



DESHBANDHU COLLEGE

(UNIVERSITY OF DELHI)

KALKAJI, NEW DELHI, DELHI 110019



Name (Dr.)	VARSHA BAWEJA	
Designation	ASSOCIATE PROFESSOR	
Department	ZOOLOGY	
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Phone Number	+91-9891511206	
Web Page	https://www.deshbandhucollege.ac.in/	
Educational Qualifications		
Degree	Institution and University	Year of Award
Ph. D.	Kanpur University, Kanpur	1990
M Sc	Kanpur University, Kanpur	1985
B Sc	D E I, Dayalbagh, Agra	1983
Career Profile		
Associate Professor		
Administrative/Organizational Assignments (Year wise)		
<ul style="list-style-type: none">• Member of purchase committee in the academic session 2020-2021• Member of canteen committee in the academic session 2020-2021• Member of purchase committee in the academic session 2019-2020• Member of canteen committee in the academic session 2019-2020• Member of sports committee in the academic session 2017-2018.• Member of cultural committee in the academic session 2016-2017.• Member of building and furniture committee in the academic session 2016-2017.• Admission-in-charge for B.Sc. Life Sciences in the academic session 2015-2016.• Convener of extension lecture committee in the academic session 2015-2016.• Member, union advisory committee in the academic session 2015-2016.• Member, proctorial committee in the academic session 2014-2015.• Member, extension Lecture Committee in the academic session 2014-2015.• Member of building and furniture committee in the academic session 2013-2014.• Member of prospectus committee in the academic session 2013-2014.• Convener of proctorial committee in the academic session 2012-2013• Member of building and furniture committee in the academic session 2012-2013• Convener of extension lecture committee in the academic session 2011-2012.• Convener of garden committee in the academic session 2011-2012.• Expert member: Interview Board for interviewing candidates seeking admission to B.Ed. Programme of CEI, University of Delhi for the academic session of 2010-2011• Convener of garden committee in the academic session 2010-2011.		
Area of Specialization		

Developmental biology, Physiology, Entomology

Papers Taught

Name of the Course	Year/Semester	Name of the Subject	Year
B.Sc (Hons) Zoology	III/VI	Developmental Biology	2019
B.Sc (Hons) Zoology	II/IV	Physiology	2019
B.Sc (Hons) Zoology	III/V	Animal Behaviour and Chronobiology	2019
B.Sc (Hons) Zoology	II/III	Physiology	2018
B.Sc (Hons) Zoology	II/III	Diversity of Chordates	2018
B.Sc (Hons) Zoology	II/III	Biochemistry	2018
B.Sc (Hons) Zoology	III/VI	Developmental Biology	2017
B.Sc (Hons) Zoology	II/IV	Comparative anatomy of chordates	2017

Area of Specialization in Research

Biological control, Entomopathogenic Nematodes, Physiology, Entomology

Research Guidance

Projects Completed

- i. "Effect of plant extracts on the midgut microbial flora of *Aedes aegypti*." Innovation project funded by University of Delhi (2012-2013)
- ii. "Influence of plant extracts on reproductive physiology and behavior of *Aedes aegypti*". Innovation Project funded by University of Delhi (2013-2014)

Supervision of M.Sc. Dissertations

- i. Manish Kumar (M.Sc.), Department of Agrochemical and Pest Management, University of Delhi. January 2000. "Entomopathogenic nematodes in IPM".
- ii. Hem Ranjini (M.Sc.), Department of Agrochemical and Pest Management, University of Delhi. February 2001. "Effect of environmental factor on efficacy of entomopathogenic nematodes as biocontrol agents".
- iii. Vishal (M.Sc.), Department of Agrochemical and Pest Management, University of Delhi. February 2002.

Invited Talks Delivered/ Jury Member

1. Let's Innovate Competition organized by Delhi Public School, R.K. Purum Delhi, on July 13, 2019. **Jury Member**
2. **Invited talk** on Insect Biodiversity was delivered in Colloquium of the Department of

Zoology, Deshbandhu College on August 30, 2019.

3. **Invited talk** on 'Role of lifestyle behaviours on women's health' on International Women's Day at Deshbandhu College on March 8, 2019.
4. **Invited talk** on Biopesticides: A potent tool of Green Technology for mitigation of Pesticide Pollution was delivered in Colloquium of the Department of Zoology, Deshbandhu College on January 10, 2020.
5. International Conference on Natural Products and Human Health – 2020 (ICNPHH-2020)" held on February 27-29, 2020 organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India. **Jury Member** for an Oral Session.
6. **Invited talk** on 'Impact of Covid-19 pandemic on the environment' in an International webinar, organized by Sheodeni Sao College, Kaler, Bihar on June 5, 2020.
7. **Invited talk** on 'Bio-sustainable solutions to global environmental crisis' in a webinar organized by S N Sinha College, Tekari, Gaya on June 18, 2020.

Papers Presented in Conference/Workshop/Seminar/ Symposium

1. **Baweja V.** and Himanshu. 2020. Soy consumption and prevailing statistics of neurodegenerative disorders in Asia. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India. ISBN 9-788194-428237
2. Chakraborty, A. and **Baweja, V.** 2020. Curcumin in cancer: an end to our woes? International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India. ISBN 9-788194-428237
3. Tiwari, S K and **Baweja, V.** 2020. Therapeutic effects of curcumin in gynaecological cancers. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India. ISBN 9-788194-428237
4. Himanshu and **Baweja Varsha.** 2019. Effect of dietary isoflavone consumption on the prevalence of Alzheimer's disease. In: 6th World Congress on Nanomedical Sciences held at Vigyan Bhawan New Delhi.
5. **Baweja Varsha.** 2018. Biopesticides: A potent tool for green technology for the mitigation of pesticide pollution. In Fourth National Symposium on Environment: Green Technology for Environmental Sustainability' held at Deshbandhu College, New Delhi.
6. **Varsha Baweja.** 2017. Interaction of *Steinernema glaseri*, an Entomopathogenic Nematode with a Predatory Fungus *Arthrobotrys superba* on Different Nutrient Media. International Journal of Bioengineering and Life Sciences, Vol:11 (10)
7. **Baweja, V.,** Gupta, K K, Dubey, V, Keshavam, C. 2014. Assessing antimicrobial activity of various plant extracts on midgut microflora of *Aedes aegypti*. Int. J. of Bioengineering and Life Sci., Vol 1 (12)
8. Gupta K K, **Baweja V,** Prajneshu M. 2013. Effect of Plant Extracts on the Midgut Microbial Flora of *Aedes aegypti*. In: XII Int. Conf. on Vector and Vector borne Diseases, Udaipur.
9. Seth, R.K., **Baweja V.** 2000. Compatibility of entomopathogenic nematodes and F-1 sterility for managing *Spodoptera litura* (Lepidoptera, Noctuidae): Parasitoid responses & host suitability. In: XXI Int. Cong. of Entomology, Brazil, pp. 417
10. **Baweja Varsha,** 2000. Experimental evaluation of adult stage of *Spodoptera litura* (Lepidoptera: Noctuidae) as a potent host for Entomopathogenic Nematodes, *Steinernema*

glaseri; In XXI International Congress of Entomology, pp. 513.

11. Seth, R.K. **Varsha Baweja** and Anjali Dhar. 1998. Ascertaining the bioinfectivity potential of entomogenous nematodes on F-1 progeny of irradiated *Spodoptera litura*. In: FAO/IAEA Int. Conf. on area wide control of insect pests integrating the sterile insect and related nuclear and other techniques, Penang, Malaysia, 117.
12. **Varsha Baweja**, S.K. Sagar and S.S. Sehgal, 1997. Host searching behaviour: Response to host volatile cues by entomopathogenic nematodes. In: National Symposium on IPM in India – Constraints and Opportunities, New Delhi, 10-11.
13. Sehgal S.S. and **Varsha Baweja**, 1996. Efficiency of *Heterorhabditis bacteriophora* Poinar (Nematoda :Heterorhabditidae) under insecticide–stress in parasitizing *Spodoptera litura* Fabr. (Lepidoptera: Noctuidae). In: XX International Congress of Entomology, Italy, 683.
14. **Varsha Baweja**, and S.S. Sehgal, 1996. The area of discovery and host searching strategy of an entomophagous nematode *Heterorhabditis bacteriophora* in soil columns. In: XX International Congress of Entomology. Italy, 678.
15. **Sachdeva, V.** and P.C. Gupta, 1986, Two new species of the genus *Microcotyle* from marine fishes at Puri coast, Orissa, India. In: National Congress of Parasitology, 7th Session, Raipur.

Book/ Book Chapter/ E-Content Published

1. **Varsha Baweja** and Ruby Mishra (Eds) 2017. Reproductive Health in India: Concerns and Awareness. Publisher: Enriched Publications, New Delhi. Pages: 133. ISBN: 978-819346343-7
2. **Baweja Varsha. 2017.** Status of Congenital Anomalies in India: A Bird’s Eyeview. In: Reproductive Health in India: Concerns and Awareness (Ed: Varsha Baweja and Ruby Mishra) Enriched Publications, New Delhi, pp. 121-133. ISBN: 978-819346343-7
3. **Baweja Varsha**, S.S. Sehgal and R.K. Seth. 1998. Nematodes as a biological tool in Integrated Pest Management. In: **Book ‘Ecofriendly pest suppression’** (ed. Gautam, R.D. and Prasad, D.) Westville Publications, New Delhi, pp. 271-320. ISBN 13: 97881858
4. Jain Anju, Nanda Sarita, **Baweja Varsha.** 2018. Endocrine Disruptors. E-content for postgraduate course. NME-ICT in Zoology under MHRD project.
5. Nanda Sarita, **Baweja Varsha.** Jain Anju. 2018. Neuronal Cytoskeleton. E-content for postgraduate course. NME-ICT in Zoology under MHRD project.
6. Jain Anju, **Baweja Varsha**, Anna Senrung. 2018. Neuroendocrine Physiology: Hypothalamic Hormones. E-content for postgraduate course. NME-ICT in Zoology under MHRD project.
7. Anna Senrung, **Baweja Varsha**, Jain Anju., 2018. Neuroendocrine Physiology: Classification of Hormones. E-content for postgraduate course. NME-ICT in Zoology under MHRD project

Publications Profile

Research Papers published:

- i. **Baweja Varsha** and Rawat R. 2020. Biocompatibility of *Steinernema glaseri* with a nematode trapping fungus *Arthrobotrys superba* on different nutrient media. Acta Ecologica Sinica. <https://doi.org/10.1016/j.chnaes.2020.03.001> ISSN 1872-2032
- ii. **Varsha Baweja** and Seth R. K. 2013. Azadirachtin treated larvae of *Spodoptera litura* as potential host for *Steinernema glaseri*– an integrated approach. Int. J. Env. Res. and Dev. 3

(8): 113-116.

- iii. Seth, R.K., Tyagi, S., **Baweja V.** 2001. Effect of Host – irradiation on Bioefficacy of Entomopathogenic Nematodes (EPNs), *Steinernema glaseri* As Potential Parasitoids on Lepidopteran pest, *Spodoptera litura* (Fabr.). In: Second Research Co-ordination Meeting on “Use of Nuclear Techniques for the Colonization and Production of Natural Enemies of agricultural insect pests”. Mexico.
- iv. **Baweja Varsha** and S.S. Sehgal. 1997. Potential of *Heterorhabditis bacteriophora* Poinar (Nematoda, Heterorhabditidae) in parasitizing *Spodoptera litura* Fabricius in response to malathion treatment. Acta Parasitologica 42(3): 168-172.
- v. Seth, R.K., **Varsha Baweja** and S.S. Sehgal, 1994. Bioinfectivity of entomogenous nematode, *Heterorhabditis bacteriophora* on progeny of irradiated *Spodoptera litura*. J. Nucl. Agric. Biol. 23(3): 192.
- vi. Nayak, M.K., S.S. Sehgal and **Varsha Baweja**, 1993. Morphometric variation within and between two natural populations (from plague endemic areas) and a pure-line laboratory strain of oriental rat flea *Xenopsylla cheopis* (Siphonoptera :Pulicidae). Bull. Ent. 34(1-2): 132-141.
- vii. **Baweja Varsha**, S.S. Sehgal and M.K. Nayak. 1993. The influence of temperature on the rate of development of *Spodoptera litura* (Fabricius) Bull. Ent. 34(1-2): 142-147.
- viii. Gupta, P.C. and **V. Sachdeva**. 1992. On a remarkable new species of the genus *Calceostoma* van Beneden, 1858. Acta Parasitol. 37: 1-3.
- ix. Nayak, M.K. S.S. Sehgal and **Varsha Baweja**, 1991. Flea-host relationships of associated *Rattus* and native wild rodents in selected biotopes of two erstwhile plague endemic areas in India. Indian J. Ent. 53(4): 564-574.
- x. Gupta, P.C. and **V. Sachdeva**. 1989. On two monogeneans from Indian marine fishes. Riv. Di Parasitol. 56: 293-298.
- xi. Gupta P.C. and **V. Sachdeva**, 1989. Two piscine monaxinids from Indian subcontinent. Riv. Di Parasitol. 56: 287-292.
- xii. Gupta, P.C. and **Varsha Sachdeva**. 1989. *Neofridericianella ritai* gen. nov.sp. nov. (Monogenea : Fridericianellidae fam. nov.) from an estuarine fish, *Rita pavimenta* (Gunther) from Chilka lake, Puri, Orissa. Riv. Di Parasitol. 56: 293 197-203.
- xiii. Gupta, P.C. and **Varsha Sachdeva**, 1987. *Neohamatopeduncularia bengalensis* gen. nov. sp. nov. and *Lobotrema aspidopariaii* sp. Nov. (Monogenea : Dactylogyridae) from the gills of Indian fishes. Kanpur Univ. Res. J. (Sci.) 5 (1984): 41-55.
- xiv. Gupta, P.C. and **Sachdeva, V.** 1986. Two new species of the genus *Lamellodiscoides* Yamaguti, 1963 (Monogenea : Diplectanidae) with a key to its species, and synonymy to the genus *Pseudolamellodiscoides* Gupta and Krishna, 1979. Proc. Nat. Sym. Fish & Env. 27-31.
- xv. Gupta P.C. and **Sachdeva, V.** 1986. *Silonditrema kanpurensis* sp. nov. (Monogenea: Dactylogyridae) from freshwater fish, *Mystus tengara*. Indian J. Parasitol. 10: 153-155.

Academic Distinctions/Fellowships

1. Research Associateship C.S.I.R. 1991 to 1996
2. Pool Officer C.S.I.R. 1996 to 1999
3. Chaired a session in an International Conference on Entomology, Paris in Oct, 2017
4. Got the best presentation award for the paper presented on “Interaction of *Steinernema glaseri*, an entomopathogenic nematode with a predatory fungus *Arthrobotrys superba* on different nutrient media” in Int Conf on Entomol 2017, Paris
5. National Symposium on “Environment: Greener Future and Awareness” held at Deshbandhu College, New Delhi. March 19, 2016. Jury Member for an Oral Session.
6. International Conference on Natural Products and Human Health – 2020 (ICNPHH-2020)” held on February 27-29, 2020 organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India. **Jury Member** for an Oral Session.

Resource Person:

1. Development of e-Resource in science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 9.1.2017-13.1. 2017
2. Development of e-Resources in science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 27.11.2017-1.12. 2017
3. Development of joyful Learning of science kit. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 11.12.2017 to 15.12.2017
4. Development of kit based handbook of understanding science through activities games and art forms at upper primary and secondary stages’. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi, December 18-22, 2018
5. Online Course in teaching of science at upper primary stage.Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 8.1.2018 to 12.1. 2018
6. Development of kit based on handbook on understanding science through activity games, and art forms at upper primary and secondary Stages. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 29.01. 2018 to 02.02.2018.
7. Online Course in teaching of science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 19.02.2018 to 23.02.2018.
8. Online Course in Science for Teachers teaching at Upper Primary Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From July 22-26, 2019.
9. Development of Script for the Modules of Training Package in Biology for Teachers Teaching at Higher Secondary stage for Dissemination of MOOC Format. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From November 25-29, 2019
10. Online Course in Science for Teachers teaching at Upper Primary Stage. Organized by

Department of Education in Science and Mathematics at NCERT, New Delhi, From December 9-13, 2019.

11. Development of Scripts for the Modules of Training Package in Biology for teachers teaching at Higher Secondary Stage for dissemination in MOOC format. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From December 30, 2019 to January 3, 2020.
12. Development of Tactile Kit in Science at Upper Primary Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From March 11-13, 2020
13. Innovation in Science Pursuit for Inspired Research (DST) held at Deshbandhu College, Kalkaji, New Delhi, Dec 17-20, 2020
14. Participated as '**Evaluator**' for Biology in Vidyarthi Vigyan Manthan (VVM) 2019-20, State Level Camp (Level II) Delhi held at Deshbandhu College, New Delhi, January 19, 2020

Conference/Workshop/Seminar/ Symposium/ Webinar Organized /Attended

1. **Convenor** of Webinar on Environment, held on Zoom on June 6, 2020.
2. **Convenor** of Virtual workshop on 'Role of a Citizen in Biodiversity Conservation' held on Gotomeetings app on May 13, 2020.
3. **Attended** a webinar on 'Covid-19 Pandemic and Immunity' and 'Socio-psychological Issues and Covid-19' organized by Deshbandhu College, University of Delhi and Delhi Pharmaceutical Sciences and Research University, Delhi on May 6, 2020.
4. **Attended** a webinar on 'Challenges before Universities in Covid-19 Phase' organized by
5. **Attended** a webinar on 'Urban Health Hazard and Preparedness in Global Pandemic Covid-19' organized by Shaheed Bhagat Singh College, University of Delhi. May 2, 2020
6. **Attended** a webinar on 'Mental Health Issues and Solutions' organized by Sri Venkateswara College, University of Delhi. April 28, 2020.
7. **Attended** a webinar on 'Covid-19 and the challenges of the Visually Impaired' organized by the University of Delhi. April 27, 2020.
8. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020. **Co-convenor**
9. National Conference on Pharmacovigilance Advancement in the Safe Drug Development. held at Deshbandhu College, University of Delhi, Kalkaji, New Delhi on January 16-17, 2020 **Advisory Member**
10. Innovation in Science Pursuit for Inspired Research (DST) held at Deshbandhu College, Kalkaji, New Delhi, Dec 17-20, 2020. **Member, Organizing Committee.**
11. National Conference on "Insect-Plant Biology in 21st Century" held at Deshbandhu College, University of Delhi, Kalkaji, New Delhi on November 4-5, 2019. **Convenor**
12. **Member, Organising Committee** of Two weeks Faculty Development Programme on Entrepreneurship (Science, Technology and Management for Society) held at Deshbandhu College, New Delhi. Dec 13-27, 2018.
13. **Member, Organising Committee** of the 4th National Symposium on 'Environment: Green Technology for Environmental Sustainability' held at Deshbandhu College, New Delhi. Sep 25, 2018.
14. **Member, Organising Committee** of the workshop on "Skill development to build a clean India" held at Deshbandhu College, New Delhi. June 7-8, 2018
15. **Coordinator, National Symposium** on "Reproductive Health in India: Concerns and

Awareness” held at Deshbandhu College, New Delhi. February 12, 2016.

16. **Member, Organising Committee** of National Symposium on “Environment: Greener Future and Awareness” held at Deshbandhu College, New Delhi. March 19, 2016.
17. **Attended** International Congress on “Embryo Implantation and Pregnancy: Intricacies and Strategies for its Success” held at National Institute of Immunology, New Delhi. March 9-11, 2015.
18. **Member, Organising Committee** of National Symposium on “Vector Biology and Vector Control” held at Deshbandhu College, N. Delhi. February 12, 2015.
19. **Member, Organising Committee** of National Symposium on “Environment: Challenges and Awareness” held at Deshbandhu College, New Delhi. Nov 5, 2014.
20. **Member, Organising Committee** of National Symposium on “Vector Biology and Vector Control” at Deshbandhu College, N. Delhi. June 21, 2013.
21. **Attended** The Academic Congress – Enabling the Young: Redefining Education’ held at University of Delhi, 6-7 September, 2012.
22. **Attended** Indo-Swiss Collaboration in Biotechnology International Conference on Recent trends in developing bioremediation strategies for Hexachlorohexane (HCH) & other chlorinated contaminants” organized by Department of Zoology, University of Delhi. Feb 9-11, 2011
23. **Attended** National Symposium on Current Trends in Genomics and Proteomics” organized by Deshbandhu College, N. Delhi. Feb 4-5, 2010.

Professional Training/Workshop attended

- i. “Lecture workshop on **Molecular Endocrinology & Gamete Biology**” held on October 3-4, 2005 organized by Indian Academy of Sciences, Bangalore at Daulat Ram College, University of Delhi, Delhi- 110007.
- ii. Attended four week Orientation Programme organized by the UGC-ASC Jamia Millia Islamia, New Delhi from 16th April to 14th May 2009 and obtained grade ‘A’.
- iii. Attended three weeks Refresher Course organized by CPDHE (Centre for Professional Development in Higher Education), ILL, University of Delhi on “**Life Sciences**” from 29th January to 18th February, 2009.
- iv. Workshop on “The fascinating world of e-resources for teaching biology to undergraduate students” organized by Pearson Education India and Daulat Ram College, University of Delhi. March 8, 2010.
- v. Attended three weeks Refresher Course organized by UGC-ASC Jamia Millia Islamia, New Delhi on “**Human Rights and Social Inclusion**” (Interdisciplinary) from 15th April to 5th May, 2010 and obtained grade ‘A’.
- vi. Attended four weeks Refresher Course organized by UGC-ASC Jawaharlal Nehru University, New Delhi on “**Biotechnology**” from 26th July to 20th August, 2010 and obtained grade ‘A’.
- vii. Workshop on “**Introduction to Bio-informatics**” organized by Department of Zoology, Zakir Husain College and ILL, University of Delhi. January 16-20, 2012.
- viii. Seminar on ‘**Use of Animals in Education and Research**’ held at Department of Zoology,

University of Delhi. Oct. 20, 2012.

- ix. Workshop entitled, “**Monitoring the Implementation of Environmental Education in Schools in States and UTs**” organized by Department of Education in Science and Mathematics, NCERT, New Delhi. Nov.18- 20, 2012.
- x. National workshop on ‘**Recent Trends in Biochemistry and Biotechnology**’ organized by Deshbandhu College, University of Delhi. April 21-22, 2016.
- xi. Attended Research Based Pedagogical Tools (RBPT) Workshop for Science Teachers at Daulat Ram College, University of Delhi. 25.03.2019 to 27.03.2019

Community Extension Service Program Organized

- i. Reproductive and sexual health awareness program at Deshbandhu College, New Delhi, 2016.
- ii. Dengue awareness program at Deshbandhu College, New Delhi, 2015.
- iii. Dengue awareness program during Antardhwani at University of Delhi, Delhi, 2015.

Date: June 19, 2020

Dr Varsha Baweja