

Prof. Vinay Malik

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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

M. Sc. Supervision: 74 (Dissertations)

Ph. D. Supervision: Awarded – 4; Submitted-1; Registered – 5

Ph.D. Scholar	Title of the thesis	Status
Vivek Goyal	Biodiversity of spiders (Araneae Arachnida) of Haryana.	Awarded
Vijay Singh	Biodiversity of Ladybirds (Coleoptera: Coccinellidae) in Haryana.	Awarded
Jagjeet Singh	Evaluation of the Effects of N-Acetylcysteine on the antioxidant status and hepatotoxicity due to Monocrotophos exposure in Rats.	Awarded
Annu	Effects of berberine on acetamiprid induced hepatotoxicity in rats.	Awarded
Neetu Sharma	Degradation of paddy straw by <i>Eisenia fetida</i> and <i>Trichoderma sp.</i> and evaluation of compost for wheat growth.	Submitted
Anju Rani	Diversity of spiders (Araneae: Arachnida) in the Bhindawas Wildlife Sanctuary and Sultanpur National Park of Haryana.	Registered
Arun Hasanpuri	Effects of eugenol on lead-induced oxidative stress and inflammation in liver tissue of rats.	Registered
Reena	Effects of morin on lead-induced oxidative stress and apoptosis in liver tissue of rats.	Registered
Shakti	Effects of thymoquinone on acetamiprid mediated toxicity in Liver tissue of rats.	Registered
Aakash	Effects of morin on acetamiprid exposure-induced neurotoxicity in rats.	Registered

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, J. Singh, R. Sheoran, A. Hasanpuri, A. Chaudhary, S. Bhardwaj, S. Antil, V. Kumar, C. Parkash & 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).
- 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*.
- 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, Pragya, 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 rats' liver and kidney tissues. *Chemical Biology Letters*, 11(3).
- 9) Jagjeet singh, Vijay singh, Sunita Grewal, Manju Chikara, Vinay Malik (2024). Habitat-dependent avian diversity in the agri-industrial zone of Jhajjar, Haryana, India. *Journal of Applied biology and biotechnology*, 12(6) 10.7324/JABB.2024.191977
- 10) Annu Phogat, Jagjeet Singh, Vinay Malik (2024). Pharmacological effects of Berberine- A Chinese medicine, against xenobiotics toxicity. *Pharmacological Research-Modern Chinese Medicine*, 13 10.1016/j.prmcm.2024.100507
- 11) 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
- 12) 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>
- 13) 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>
- 14) 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>
- 15) 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. *Toxic.Internat.*,29(4): 515-525.

- 16) Bijender Singh, Anu, D. Singh, V. Kumar, V. 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/need.v1i2.42>.
- 17) 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>.
- 18) 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>.
- 19) 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>.
- 20) 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>.
- 21) 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>.
- 22) 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.
- 23) V.Singh; K. Kumar; D. Purohit; 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.

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).