

Dr. Ajay Singh
Professor, Department of Zoology
Director, IQAC
Deen Dayal Upadhyaya Gorakhpur University
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SUMMARY

Highly motivated Fisheries specialist with over 37 years of teaching and research experience in the field of Aquatic Toxicology, Snail and Vector Control, Aquaculture, Environmental Science, Physiology and Molluscicides. Renowned for contributions in developing a number of new methods for the extraction of natural compounds from plants, which were found effective against molluscs, fishes and mosquito larvae. Furthermore a number of biochemical methods have also been established for the studies of toxicological effects of pesticides on various metabolically vital enzymes such as acetylcholinesterase, succinic dehydrogenase, lactic dehydrogenase, cytochrome oxidase, protease, phosphatases and transaminases etc. Ready to leverage my expertise to contribute in sustainable development of environment and create awareness in society to reduce the pollution of water bodies.

EXPERIENCE

Professor, Zoology D.D.U Gorakhpur University	01.01.2009-Till date Gorakhpur, U.P.
Associate Professor, Zoology D.D.U Gorakhpur University	23.08.2001-31.12.2008 Gorakhpur, U.P.
Senior Lecturer, Zoology D.D.U Gorakhpur University	27.07.1998-22.08.2001 Gorakhpur, U.P.
Lecturer, Zoology D.D.U Gorakhpur University	09.11.1993-26.07.1998 Gorakhpur, U.P.

EDUCATION

Ph.D. in Zoology University of Gorakhpur Title of the thesis: "Studies on molluscicides of plant origin on common harmful snails"	1987-1991 Gorakhpur, U.P.
M.Sc. in Zoology University of Gorakhpur	1984-1986 Gorakhpur, U.P.
B.Sc. (Zoology, Botany, Chemistry) University of Gorakhpur	1982-1984 Gorakhpur, U.P.



STRENGTHS

- 💡 **Research and Development**
Authored 234 research papers that were published in reputed journals in the field of Zoology. Successfully completed 10 major research projects funded by different reputed Government Agencies.
- ☆ **Teaching and mentorship**
Mentored over 5000 students of UG/PG and guided 28 successful PhDs in the field of Zoology.

ACADEMIC IDENTITY

Profile	Citations	h-index
Scopus	1,086	20
Web of Science	658	15
Research Gate	2,602	30
Google Scholar	3,123	31
Vidwan	1,089	20

EXPERTISE

- Aquatic Toxicology • Physiology
- Molluscicides • Snail Control
- Genotoxicity • Vector Control
- Environmental Science

CONTACT DETAILS

📍 Natural Products Laboratory
Department of Zoology
Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur-273009

HONOURS AND AWARDS

Junior Research Fellow Council of Scientific and Industrial Research (C.S.I.R)	1988-1990 New Delhi
Senior Research Fellow Council of Scientific and Industrial Research (C.S.I.R)	1990-1991 New Delhi
Research Associate Council of Scientific and Industrial Research (C.S.I.R)	1991-1993 New Delhi
Fellowship Zoological Society of India	2003 Bodh Gaya
Fellowship Zoological Society	2011 Kolkata
Fellowship Society of Biological Sciences & Rural Development	2013 Allahabad
Prof. Baba Jadhav Award Society of Life Sciences	2018 Satna
Recognition for Implementing NEP 2020 in Higher Education Uttar Pradesh Government & DDUGU	2021 Gorakhpur
SKSS National Lifetime Achievement Award Sarvhit Kalyan Seva Samiti (SKSS)	2024 Meerut

ADMINISTRATIVE EXPERIENCE

With over 10 years of distinguished administrative experience, I have had the privilege of serving in multiple academic leadership roles that contributed significantly to institutional growth and quality enhancement. As **Director, IQAC**, I led quality assurance and institutional reforms, which culminated in the University achieving the prestigious **NAAC A++ Grade (3.78 C.G.P.A)**, a testimony to collective excellence and visionary leadership. As **Head, Department of Zoology**, I provided academic and administrative leadership, strengthened research culture, and promoted innovative teaching practices. Later, as **Dean, Faculty of Science**, I facilitated interdisciplinary collaboration, curriculum development, and faculty empowerment to strengthen the academic ecosystem.

Recognizing the importance of expanding academic horizons, I also served as the **Dean, Faculty of Agriculture**, where I played a pivotal role in conceptualizing and establishing the faculty at University Campus, designing its programs, and laying the foundation for its long-term growth. My role as **Dean, Student Welfare** focused on nurturing holistic student development through co-curricular and extracurricular activities. Additionally, as **Coordinator, Ph.D.**, I streamlined research processes, strengthened regulatory compliance, and promoted a robust research culture.

This journey of academic administration reflects a sustained commitment to academic innovation, institutional development, and quality enhancement, with a focus on creating an environment conducive to excellence in teaching, research, and outreach.

ADMINISTRATIVE ASSIGNMENTS

Director, IQAC D.D.U Gorakhpur University	19.08.2025-Till date Gorakhpur, U.P.
Dean, Faculty of Science D.D.U Gorakhpur University	18.12.2021-19.12.2023 Gorakhpur, U.P.
Director, IQAC D.D.U Gorakhpur University	28.05.2021-06.09.2023 Gorakhpur, U.P.
Dean, Student Welfare D.D.U Gorakhpur University	19.10.2020-03.10.2023 Gorakhpur, U.P.
Dean, Faculty of Agriculture D.D.U Gorakhpur University	03.09.2022-09.10.2023 Gorakhpur, U.P.
Registrar D.D.U Gorakhpur University	02.07.2023-06.09.2023 Gorakhpur, U.P.
Finance Officer D.D.U Gorakhpur University	12.09.2021-07.12.2021 Gorakhpur, U.P.
Superintendent of Works D.D.U Gorakhpur University	25.05.2021-12.12.2022 Gorakhpur, U.P.
Coordinator, Ph.D. D.D.U Gorakhpur University	21.09.2020-20.04.2022 Gorakhpur, U.P.
Head, Department of Zoology D.D.U Gorakhpur University	24.01.2018-23.01.2021 Gorakhpur, U.P.
Coordinator, Environmental Science D.D.U Gorakhpur University	24.01.2018-23.01.2021 Gorakhpur, U.P.
Member, Executive Council D.D.U Gorakhpur University	01.12.2013-30.11.2014 Gorakhpur, U.P.
Member, Academic Council D.D.U Gorakhpur University	01.01.2009-Till date Gorakhpur, U.P.

The research work in my laboratory currently focuses on studying the mechanism of control of vector snails and mosquito larvae through natural as well as synthetic pesticides and in order to study the environmental toxicity by these pesticides, the toxicity, biochemical, physiological and genotoxic experiment were carried out on freshwater fish over the last thirty seven years. A number of new methods have been developed in my laboratory for the extraction of natural compounds from plants, which were found effective against molluscs, fishes and mosquito larvae. Furthermore a number of biochemical methods have also been established for the studies of toxicological effects of pesticides on various metabolically vital enzymes such as acetylcholinesterase, succinic dehydrogenase, lactic dehydrogenase, cytochrome oxidase, protease, phosphatases and transaminases etc. My laboratory also studied the effect of toxicants on reproduction and post-embryonic development of mosquitoes as well as fecundity, hatchability and survival of snails.

During this period my laboratory has published **four (4) review papers**, **Twelve (12) book chapters** in edited books and **two hundred seventeen (217) research papers** in journals of international repute (like Acta Hydrochim Hydrobiol, Chemosphere, Journal of Ethnopharmacology, Fitoterapia, Environmental Research, environmental toxicology and pharmacology, Pesticide Biochemistry and physiology, Ecotoxicology and Environmental safety etc. (**Impact Factor ranges from 0.5- 4.0**) and **Twenty Eight (28) students obtained Ph.D. degree**.

Another side, **Eleven (11) major research projects have been sanctioned** from different organization like Department of Biotechnology, New Delhi, Department of Environment and Forest, New Delhi, Indian council of Agricultural Research, New Delhi, University Grants Commission, New Delhi, Council of Science & Technology U.P., Lucknow, Council of Scientific and Industrial Research, New Delhi and Indian Council of Medical Research, New Delhi.

MEMBER OF EDITORIAL/ADVISORY BOARD OF THE INTERNATIONAL/NATIONAL JOURNAL

1. The Open Bioactive Compounds Journal
2. Asian Journal of Animal and Veterinary Advances
3. International journal of Zoological research
4. Journal of Fisheries and Aquatic Science
5. Journal of Pharmacology and Toxicology
6. Research Journal of Environmental Toxicology
7. Journal of Natural Products India
8. British Journal of Pharmacology and Toxicology
9. International Journal of Animal and Veterinary Advances

MEMBERSHIP OF ACADEMIC BODIES

1. Life member of Zoological Society of India
2. Life member of National Academy of Vector Born Diseases, India
3. Life member of Zoological Society, Kolkata
4. Member of Indian Science Congress
5. Life Member of Society of Biological Sciences & Rural Development, Allahabad

THESIS SUPERVISED FOR Ph.D. DEGREE

28

S. No.	Name of the student	Topic of the thesis	Year of award
1.	Dr. Vijay Kumar Srivastav	Studies on the toxicological and biochemical effects of commercially formulated pesticides on freshwater fish <i>Channa punctatus</i>	2000
2.	Dr. Sunil Kumar Singh	Studies on molluscicidal properties of some common plants of Eastern Uttar Pradesh against harmful snails	2001
3.	Dr. Ram Pratap Yadav	Studies on molluscicidal properties of some common plants of family Euphorbiaceae and their environmental impact on non-target organism	2001
4.	Dr. Digvijay Singh	Studies on the toxicological and biochemical effects of phytopesticides on non-target freshwater fish <i>Channa punctatus</i>	2001
5.	Dr. Sudhanshu Tiwari	Studies on the toxicological and biochemical effects of active compound extracted from some common plant against freshwater predatory fish <i>Channa punctatus</i>	2003
6.	Dr. (Smt.) Rajeshwari Yadav	Studies on insecticidal properties of common euphorbious plants against mosquito larvae	2004
7.	Dr. Meelu Rai	Studies on toxicological and biochemical effects of certain plant origin insecticides on freshwater target and non-target organism	2005
8.	Dr. Manisha Srivastava	Studies on isolation of compounds from common plants and their role in integrated vector management programme	2006
9.	Dr. Jaya Singh	Studies on water quality and pollution load in Maheshara lake of Gorakhpur district U.P.	2010
10.	Dr. Jaya Shahi	Studies on fresh water fishes under the stress of paper industry (Rayana Paper Board Industries Limited, Sant Kabir Nagar) effluents and its impact on the water quality of river, Aami.	2010
11.	Dr. Saroj Chauhan	Studies on molluscicidal properties of common plants in ponds.	2010

12.	Dr. Preeti	Studies on planktons found in Maheshara Lake of Gorakhpur	2010
13.	Dr. Kamlesh Kumar	Studies on the piscicidal activity of active compounds extracted from common plants against freshwater predatory and weed fishes in ponds	2011
14.	Dr. Abhishek Kumar	Botanical Pesticides: Effect on blood parameters and calcium regulating endocrine glands of a telecast <i>Heteropneustes fossilis</i>	2012
15.	Dr. Pallavi Srivastava	Studies on the genotoxic, physiological and biochemical effect of agricultural pesticides on fresh water fishes.	2015
16.	Dr. Pallavi Shukla	Studies of the effect of pulp and paper mill effluent on fish and aquatic megafauna in river Aami of Sant Kabir Nagar.	2015
17.	Dr. Zubay Afroz	Genotoxicity and metabolic anomalies induced by pulp and paper mill effluent in fresh water fishes	2015
18.	Dr. Bhunesh Pratap	A comparative study on the piscicidal activity of commercial and botanical piscicides on trash fishes and on nontarget major carp	2015
19.	Dr. Chandra Shekhar	A comparative study of commercially used synthetic pesticides and plant origin pesticides against freshwater predatory and weed fishes in reference to their toxicological and biochemical effects	2017
20.	Dr. Lal Babu Yadav (International Scholar)	Studies on plankton population found in Chhapkaiya pond, Birganj, Nepal	2018
21.	Dr. Abhai Deep Jonson	Studies on larvicidal and growth inhibitor activity of some medicinal plant compounds, synthetic insecticides and their combinations against filarial vector <i>Culex quiquefasciatus</i>	2019
22.	Dr. (Km.) Mamta	Studies on fish as a bio-indicator of environmental pollution in Ramgarh lake (Gorakhpur, Uttar Pradesh, India).	2020
23.	Dr. Anamika Singh	Studies on toxic effects of commonly used herbicides on non-target animals.	2020
24.	Dr. Bhagyashree Tiwari	Genotoxicity and Biochemical alteration induced by various industrial effluents on freshwater inhabiting fishes	2024
25.	Dr. (Km.) Poonam Devi	Study on the Effect of Pollutants on Fish Life of River Aami	2025
26.	Dr. Bushra Warsi	Industrial Water Pollution in Gorakhpur Industrial Region Through Satellite Images	2025
27.	Dr. Sarwat Jahan	Impact of Various Industrial Effluents on Water Quality of Aami River and its impact on Phytoplankton Diversity	2025
28.	Dr. Rakesh Kumar Singh	Studies on Piscicidal Effect of some Biologically Active Plant Compounds Commonly used in Fresh Water Bodies Against Target Animal	2025

1.	Title of the project	Studies on synergism with molluscicidal plant product against harmful snails.
	Funding Agency	Department of Biotechnology (Govt. Of India), New Delhi.
	Duration	Three years
	Sanctioned Amount	Rs. 827,500/-
	Remark	Successfully completed.
2.	Title of the project	Studies on snails as indicator of Environmental pollution with pesticides.
	Funding Agency	Council of Science and Technology, Govt. Of U. P.
	Duration	Three years
	Sanctioned Amount	Rs. 275,000/-
	Remark	Successfully completed
3.	Title of the project	Studies on molluscicidal activity of some common plants of family Euphorbiaceae and their environmental impact on freshwater non-target animals
	Funding Agency	Department of Environment, Ministry of Environment and Forest Govt. Of India, New Delhi.
	Duration	Three years
	Sanctioned Amount	Rs. 10,72,360/-
	Remark	Successfully completed
4.	Title of the project	Studies on toxicological and biochemical effects of plant origin pesticides on freshwater non-target organism
	Funding Agency	Indian Council of Agricultural Research, Ministry of Agriculture, Govt. Of India, New Delhi
	Duration	Three years
	Sanctioned Amount	Rs. 737,610/-
	Remark	Successfully completed
5.	Title of the project	Studies on isolation, purification and identification of active compounds from common medicinal plants and their role in integrated vector management (IVM) programme
	Funding agency	University Grants Commission, New Delhi
	Duration	Three years

	Sanctioned Amount	Rs.596,000.00
	Remark	Successfully completed
6.	Title of the project	Effect of bio-toxins on growth and development of freshwater paddy fish <i>Channa punctatus</i>
	Funding agency	Council of Scientific and Industrial Research, New Delhi
	Duration	Three years
	Sanctioned Amount	Rs.515,400.00
	Remark	Successfully completed
7.	Title of the project	Studies on the toxic effect of bioactive compounds extracted from Euphorbious plant on the non-target organism”
	Funding agency	University Grants Commission, New Delhi
	Duration	Three years
	Sanctioned Amount	Rs.631,800.00
	Remark	Successfully completed
8.	Title of the project	Studies on herbal formulations based on common medicinal plants used against Vector snails in Tarai region of Eastern Uttar Pradesh
	Funding agency	Indian Council of Medical Research, New Delhi
	Duration	Two years
	Sanctioned Amount	Rs.539,000.00
	Remark	Successfully completed
9.	Title of the project	Genotoxicity and metabolic anomalies induced by pulp and paper mill effluents in fresh water fishes
	Funding agency	Council of Science and Technology, Govt. Of U. P.
	Duration	Two years
	Sanctioned Amount	Rs. 530,000/-
	Remark	Successfully completed
10.	Title of the project	Genotoxicity and metabolic anomalies induced by water pollutants in fresh water fishes.
	Funding agency	University Grants Commission, New Delhi
	Duration	Three years
	Sanctioned Amount	Rs.1349,800.00
	Remark	Successfully completed

11.	Title of the project	Effects of industrial effluents on fish diversity, status and their ex-situ conservation management in river Aami of Gorakhpur region
	Funding agency	Uttar Pradesh Higher Education Department
	Duration	Three years
	Sanctioned Amount	Rs.1100,000.00
	Remark	Ongoing

PARTICIPATION AS RESOURCE PERSON IN PROFESSIONAL DEVELOPMENT PROGRAMME

- 4th **Refresher Course** in Zoology on “Modern Trends in Zoology” from 11.3.2004-31.3.2004.
- 5th **Refresher Course** in Zoology on “Environmental Sciences” from 8.11. 2006-28.11.2006.
- 6th **Refresher Course** in Zoology on “Advancement in Zoology and Environmental Sciences” from 7.11. 2008-27.11.2008.
- 1st **Refresher Course** in Defence Studies on “Major Concern in Social Sciences” from 21.3. 2009-10.4.2009.
- 1st **Refresher Course** in Academic Staff College on “Environmental Studies” from 31.12. 2009-20.1.2010.
- 7th **Refresher Course** in Zoology on “Advancement in Zoology and Environmental Sciences” from 7.11. 2012-27.11.2012.
- 2nd **Refresher Course** in Botany on “Life Science” from 7.1. 2013-27.1. 2013.
- 92nd **Orientation Programme** in Academic Staff College for newly appointed teachers of university and college during 1st June to 28th June, 2013.
- 93rd **Orientation Programme** in Academic Staff College for newly appointed teachers of university and college during September 4th to October 1st, 2013.
- 1st **Short Term Course** in Physics Department on “Research Guidance ,Quality Research and its Metrics” from 24.9. 2013-30.9.2013.
- 94th **Orientation Programme** in Academic Staff College for newly appointed teachers of university and college during November 23 to December 20, 2013.
- 1st **Short Term Course** in Zoology Department on “Water” from 17.12. 2013-23.12.2013.
- 95th **Orientation Programme** in Academic Staff College for newly appointed teachers of university and college during January 18 to February 14, 2013.
- 96th **Orientation Programme** in Academic Staff College for newly appointed teachers of university and college during May 24 to June 20, 2014.
- 97th **Orientation Programme** in Academic Staff College for newly appointed teachers of university and college during August 22 to September 18, 2014.
- 2nd **Refresher Course** in Botany on “Life Sciences in relation to Human Welfare” from 6.9. 2014-26.9. 2014.

RESEARCH PUBLICATIONS

Books

1. Ram Pratap Yadav and **Ajay Singh** (2012): Bio-Pesticides Used As Snail Control: Molluscicides Of Plant Origin. **Lambert Academic Publishing, Germany**, ISBN:978-3-8383-4804-9.
2. Saroj Chauhan and **Ajay Singh** (2012): Ecofriendly Control of Disease Causing Snails. **Lambert Academic Publishing, Germany**, ISBN:978-3-659- 24229-8.
3. **Ajay Singh** and Ram Pratap Yadav (2013): Snail as bioindicator of aquatic pollution by pesticides. **Lambert Academic Publishing, Germany**, ISBN:978-3-659- 35223-2.
4. Pallavi Srivastava and **Ajay Singh** (2014): Fate of Fungicides on fish *Clarius batrachus*: A Complete Study. **Lambert Academic Publishing, Germany**, ISBN:978-3-659- 54878-9.

Book Chapters

1. Digvijay Singh, **Ajay Singh** and S. P. Singh (2002): Pesticides of plant origin: Threat to Fish Biodiversity. NBFGR-NATP Publication No.4. ***“Life history traits of freshwater fish population for its utilization in conservation”*** AC-6 page 1- 4
2. Rajeshwari Yadav, V.K. Srivastava and **Ajay Singh** (2003): Toxicity of Apigenine (Flavonoid) extracted from latex of *Jatropha gossypifolia* against the larvae of mosquito, *Culex quinquefasciatus*. ***Biological Control of Insect pests*** (Eds. S. Ignacimuthu, S. J. & S. Jayaraj), Phoenix Publishing House Pvt. Ltd, New Delhi. PP 327-331
3. Digvijay Singh, R.P. Yadav and **Ajay Singh** (2003): Changes in phospholipid and lipid peroxidation level due to latex of *Codiaeum variegatum* in freshwater snail *Lymnaea acuminata*. ***Proceedings of National Symposia on Biochemical Sciences, Health and Environmental Aspects*** (Ed Satya Prakash) Allied Publishers PVT Limited pp268-273
4. **Ajay Singh**, S.K. Singh, R. P. Yadav, V. K. Srivastava, D. Singh and S. Tiwari (2006). Eco-friendly molluscicides, Piscicides and Insecticides from common plants (Chapter- 5). In: ***Trends in Agriculture and Soil Pollution Research***, Editors: Livingston, James V., Book published by Nova Science Publisher, Inc. pp 205-230, New York. ISBN 1-59454-325-9
5. Digvijay Singh, R.P. Yadav, S.K. Singh, and **Ajay Singh** (2006): Botanicals as pesticides and their future perspectives in India (Chapter- 5). In: ***Frontiers in Environmental Research***. Editors: Emma B. Davis, Book published by Nova Science Publisher, Inc. pp 95-108, New York. ISBN 1-60021-016-3
6. Ram P. Yadav and **Ajay Singh** (2010): Euphorbious plants as molluscicides and piscicides: A Review. ***Comprehensive Bioactive Natural Products (Vol. 2)***, Editor: **Gupta, V.K.**, Book published by Studium Press LLC, USA pp.449-460. ISBN 1933699523
7. Ram P. Yadav and **Ajay Singh** (2011): Pesticides (Fish and Mollusc) In: ***Encyclopedia of Biological Invasions*** (Edited by Daniel Simberloff and Marcel Rejmanek) published by University of California Press 2120 Berk clay way, Berkclay, CA pp 225-228. ISBN 978-0-520-26421-2.
8. Saroj Chauhan and **Ajay Singh** (2014): A detailed review on *Euphorbia tirucalli*: A plant of family Euphorbiaceae. ***Natural Product: Research Reviews*** Vol. 2. (Edited by V.K. Gupta) published by Daya Publishing House, New Delhi, pp 177-188. ISBN 9789351301059 (International Edition)
9. Paratibha Singh and **Ajay Singh** (2014): Review on Phytochemistry and Pharmacological aspects of *Jatropha gossypifolia* Linn. ***Medicinal Plants: Phytochemistry, Pharmacology and Therapeutics*** Vol. 3. (Editors: V.K. Gupta, G.D. Singh, Surjeet Singh and A. Kaul) published by Daya Publishing House, New Delhi, pp335-349 ISBN: 9788170358640
10. Saroj Chauhan, Jaya Shahi and **Ajay Singh** (2016): Review on the natural aspects of medicinal plant *Codiaeum variegatum* (Family: Euphorbiaceae). ***Natural Product: Research Reviews*** Vol. 4. (Edited

- by V.K. Gupta). published by Daya Publishing House, New Delhi, pp441-451 ISBN: 978-93-5130-883-6.
11. Ram P. Yadav and **Ajay Singh** (2016): Evaluation and studies of medicinal euphorbious plant *Croton tiglium*: A Review. **Utilisation and Management of Medicinal Plants** Vol. 3 (Editors: V.K. Gupta and A. Kaul) published by Daya Publishing House, New Delhi, pp 231-243 ISBN: 978-93-5130-886-7
 12. Sunil Kumar Singh, Shailendra Kumar Singh and **Ajay Singh** (2024): Piscicidal Activity of Thevetia peruviana Latex against Freshwater Fish in Laboratory and Cement Plastering Pond Conditions. **Contemporary Research and Perspectives in Biological Science** Vol.3 (Edited by Dr. Pinar Oguzhan Yildiz). published by BP International, pp 37-48 ISBN: 9789348119575

Reviews

1. **Ajay Singh**, D.K. Singh, T.N. Mishra and R.A. Agarwal (1996): Molluscicides of plant origin. **Biological Agriculture and Horticulture**, 13: 205-252
2. Sunil K. Singh, R. P. Yadav and **Ajay Singh** (2010): Molluscicides from some common medicinal plants of eastern Uttar Pradesh, India. **Journal of Applied Toxicology**, 30:1-7.
3. Sunil K. Singh, Shailendra K. Singh and **Ajay Singh** (2013): Molluscicidal and Piscicidal properties of three medicinal plants of family Apocynaceae – a review. **Journal of Biology and Earth Science**, 3(2): B194-B205.
4. Pallavi Srivastava, **Ajay Singh** and A. K. Pandey (2016): Pesticide toxicity in fishes: Biochemical, Physiological and Genotoxicity aspects. **Biochem Cell Arch**, 16(2): 199-218.

Research Articles

1. **Ajay Singh** and R.A. Agarwal (1988): Possibility of using latex of euphorbiales for snail control. **The Science of the Total Environment**, 77: 231-236
2. **Ajay Singh** and R.A. Agarwal (1990): Molluscicidal and Anti-Cholinesterase activity of euphorbiales. **Biological Agriculture and Horticulture**, 7: 81-91
3. **Ajay Singh** and R.A. Agarwal (1990): Molluscicidal properties of synthetic pyrethroids. **Journal of Medical and Applied Malacology**, 2: 141-144
4. **Ajay Singh** and R.A. Agarwal (1991): Kinetics of acetylcholinesterase inhibition by the latex of euphorbiales in the snail *Lymnaea acuminata*. **Journal of Medical and Applied Malacology**, 3: 101-105
5. **Ajay Singh** and R.A. Agarwal (1992): Toxicity of the latex of euphorbiales: Effect on acid and alkaline phosphatase of the snail *Lymnaea acuminata*. **Biological Agriculture and Horticulture**, 8: 211-219
6. **Ajay Singh** and R.A. Agarwal (1992): Molluscicidal activity of euphorbiales against the snail *Indoplanorbis exustus*. **Acta hydrochim et hydrobiol**, 20 (5): 262-264
7. **Ajay Singh**, D.K. Singh and R.A. Agarwal (1993): Effect of cypermethrin, mexacarbate and phorate on phospholipids and lipid peroxidation in the snail *Lymnaea acuminata*. **Bulletin of Environmental Contamination and Toxicology**, 51: 68-71
8. **Ajay Singh** and R.A. Agarwal (1993): Effect of cypermethrin on lactate and succinic dehydrogenase and cytochrome oxidase of snail and fish. **Bulletin of Environmental Contamination and Toxicology**, 51: 445-452
9. D.K. Singh and **Ajay Singh** (1993): *Allium sativum* (Garlic), A potent new molluscicide. **Biological Agriculture and Horticulture**, 9: 121-124
10. **Ajay Singh** and D.K. Singh (1993): Garlic can kill. **International Agricultural Sieve**, Published by Rodale Institute. (6): 115
11. **Ajay Singh** and R.A. Agarwal (1993): Effect of synthetic pyrethroids on snail metabolism. **Argonauta**, 6: (6-12): 26-30

12. **Ajay Singh** and R.A. Agarwal (1993): Toxic effect of synthetic pyrethroid, Fenvalerate on enzymes of the target snail, *Lymnaea (Radix) acuminata*, and the non-target fish, *Channa striatus*. **Journal of Medical and Applied Malacology**, 5: 87-91
13. D.K. Singh, **Ajay Singh** and R.A. Agarwal (1993): *Nerium indicum* as a potent molluscicide of plant origin. **Journal of Medical and Applied Malacology**, 5: 93-95
14. **Ajay Singh** and D.K. Singh (1994): Pestoban, a potent herbal molluscicide. **Biological Agriculture and Horticulture**, 10: 175-178
15. **Ajay Singh** and R.A. Agarwal (1994): Effect of three synthetic pyrethroids to a non-target fish *Channa striatus*. **Acta hydrochim. Hydrobiol.** 22: 237-240
16. Keshav Singh, **Ajay Singh** and D.K. Singh (1995): Molluscicidal activity of different combinations of plant products in the molluscicide Pestoban. **Biological Agriculture and Horticulture**, 12: 253-261
17. **Ajay Singh** and R.A. Agarwal (1995): Latices of euphorbiales used as molluscicide. **Argonauta**, 9 (1-6): 35-38
18. Keshav Singh, **Ajay Singh** and D.K. Singh (1996): Molluscicidal activity of Neem (*Azadirachta indica* A. Juss). **Journal of Ethnopharmacology**, 52: 35-40
19. Keshav Singh, **Ajay Singh** and D.K. Singh (1998): Synergism of MGK-264 and piperonyl Butaoxide on the toxicity of plant derived molluscicides. **Chemosphere**, 36 (15): 3055-3060
20. Kiran Singh, **Ajay Singh** and D.K. Singh (1998): The use of piperonyl butaoxide and MGK-264 to improve efficacy of some plant-derived molluscicides. **Pesticide Science**, 54: 145-149
21. **Ajay Singh** and V.K. Srivastava (1999): Toxic effect of synthetic pyrethroid permethrin on the enzyme system of the freshwater fish *Channa striatus*. **Chemosphere**, 39 (11): 1951-1956
22. Digvijay Singh and **Ajay Singh** (2000): The acute toxicity of plant origin pesticides into the freshwater fish *Channa punctatus*. **Acta hydrochimica et hydrobiologica**, 28 (2): 92-94
23. Digvijay Singh and **Ajay Singh** (2001): Toxicity of the latex of *Thevetia peruviana* and *Nerium indicum*: effect on metabolism of the fish *Channa punctatus*. **Journal of Medicinal and Aromatic Plant Sciences**, 22/4A & 23/A, 108-112
24. Sunil Kumar Singh, Ram P. Yadav and **Ajay Singh** (2001): Molluscicidal activity of *Thevetia peruviana*, a common medicinal plant of India. **Journal of Medicinal and Aromatic Plant Sciences**, 22/4A & 23/A, 113-116
25. V. K. Srivastava and **Ajay Singh** (2001): Toxicity of alphas-methrin, dimethoate and carbaryl pesticides to the freshwater snail *Lymnaea acuminata* and *Indoplanorbis exustus*. **Iberus**, 19: 1-5
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