to Datura metel extracts as potential cowpea grains protectant. International Journal of Tropical Insect Science, 42(3), 2305-2312. IF:1.01
- 24. Devi, T. B., Raina, V., Rajashekar, Y* (2022) A novel biofumigant from *Tithonia diversifolia* (Hemsl.) A. Gray for control of stored grain insect pests. *Pesticide Biochemistry and Physiology 105116* IF:4.96
- 25. Devi WD, Bonysana R, Kapesa K, Rai AK, Mukherjee PK, &Rajashekar Y. (2022). Potential of edible insects as source of

functional foods: biotechnological approaches for improving functionality. *Systems Microbiology and Biomanufacturing*, 1-12 **IF:4.29**

- 26. Saini, M., Raghavendra, A., Rajashekar, Y* (2022) Use of Ageratina adenophora (Spreng.) essential oil as insecticidal and antifeedant agents against diamondback moth, Plutella xylostella (L.) Journal of Plant Diseases and Protection, 129, 439-448 IF:1.84
- 27. Saini, M., Singh, K. D., Rajashekar, Y* (2021) Current biological approaches for management of crucifer pests. *Scientific Reports*, 11, 11831 IF:4.96
- 28. Devi, A. M., Singh, T. B., Sahoo, D., Rajashekar, Y* (2021) Antifungal activity and volatile organic compounds analysis of essential oils from *Cymbopogon species* using solid-phase microextraction-gas chromatography-mass spectrometry *Journal of Agriculture and Food Research 3*, 100110 IF:3.8
- 29. Devi, T. B., Raina, V., Sahoo, D., Rajashekar, Y* (2021) Chemical composition and fumigant toxicity of the essential oil from *Tithonia diversifolia* (Hemsl.) A. Grey against two major stored grain insect pests. *Journal of Plant Diseases and Protection* 128, 609-615. IF:1.84
- 30. Singh, K. D., Adesina, J. M., Rupjyoti, B., Sahoo, D., Rajashekar, Y* (2021) Main plant volatiles as stored grain pest management approach: A review Journal of Agriculture and Food Research 4, 100127 IF:3.8
- Saini M, Singh KD, Rajashekar Y (2021) Current biological approaches for management of crucifer pests. Scientific Reports 11, 11831 IF:4.99
- 32. Kapesa, K., Deepantia, W., Bonysana, R. K., Rajashekar, Y* (2020) Anthropoentomophagy and ethnoentomology among ethnic Mao-Naga and Poumai-Naga tribes of Manipur, North-East India. Journal of Insects as Food and Feed 6(5), 507-514. IF:5.08

- 33. Devi, A. M., and Rajashekar, Y* et al. (2020) Chemical compositions and insecticidal efficacies of four aromatic essential oils on rice weevil Sitophilus oryzae L. International Journal of Tropical Insect Science 40, 549-559. IF:1.01
- 34. Messi Srichandan, Padhi: Marco, Chourasia Rounank, Rajashekar Yallappa, Amit Kumar Rai, Evidente Antonia (2020) ADMET profile and virtual screening of plant and microbial natural metabolites as SARS-CoV-2 S1 glycoprotein receptor binding domain and main protease inhibitors. *European Journal of Pharmacology* 890, 173648 IF:5.19
- 35. Devi AM, Sahoo D, Singh TB, Rajashekar Y(2019) Toxicity, repellency and chemical composition of essential oils from Cymbopogon species against red flour beetle *Tribolium castaneum* Herbst (Coleoptera: Tenebrionidae). Journal of Consumer Protection and Food Safety 15, 181-191. IF:2.6
- 36. Adesina, JM, Raghavendra, A, Rajashekar, Y, Ofuya, TI (2019). Potential use of *Clerodendrum capitatum* extracts and its formulation for control of three major stored product beetles. *Food Quality and Safety*, 3(3), 179-185. IF: 4.19
- 37. Adesina JM, Bunindro N, Sahoo D, Rajashekar Y (2019) Traditional methods of food grains preservation and storage in Nigeria and India. *Annals of Agricultural Sciences* 64(2), 196-205. IF: 7.4
- 38. Thiyam BD, Saini M, Heisnam DC, Kabrambam DS, Sonia S, Bunindro N, Ningthoujam IS, Momota P, Dinabandhu S, Rajashekar Y (2018) Toxicity and antifungal activity of 2, 3-Dimethylmaleic anhydride against stored product beetles and plant fungal pathogens. *Journal of Plant Diseases and Protection* 125, 585-590. IF:2.0
- 39. Mobolade, A. J., Chanu, H. D., Singh, K. D., Devi, T. B., Singh, N. I., Raghavendra, A., ... & Rajashekar, Y. (2018). Chemical composition, toxicity and biochemical efficacy of Phyllantus fraternus against

major three stored grain pests. Annals of Experimental Biology, 6(1), 1-9. IF: 2.43

- 40. Kabrambam DS, Rajendra Kumar L, Thiyam BD, Ningthoujam IS, Heisnam DC, Sonia S, Bunindro SN, Dinabandhu S, Rajashekar Y (2017) Biochemical efficacy, molecular docking and inhibitory effect of 2, 3-dimethylmaleic anhydride on insect acetylcholinesterase. *Scientific Reports* (npg) 7: 12483 | IF:4.99
- **41. Rajashekar Y,** Shivanandappa T. (2017) Mode of action of the natural insecticide, Decaleside involves sodium pump inhibition. *PloS one*, 12(1), e0170836. IF:3.7
- **42.** Rajashekar Y. (2016) Toxicity of coumaran to stored products beetles. Journal of Stored Products Research 69, 172-174. IF:2.83
- 43. Rajashekar Y, Tonsing N, Shantibala T, Manjunath JR. (2016) 2, 3dimethylmaleic anhydride (3, 4 –Dimethyl-2, 5-furandione): A plant derived insecticidal molecule from Colocasia esculenta var. esculenta (L.) Schott. *Scientific Reports* (npg) 6:20546 IF:4.99
- 44. Adesina, J. M., Ileke, K. D., Rajashekar, Y., & Ofuya, T. I. (2016). Insecticidal evaluation of Bridelia micrantha and Dalbergia lactea aqueous extracts for the control of Podagrica uniforma (Jacoby) and Nisotra dilecta (Jacoby)(Coleoptera: Chysomelidae) infestation on okra. AGRIVITA, Journal of Agricultural Science, 38(3), 269-274. IF:1.02
- 45. Adesina Mobolade, J., Tonsing, N., & Rajashekar, Y. (2015). Efficacy of Clerodendrum capitatum and Phyllantus fraternus leaf powders on seed beetles of stored maize and cowpea. *Journal of Crop Protection*, 4(5), 655-665. IF:0.83
- 46. Ritesh KR, Suganya A, Dileep Kumar HV, Rajashekar Y, Shivanandappa T. (2015) A single acute hepatotoxic dose of CCl4 causes oxidative stress in the rat brain. *Toxicology Reports* 2, 891-895. IF:4.8

- 47. Rajashekar Y, Raghavendra A, Bakthavatsalam N. (2014) Acetylcholinesterase inhibition by biofumigant (coumaran) from leaves of Lantana camara in stored grain and household insect pests. *BioMed Research International* 2014, Article ID 187019, 6 pages IF:3.2
- **48. Rajashekar Y,** Shivanandappa T. (2014) Grain protection potential of Decaleside II, a new plant-derived natural insecticide. Advance in Entomology 2, 144-150. IF:1.0
- 49. Rajashekar Y, Shivanandappa T. (2014) Mammalian safety of Decaleside in the laboratory mouse. *Toxicology Reports* 1, 969-972.
 IF:4.8
- 50. Rajashekar Y, Ravindra KV, Bakthavatsalam N. (2014) Leaves of Lantana camara Linn. (Verbencaceae) as a potential insecticide for the management of stored grain pests. Journal of Food Science and Technology 51(11), 3494-3499. IF:3.17
- Rajashekar Y, Vijay Kumar, Ravindra KV, Bakthavatsalam N. (2013) Isolation and characterization of biofumigants from leaves of Lantana camara for grain protection. *Industrial Crops and Products* 51, 224-228. IF:6.4
- 52. Rajashekar Y, Rao LJM, Shivanandappa T. (2012). Decaleside: a new class of natural insecticide targeting tarsal gustatory sites. *Naturwissenschaften* 99(10), 843-852. IF:2.4
- 53. Rajashekar Y, Bakthavatsalam N, Shivanandappa T. (2012).
 Botanicals as grain protectants. *Psyche: A Journal of Entomology 2012* Article ID 646740, 13 pages. IF: 1.04
- 54. Rajashekar Y, Gunasekaran N and Shivanandappa T. (2010). Insecticidal activity of the root extract of *Decalepis hamiltonii* against stored-product insect pests and its application in grain protection. *Journal of Food Science Technology* 43(3), 310-314. IF:3.17

- **55. Rajashekar Y** and Shivanandappa T (2010). A novel natural insecticide molecule for grain protection. Julius-Kühn-Archiv 425, 913-917.
- 56. Vanitha Reddy P, Rajashekar Y, Khamrunissa Begum Leelaja BC and Rajendran S. (2007). The relation between phosphine sorption and terminal gas concentrations in successful fumigation of food commodities. *Pest Management Science* 63, 96-103. IF:4.4
- 57. Leelaja BC, Rajashekar Y and Rajendran S. (2007). Detection of eggs of stored-product insects in flour by staining technique. *Journal of Stored Products Research* 43, 206-210. IF:2.83
- 58. Leelaja BC, Rajashekar Y, Vanitha Reddy P, Khamrunissa Begum and Rajendran S. (2007). Enhanced fumigant toxicity of allyl acetate to stored-product beetle pests in the presence of carbon dioxide. *Journal* of Stored Products Research 43; 45-48. IF:2.83
- 59. Khamrunissa Begum, Vanitha Reddy P, Leelaja BC, Rajashekar Y, and Rajendran S. (2007). Studies on insect infestation in chocolates. *Journal of Stored Products Research* 43, 118-122. IF:2.83

XII. Book Chapter

- Sriranjini V, Rajashekar Y and Rajendran S. (2009). Toxicity of Sulfuryl Fluoride to Stored Grain Insects. *Pest Management in Store Grains*. Satish Serial Publishing House, Azadpur, New Delhi
- Shivanandappa T, Rajashekar Y (2014) Mode of action of plantderived natural insecticides. In: Advances in plant biopesticides (Singh D, ed), Springer India, pp. 323-345.

XIII. PATENT

 Rajashekar Y, Borah JC. (2014) A BIOFUMIGANT COMPRISING 2-METHYLTETRAHYDRO-3-FURANONE. 2530/DEL/2014. Granted No. 439446

- 2. Shivanandappa T, Rajashekar Y, Rao LJM. (2010). A process for preparation of novel insecticidal oligosaccharides from the roots of Decalepis hamiltonii effective against household and stored grain insect pests. 63/DEL/2010; PUBLICATION DATE: 17/02/2012;
- Rajashekar Y, Bakthavatsalam N. (2012). A process for preparation of biofumigant from leaves of *Lantana camara* against stored grain insect pests. 4227/CHE/2012; PUBLICATION DATE: 03/05/2013.
- Bunindro N, Sonia S, Rajashekar Y, Jharna C, Mukherjee PK (2020) A Novel Biofumigant Composition And A Process For The Preparation Thereof. Indian Patent Application No. 202031049091 PUBLICATION DATE (U/S 11A) 13/05/2022

International

 NEIRAPAKAM, Bunindro; SOUGRAKPAM, Sonia; RAJASHEKAR, Y. CHAKRAVORTY, Jharna & MUKHERJEE, Pulok K. "A Novel Biofumigant Composition And A Process For The Preparation Thereof" PCT Application Number: PCT/IN2021/051060 and International Publication Number WO 2022/101932 A1

XIV Research Projects (Currently pursuing and Completed)

S.	Title	Sponsor	Period	Amount	Status	Collaborators
No		ing		(Rs in		
		Agency		lakh)		
1	Plant-derived botanicals from	DBT	Three	60.14	completed	Dr. N,
	herbs/shrubs of Indo-Burma biodiversity hotspot for control of stored grain insect pests		years			Bakthavatsalm Principal Scientist, ICAR-NBAIR Bangalore

XIV A. Extramural funded projects: 05 (As Principal Investigator)

2	Chemical Ecology of the North East Region of India: A Collaborative Programme Linking NER and Bangalore Researcher	DBT	Five years	2662.48 IBSD 238.06	Completed	Dr. Uma Ramakrishanan Professor TIFR-NCBS Bangalore
3	Phytopharmacetuical Development of <i>Ficus</i> <i>semicordata</i> Buch, -Ham. Ex Sm. As per regulatory guidelines of DCGI"	DBT	3 years	29.06	Completed	Dr. P.S. Sangwan Principal Scientist CSIR-IIIM Jammu
4	Bioresources and sustainable lively hood s in North East India	DBT	3 years	54.06	Completed	Dr. R. Ganesan Fellow ATREE Bangalore
5	Exploration of potential bio actives from edible insects of north-east region of India with special reference to anti- diabetic, anti-inflammatory and antioxidant effects	DBT	3 years (2022- 2025)	65.9	On going	Dr. Jatin Kalita Principal Scientist CSIR-NEIST Jorhat, Assam

XIV B. Intra-mural projects: 02 (As Principal -Investigator)

5	Field	IBSD Partnership Projects	2017	2019	17.42	Kalkar
	demonstration	IBSD/A1/Partnership/2017/7			lakhs	Research
	and					Foundation
	establishment of					Dr: S. S
	Demo plots for the					Barve
	cultivation and					
	processing of					
	select aromatic					
	crops in Manipur					
6	Bioactivity guided	IBSD Partnership Projects	2017	2019	32.2	Manipur
	isolation and	IBSD/A1/P(PH2)/6			lakhs	University
	purification of					Dr: Reena
	neuroprotective					Н
	molecules from					
	Isodon ternifolius					
	and <i>Tinospora</i>					
	cordifolia					

XV. Scholarships & Awards

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- NESA Distinguished Scientist of the Year Award-2023
- Received Eminent Young Scientist Award of the year 2017 from International Foundation For Environment and Ecology
- Received for Prof. T. S. Sadasivan Memorial NABS- Best Research Paper Award 2016 from National Academy of Biological Sciences
- Received for Young Scientist Award of the year 2015 from International Foundation For Environment and Ecology
- FSAB and SAB Young Investigator 2012 from Society of Applied Biotechnology 2012
- Postdoctoral Research Associate by Department of Biotechnology (IISc-DBT) 2011
- SBC Best poster award for best poster paper presented at 76th Annual meeting of the Society of Biological Chemists (India) (SBCI), 25th-28th Nov 2007, Sri Venkateshwara University, Tirupati, India.
- Senior Research Fellowship by Council of Scientific and Industrial Research (CSIR), New Delhi, India
- Dr. Kameshwar Rao award for best poster paper presented at 7th Applied Zoological Research Association conference, 14th- 16th Feb 2005, Orissa Agriculture University, Bhubaneshwar, India.

XVI. Reviewer for Journals

PLoS ONE, Scientific Reports, Journal of Stored Product Research, Industrial Crops and Products, Pesticide Biochemistry Physiology, Journal of Ethnopharmacology, Ecotoxicology and Environmental Safety, Food Chemistry, Future Foods, Journal of Insect as Food and Feed, Journal of Food science and Technology, Current Science, Pest Management Science, Frontiers in Pharmacology, Frontiers in Plant Science, Molecules, Agriculture, Biocatalysis and Agricultural Biotechnology, Journal of Environmental Science and Health Part B, Molecular and Cellular Biochemistry, Journal of Advanced Research, International Journal of Tropical Insect Science, Phytomedicine Plus, Food Research International.

XVII. Guidance of Research Programme

Ph.D., Awarded: 02
Ph.D., thesis submission: 03
Ph.D., programme in progress: 03
TWAS Fellow Programme: 01
CV Raman Fellow Programme for Foreigners: 01
M.Sc. dissertation students: 15

A. Students pursuing Ph.D. under my guidance

1. Sonia Sougrakpam (Chemical Ecology project-JRF) : Sonia joined Ph.D programme September 2018, and she working on Potential natural repellents to control insect vectors derived from *Artemisia* sp.

2. **Yumnam Rajlakshmi Devi** (IBSD Core Ph,D SRF): Rajlaksmi Devi joined Ph.D programme September 2018 and She working on Genetic characterization of alphabaculovirus causing tiger band disease of oak tasar silkworm(*Antheraea proylei* J.) and its management with the botanicals.

3. **Rajkumari Bonysana** (IBSD Core Ph.D JRF): Bonysana Ph.D programme 2023, and she working on : Study on potential bioactives of *Darthula hardwickii* (Gray), a traditional therapeutic insect of North-east India with reference to anti-diabetic.

B. Students with completed Ph.D.

1. Dr. Nameirakpam Bunindro Singh, Degree awarded 2024; University: Rajiv Gandhi University, Itanagar

Ph.D. thesis title "Insect-plant interaction for stored grain insect pest and disease management"

2. Dr. Kabrambam Dasanta Singh, Degree awarded 2024; University: Guwahati University

Ph,D, thesis title " Isolation and characterization of green pesticides from *Dillenia indica* Linn. against stored grain insect pests".

C. Students with Ph.D thesis submission:

1. Miss. Thiyam Bidyababy Devi, Ph.D thesis submitted 2024; University: Kalinga Institute of Industrial Technology (KIIT), Deemed to be University, Bhubaneswar

Ph,D, thesis title " Isolation and identification of botanicals from *Tithonia diversifolia* (Hemsl.) A. Gray for control of stored grain insect pests".

2. Miss. Mutum Ranjana Devi, Ph.D thesis submitted 2024; University: Kalinga Institute of Industrial Technology (KIIT), Deemed to be University, Bhubaneswar

Ph,D, thesis title " Identification and characterization of bioactive peptides from three species of giant water Bugs (Belostomatidae)".

3. Miss. Saini Mayanglambam, Ph.D thesis submitted 2024; University: Kalinga Institute of Industrial Technology (KIIT), Deemed to be University, Bhubaneswar

Ph,D, thesis title " Evaluation of plant derived products from *Ageratina adenophora* (Spreng.) for suppressing insect pests of Crucifers".

XIV. Students who have worked earlier in funded projects

Ms. Alina Devi (JRF) in IBSD Partnership Projects
 Dr. W. Elizabeth Devi (Women Scientist) in DBT BioCaRE

- 3. Ms. Sadia S (JRF) in IBSD Partnership Projects
- 4. Mr. Siso kumar (JRF) in IBSD Partnership Projects
- 5. Ms. Tonz singh (Technical Assistant) IBSD core staff
- 6. Ms. H. Diana Chanu (Technical Assistant) in Chemical Ecology Project
- 7. Mr. N. Indrajit Singh (Technical Assistant) in Chemical Ecology Project
- 8. Mr. David (Technical Assistant) in Chemical Ecology Project
- 9. Mr. T. Marjit (Technical Assistant) in IBSD Partnership Project
- 10. Dr. W. Deepanita Devi (Principal Project Associate) in Taxonomy project
- 11. Ms. Kokho Kapesa (Project Fellow) in Taxonomy project
- 12. Dr. K. Arunkumar Singh (DBT-Research Associate)
- 13. Dr. A. Chandralekha (DBT-Research Associate)
- 14. Dr. Adesina Mobolade Jacob (TWAS Fellow)

Prospective Ph.D. students : New students (having national level fellowship) interested in joining my laboratory can contact with their brief CV. The admissions to Ph.D. course under AcSIR happen twice a year and other affiliated universities.

Prospective post-doctoral fellows: Please send your detailed CV having information about your PhD, publications and research interests. The applications for exploring post-doctoral opportunities under various schemes (DBT, DST, CSIR, ICMR & TWAS) can be forwarded after due discussion.

(Rajashekar)