

INSTITUTE OF HOME ECONOMICS

UNIVERSITY OF DELHI



Name	Prof. Rachna Kapila	Photograph
Designation	Professor	
E-mail	rachnakapila.ihe@gmail.com	

Educational Qualifications:

- Ph.D from Punjab University, Thesis title: Biology of an egg parasite of Callosobruchus maculates (Fab.) (Coleoptera: Bruchidae)
- MPhil from Punjab University, Thesis title: Taxonomical study of family Eremnivae: Curculionidae
- M.Sc. Zoology from Kurukshetra University
- B.Sc. Medical (Botany, Zoology, Chemistry, Physics) from Kurukshetra University.
- DST JRF, SRF December 1982

Teaching experience: Thirty years

Subjects/Papers Taught: Zoology, Biology and Biotechnology

Conducted biology classes for B.sc (Nursing) - 1st year students of Ahilya Bai College of Nursing, Delhi

University.

Research Interest/Specialization: Zoology, Microbiology, Biotechnology

ORCID No.:

Research Projects:

Title	Funding agency/organization	Duration of Project
Evaluation of chemical and	U.G.C Major Research Project	Three years
microbiological quality of the vermicompost prepared from different		
type of wastes using Eisenia foetida		

Research papers since 2010 (APA format)

- 1. Cultivation and conservation of underutilized medicinal and agricultural plants in India, Rashi Gupta, Arti Nigam, Rachna Kapila Proceedings of the National Academy of Sciences, India Section B (2022) https://doi.org/10.1007/s40011-022-01405-8
- 2. Analyzing the Use of Medicinal Herbs During the First Wave and Second Wave of COVID19. Tanvi Singh, Arti Nigam, Rachna Kapila Proceedings of the National Academy of Sciences, India Section B (2022). https://doi.org/10.1007/s40011-021-01303-5

- 3. Awareness, Perceived Risk, and Protective Behavior Towards Covid-19 Among Undergraduate Students of Delhi and NCR, India. Bhardwaj, M., Kapila, R., Neha, A., Jain, R., Mittal, P., & Suri, M. International Journal of Pharmaceutical Research And Allied Sciences, 11(3), 71-80. (2022) https://doi.org/10.51847/2KbrLHumKg
- 4. Increased Inclination of Herbal Preparations as Immunity Booster among Adults in the times of Pandemic: A Cross Section Study, Journal of Ayurveda, 10.4103/joa.joa_7_21(2022).
- 5. Biotechnological Applications of Microbial Enzymes to Replace Chemicals in the Textile Industry- A Review, Journal of the TEXTILE Association, 82(2), 68-73. Sen, A., Kapila, R., Chaudhary, S., & Nigam, A. (2021).
- 6. Microbial therapeutic enzymes: A promising area of biopharmaceuticals. Current Research in Biotechnology. Vachher, M., Sen, A., Kapila, R., & Nigam, A. (2021).
- 7. Innovations in Silkworm Rearing and Importance: Recent Advances. Journal of the TEXTILE Association, 82(2), 87-90. Singh, T., Nigam, A., & Kapila, R. (2021).
- 8. Recent Development in Bio pesticides as potential substitutes to chemical pesticides Research Journal of Agricultural Sciences 12 (3). Singh, T. & Kapila, R. (2021).
- 9. Evaluation of Microbiological Quality of Vermicompost Prepared from Different Types of Organic Wastes using Eisenia fetida. Agricultural Science Digest-A Research Journal, 41(3), 445-449. Kapila, R., Verma, G., Sen, A., & Nigam, A. (2021).
- 10. Compositional Evaluation of Vermicompost Prepared from Different Types of Organic Wastes using Eisenia fetida and Studying its Effect on Crop Growth. Indian Journal of Agricultural Research, 1, 6. Kapila, R., Verma, G., Sen, A., & Nigam, A. (2021).
- 11. Role of Organic Production System in Improving Sericulture Singh, T., &; Kapila, R. Journal of the TEXTILE Association, 82(4), 214-217 (2021).
- 12. A questionnaire-based pilot study of sleep patterns and problems among the elderly in delhi. International Journal of Current Advanced Research, Vol 9(6B) Tibi Mathews, Mamta Bhardwaj, Rachna Kapila, Vandana Sabarwal and Manjula Suri (2020)
- 13. Effect of one-day training on Knowledge related to Biosafety and waste management among life-science Students. Indian Journal of Community Health, 32(4). Keshan, P., Rastogi, A., Aggarwal, S., Nigam, A., Kapila, R., & Syed, S. (2020).
- 14. A pilot study on prevalence of malnutrition pain depression on and anxiety in elderly population in delhi Journal of Clinical Gerontology & Geriatrics, 9(3), 91-98. Bharadwaj M, Singh P, Kapila R, Suri, M. (2018).
- 15. Vermicompositing- A technology for waste management and recycling and relevance to horticulture. International Journal of Innovative Horticulture, 2(1), 44-51. Singh, R., Nigam, A., Verma, G., & Kapila, R. (2013).

Book chapters published/edited

- Applied Zoology Practical Manual: For B.Sc Home Science, Rachna Kapila, Renuka Gupta, (2009) Elite Publishing House Pvt. Ltd. (ISBN:81-88901-38-5)
- Laboratory Manual of Biology, Rachna Kapila, Mamta Bharadwaj, Tanvi Singh (2021), APH Publishing House, (ISBN: 978-81-7946-09)

Association with Professional Societies

- Life time member of Indian Society of Entomology.
- Member International Working Group on Stored Products Protection.

Any other.

International Conference

- Paper presentation in Recent Advances and Review on Integrated Pest Management as a Tool for Coping Stored Grain Pests, International (online) Conference on Insect and Plant Biology:2021 Mahatama Hansraj Faculty Development Centre (A centre of MoE, Govt of India) UG/PG October 2021.
- Harnessing the Power of Earthworm for Sustainable Development, International conference on Environment, Health and Sustainable Development, Organized by Dept of Biology, Environment committee& Dept of Physiology. September 2020
- Papers presented in International conference on Biology of an egg parasite Callosobruchus maculates (Fab) (coleopteran: Bruchidae); 5th International working Conference on stored product protection (1990) at Bordeaux, France, September 1990.

National Conference and Workshops

- Ecosystem Restoration organized by community and outreach committee 5-june-2021 Biodiversity
 of NCR Participation National Science day Public Lecture on Biodiversity of NCR National
 Institute of Plant Genome Research New Delhi 28th February, 2020
- Biotechnological Applications in Agriculture, National Conference on Insect plant biology in 21st Century, Organized by Zoology Dept. Deshbandhu College Delhi University 4-5, November 2020 • Participated in two days conference on Microbiology: "Current challenges and future trends" held on 10th and 11th January 2018 at Institute of Home Economics, organized by department of Microbiology, Institute of Home Economics, New Delhi, India
- Gerontology and Geriatric Medicine Participation, 4th International Conference of Gerontology and Geriatric Medicine, AIIMS New Delhi, 2018.
- Participated in one day workshop on "Information competency" held on 5th May 2016, organized by Institute of Home Economics in collaboration with Delhi University Library system, New Delhi, India
- Frontiers in Plant Molecular Biology, National Symposium, IHE Delhi University, 27- 28 Sep. 2013.
- Frontiers in Plant Molecular Biology, Symposium in Plant Molecular Biology, Department of Plant Moleculor Biology, Delhi University, 17th October 2013
- Participated in Annual conference 'BioEpoch" at School of Biotechnology, Jawaharlal Nehru University, New Delhi. April 1-2, 2011
- Participated in National conference on "Sustainable development-A Collective Vision", Institute of Home Economics at New Delhi. Oct31-Nov 1, 2011
- Participated in ICI workshop on "Capacity building of Delhi staff', Institute of Home Economics at New Delhi. Jan 11-13, 2010
- Participated in 50th annual "Association of Microbiology of India" (AMI) conference in NPL, Pune, Dec 15-18, 2009
- Participated in workshop on "Commercialization of Biotechnology" at New Delhi Department of biotechnology "Government of India on March 2, 2007
- Member of organizing committee for UGC sponsored symposium on "Biotechnology: the emerging scenario in Indian society" at university of Delhi from 21-22 Dec. 2006
- Participated in One day National seminar on 40 years of Kothari commission recommendation and quality of science Education and research in new millennium, Delhi University, Delhi, Dec 4, 2006.
- THERMOPHILES 2001- "International conference on Biology and biotechnology of Thermophiles", December 3-7- 2001, Department of microbiology, University of Delhi, South campus

FDP

- E-resources in teaching learning: an innovative teaching pedagogy, Websites and automation Committee, Dept. of Microbiology Delhi University 2021.
- Digital Tools for 21st Century Teachers Grade A+, Guru Angad dev Teaching Learning Centre, Ministry of Education Govt of India 2020.
- Online teaching using Google classroom and Google meet, Dept. of Microbiology Delhi University 2020.
- Two Days International Faculty Development Program for Teaching cum Research Excellence, Organized by Dept. of Microbiology, SRCASW, 16th Oct. 17th Oct 2020
- Oriental Course in computer Science Department, Delhi University, 2000.
- Attended a U.G.C sponsored Refresher course in Life Sciences from 20th Dec. 2005 to 9 th Jan, 2006 conducted by centre for professional development in higher education, University Delhi.
- Attended a week Orientation programme sponsored by UGC and conducted by the Academic staff college, Jamia Milia Islamic, New Delhi from 1998.
- Attended a week refresher course in Life Sciences from Jan 4 1999 to Jan 29' 1999 organized by Academic staff college, Jawaharlal Nehru university, New Delhi.

Webinars

- Cancer in Women Participation Webinar: Recent Advanced and Outlooks in Biological Sciences Dept. of Microbiology Delhi University 13th October 2020
- Webinar on "Solid & Hazardous Waste, Electronic Waste & Plastic Waste Management" conducted by Environment and Community Outreach Committee and Department of Microbiology held on 20th November, 2021.
- Bioinformatics: Concept & Application, Webinar Series, Department of Biochemistry 18-19 Sep. 2020.

Conferences/ Seminars/Workshops organized

- Workshop on Organic Farming, Vegetative Propagation and Climate Smart Agriculture, Dept. of Biology Feb, 2023.
- Workshop: 'Gardening Practices- A way to add years to your life' UG Dept. of Biology Sept 2022.
- Two Days International Conference Dept. of Biology Environment Committee & Physiology Dept. IHE Sep 2020.
- Webinars: Climate smart soil for sustainable agriculture and environment UG Dept. of Biology, Dec 2020.
- Webinars: On Biodiversity: Biological act 2002 and 2020 and related provision vis-àvis Natural Recourses Management. Dept. of Biology, IHE.
- International Conference on Environment health and sustainable development IHE 25TH Sep. 2020 Dept. of Biology Environment Committee & Physiology Dept
- Training on Biosafety and waste Management IHE 5TH oct Dept. of Microbiology
- Organizing committee member webinar series- Recent Advance and outlooks in biological sciences, IHE.
- Webinar (Talk and Interactive session) Impact of ozone on plants and animals UG Dept. of Biology, IHE, DU
- Workshop: Package of Practices on Home Gardening UG Dept. of Biology 1st Oct 202, IHE
- Webinar on "Soil Health and Sustainability" on 5th December, 2021 at Institute of Home Economics, University of Delhi
- Webinar: Nanotechnology in Medicine IHE 7 th April Dept. of Biology, Institute of Home Economics, University of Delhi

- Webinar: Student workshop from home during lockdown IHE 25TH April 2020 Dept. of Biology, Institute of Home Economics, University of Delhi
- Role of urban forestry for Pollution abatement IHE 11 th April 2021 Dept. of Biology, Institute of Home Economics, University of Delhi
- Climate smart soil for sustainable agriculture and environment IHE12th Dec 2020 Dept. of Biology Institute of Home Economics, University of Delhi

Activities/ Events organised:

- Organized a Plantation Drive in College as a Coordinator, Dept. of Biology 2018-2019
- Field Visit to Vermicompost sites in Ghaziabad and Gurgaon, Dept. of Biology, 2018- 2019
- Organization of Field Visit Asola Bhatti (Biodiversity Park 1year and B.el.ed Student) UG,
 Dept. of Biology, 2018-2019
- Educational Trip to National Science Centre 1 year food technology, Dept. of Biology, 2018-2019
- Educational Trip to Zoological park 1 year B.Sc.(pass), Dept. of Biology, 2018-2019
- Recycle of West Material and Vertical Gardening B.Sc. (pass) 1 year and B.Sc. (hons) food technology, Dept. of Biology, 2019
- Organizing a field visit in Sanjay Van Mehrauli forest south Delhi with other colleges of Delhi university, Dept. of Biology 28 th Sep.2019.
- Organizing Educational field trip (Mughal Garden), Dept. of Biology, 2019- 2020
- Organizing a Plantation Drive as A Environmental Consonances In a College Campus, Dept. of Biology 2019-2020 Poster Competitions, Dept. of Biology, 2020-2021
- Poster Competitions, Dept. of Biology, 16 september 2021
- Videography competition: Documentation of your gardening skills, Dept. of Biology
- Organizing Exhibition and talk of recycled waste material for different college of DU IHE, Dept. of Biology
- Annual day celebration, IHE 2018- 2019
- Faculty Development program online teaching using google classroom and google meet IHE Dept. of Microbiology & website and Automation Committee

Design of new Curricula and Courses

- 2010 B.Sc. (P) Home Science- Introduction to life Science, B.Sc. (H) Home ScienceApplied life Science
- FYUP 2013 B.Sc.(H) Home Science Introduction to life Science
- CBCS 2015 B.Sc. (Prog) Home Science -Life Science, B.Sc. (Hons) Home Science Life Science
- LOCF 2019, B.Sc. (Prog) Home Science Life Science, B.Sc.(HONS) Home ScienceLife Science, B.Sc. (HONS) Zoology- Genetic Counselling
- CBCS 2019, B.Sc.(HONS) Home Science- Life Science, B.Sc.(Prog) Home ScienceLife Science
- NEP 2022, B.Sc.(HONS) Home Science- Life Science, B.Sc.(PASS) Home Science

Life Science Expert for development of e-content for biology (MHRD) Expert for development of c-contents for Biology for SAKSHAT: one stop education portal of ministry of human resource development, department of higher education, Government of Delhi

Administrative Responsibilities

- Teacher In-charge, Department of Biology, Institute of Home Economics
- Building committee, Member, Institute of Home Economics
- Time Table Committee, Member, Institute of Home Economics

- Courses committee, Member, Department of Home Science Delhi University
- Annual Day Invitation Committee, Member, Staff Council IHE
- CCL Committee, Member, Institute of Home Economics
- Environment, Eco club and Community Outreach, Convener, Institute of Home Economics
- Student Amenities, Co-Convener Photostat And Book Shop, Institute of Home Economics
- Governing Body of the College, Teacher Representative, Institute of Home Economics