

Prof. Vinay Malik

Department of Zoology
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RESEARCH AREAS

Molecular Cytogenetics and Biodiversity.

EDUCATIONAL QUALIFICATIONS

- **Ph.D.** Department of Zoology, M. D. U., Rohtak, Haryana
- **M.Sc. (Zoology)**, Maharshi Dayanand University, Rohtak, Haryana
- **B.Sc.** (Botany, Chemistry, Zoology), M. D. U., Rohtak, Haryana

ACADEMIC EXPERIENCE

- **Professor** : Department of Zoology, Maharshi Dayanand University, Rohtak -India (23rd August, 2021 onwards)
- **Associate Professor:** Department of Zoology, Maharshi Dayanand University, Rohtak -India (23rd August, 2018 to 22nd August 2021)
- **Assistant Professor:** Department of Zoology, Maharshi Dayanand University, Rohtak -India (07th May, 2012 to 22nd August 2018)
- **Assistant Professor:** Department of Zoology, Govt. College Haryana (Jhajjar & Rohtak) (23rd August 2004 to 07th May, 2012)

RESEARCH GUIDANCE

Ph. D. Supervision: Awarded – 4 Registered – 6

M. Sc. Supervision: 74 (Dissertations)

RESEARCH PROJECTS

1. Completed Minor Research Project (UGC): Genotoxic effect of a neonicotinoid and a synthetic pyrethroid insecticide in mice (F. No. 8-2(137)/2011).
2. Completed Minor Research Project under Dr. Radha Krishanan Foundation Fund: “Antibacterial activity of imidacloprid- an insecticide by agar well method” (F. No.DSW/14/363).

MEMBERSHIP OF LEARNED SOCIETIES/ACADEMIC BODIES

- Indian Science Congress Association
- Association of Microbiologists of India

OTHER ASSIGNMENTS

- Member, *Executive Council*, M.D. University, Rohtak (Aug. 6, 2019- Aug. 5, 2021)
- Member, *Academic Council*, M.D. University, Rohtak
- Member, Faculty of Life Sciences, M.D. University, Rohtak
- Member, PGBOS, Zoology, M.D. University, Rohtak
- Member, UGBOS, Zoology, M.D. University, Rohtak
- Departmental Coordinator of CCPC & IQAC
- Member of other various administrative and academic committees.
- Organized various Seminars, Symposia etc.

LIST OF MAJOR PUBLICATIONS

- 1) Annu Phogat, Jagjeet Singh, Reena Sheoran, Arun Hasanpuri, Aakash Chaudhary, Shakti Bhardwaj, Sandeep Antil, Vijay Kumar, Chandra Parkash and **Vinay Malik (2024)**. Berberine Attenuates Acetamiprid Exposure-Induced Mitochondrial Dysfunction and Apoptosis in Rats via Regulating the Antioxidant Defense System. *Journal of Xenobiotics*, 14(3). <https://doi.org/10.3390/jox14030061>
- 2) Yadav P, Anu, Kumar T. Santosh, Kumar V, Singh D, Kumar S, Manisha, **Malik Vinay**, Singh Bijender. (2024) Sugarcane bagasse: An important lignocellulosic substrate for production of enzymes and biofuels. *Biomass Conversion and Biorefinery*. <https://doi.org/10.1007/s13399-022-02791-9>.
- 3) Akshay Shankar, Naveen Kumar Kaushik, Vinod Kumar, **Vinay Malik**, Davender Singh, Vijay Kumar, and Bijender Singh (2024). Green mycosynthesis of silver nanoparticles exhibiting antimalarial activity. *Journal of Taibah University for Science*, 18(1). 10.1080/16583655.2024.2381286
- 4) Manju Chhikara, Harkrishan Kamboj, Parveen Kumar, and **Vinay Malik (2024)**. Composition and status of avian diversity in the Mandothi wetland habitat of Jhajjar, Haryana, India. *Journal of Applied Biology and Biotechnology*, 12(5). 10.7324/JABB.2024.182519
- 5) Vijay Singh, Sunita Grewal, Vivek Goyal and **Vinay Malik (2024)**. Taxonomic redescription of subfamily Scymninae (Coleoptera: Coccinellidae) from Haryana, India *Journal of Applied and Natural Science*, 16(2). 10.31018/jans.v16i2.5461

- 6) Manju Chhikara, Vijay Singh, Vivek Goyal, Parveen Kumar and **Vinay Malik (2024)**. Avian diversity and conservation status in Bhindawas Bird Sanctuary, Jhajjar (Haryana), India, *Journal of Applied and Natural Science* 16(2). 10.31018/jans.v16i2.5564
- 7) Bijender Singh, Pragma, Santosh Kumar Tiwari, Devender Singh, sandeep Kumar, **Vinay Malik (2024)**. Production of fungal phytases in solid state fermentation and potential biotechnological applications, *World Journal of Microbiology and Biotechnology* 40(1). 10.1007/s11274-023-03783-1
- 8) Annu Phogat, Jagjeet Singh, Reena Sheoran, Arun Hasanpuri, **Vinay Malik. (2024)**. Acetamiprid exposure causes molecular and structural changes in the liver and kidney tissues of rats. *Chemical Biology Letters*, 11(3).
<https://doi.org/10.62110/sciencein.cbl.2024.v11.671>
- 9) Annu Phogat, Jagjeet Singh, Vijay Kumar, **Vinay Malik. (2023)** Neuroprotective potential of berberine against acetamiprid induced toxicity in rats: Implication of oxidative stress, mitochondrial alterations, and structural changes in brain regions. *Journal of Biochemical and Molecular Toxicology*, 37(10). 10.1002/jbt.23434
- 10) Meenaxi Saini, Anu, Alexander Rapoport, Santosh Kumar Tiwari, Davender Singh, **Vinay Malik**, Sandeep Kumar, Bijender Singh. **(2023)** Bioacetoin Production by *Bacillus subtilis* subsp. *subtilis* Using Enzymatic Hydrolysate of Lignocellulosic Biomass. *Fermentation*, 9(8). <https://doi.org/10.3390/fermentation9080698>
- 11) Annu Phogat, Jagjeet Singh, Vijay Kumar, **Vinay Malik. (2023)** Berberine mitigates acetamiprid-induced hepatotoxicity and inflammation via regulating endogenous antioxidants and NF- κ B/TNF- α signaling in rats. *Environmental Science and Pollution Research*, 30 (37) 87412-87423. <https://doi.org/10.1007/s11356-023-28279-1>
- 12) Neetu Sharma, Jagjeet Singh, Bijender Singh, **Vinay Malik. (2023)** Improving the Agronomic Value of Paddy Straw Using *Trichoderma harzianum*, *Eisenia fetida* and Cow Dung. *Fermentation*, 9 (7). <https://doi.org/10.3390/fermentation9070671>
- 13) Jagjeet Singh, Annu Phogat, Vijay Kumar, **Vinay Malik. (2022)** N-acetylcysteine Mediated Regulation of MnSOD, UCP-2 and Cytochrome C Associated with Amelioration of Monocrotophos-Induced Hepatotoxicity in Rats. *Toxicology International*, 29(4): 515-525.
- 14) Bijender Singh, Anu Anu, Davender Singh, Vinod Kumar, Vijay Kumar, **Vinay Malik. (2022)** Cellulase production by *Myceliophthora thermophila* in solid state fermentation and its utility in saccharification of rice straw. *New Energy Exploitation and Application*, 1 (2). <https://doi.org/10.54963/nea.v1i2.42>.

- 15) Jagjeet Singh, Annu Phogat, Vijay Kumar, **Vinay Malik**. (2022) N-acetylcysteine ameliorates monocrotophos exposure-induced mitochondrial dysfunctions in rat liver. *Toxicology Mechanism & Methods*, 1-29. <https://doi.org/10.1080/15376516.2022.2064258>.
- 16) Annu Phogat, Jagjeet Singh, Vijay Kumar, **Vinay Malik**. (2022) Toxicity of the acetamiprid insecticide for mammals: A review. *Environmental Chemistry Letters*, 20, 1453–1478. <https://doi.org/10.1007/s10311-021-01353-1>.
- 17) Jagjeet Singh, Annu Phogat, C. Prakash, S. K. Chhikara, S. Singh, **Vinay Malik** and Vijay Kumar. (2022) N-acetylcysteine reverses monocrotophos exposure-induced hepatic oxidative damage via mitigating apoptosis, inflammation and structural changes in rats. *Antioxidants*, 11(1), 90, 1-18. <https://doi.org/10.3390/antiox11010090>.
- 18) **Vinay Malik**, Jagjeet Singh, A. Kumar and Vijay Kumar. (2021) Protective effect of coenzyme Q10 nanoparticles against monocrotophos induced oxidative stress in kidney tissues of rats. *Biologia*, 76, 1849-1857. <https://doi.org/10.1007/s11756-021-00732-x>.
- 19) S. Dahiya, A. Kumar, **Vinay Malik**, V. Kumar, Bijender Singh. (2021) Biochemical characterization and enhanced production of endoxylanase from thermophilic mould *Myceliophthora thermophila*. *Bioprocess and Biosystems Engineering*, 44, 1539-1555. <https://doi.org/10.1007/s00449-021-02539-1>.
- 20) Jagjeet Singh, Santosh Hooda, Annu, **Vinay Malik**. (2021) Avian Diversity and Habitat Use of Sultanpur National Park, Haryana, India. *Asian Journal of Conservation Biology* 10 (1), 124-133. ISSN: 2278-7666.
- 21) V. Singh; K. Kumar; D. Purohit; R. Verma; P. Pandey; S. Bhatia; **V. Malik**; D. Kaushik et al. (2021) Exploration of therapeutic applicability and different signaling mechanism of various phytopharmacological agents for treatment of breast cancer. *Biomedicine and Pharmacotherapy*, Volume 139, 1-19. <https://doi.org/10.1016/j.biopha.2021.111584>.

BOOK

- 1) **Malik V.** and Goyal V. (2018). Common Birds of Haryana. Intellectual Foundation (India), Rohtak (ISBN 978-93-81818-50-3).

BOOK CHAPTERS

- 1) **Vinay Malik**, Vijay Singh, Santosh Hooda, Annu Phogat & Jagjeet Singh (2021). Role of Coccinellids in biological control. *Advances in Agricultural Entomology* (Vol. 14). (ISBN: 978-93-91538-37-8).
- 2) **Malik V.**, Singh J., Chhikara S. & Singh D. (2018). Pesticides: application and pattern in Haryana. *Applied Entomology and Zoology*, (Vol. 4) 1-23. (ISBN: 978-93-5335-135-9).