



Shri Amolak Jain Vidya Prasarak Mandal's
Smt. S. K. Gandhi Arts, Amolak Science &
P.H. Gandhi Commerce College, Kada,
Tal. Ashti. Dist. Beed. PIN- 414202



Bio-Data

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|--|--|--------------------|-------------------|------------------|---------------|------------|
| First Name | VISHAL | Middle Name | VIJAYKUMAR | Last Name | VAIDYA | Photograph |
| Designation | Associate Professor | | | | | |
| Address | Department of Zoology Smt. S. K. Gandhi Arts, Amolak Science And P.H. Gandhi Commerce College, Kada, Beed (M.S.) | | | | | |
| Subject | Zoology | | | | | |
| Date of Joining | 16/06/2009 | | | | | |
| Academic Level | 13A | | | | | |
| Phone Number Office | 02441-239378 | | | | | |
| Mobile Number | 8275274160 | | | | | |
| Email ID | vvvaidya2010@gmail.com | | | | | |
| Date of Birth | 20/10/1978 | | | | | |
| Educational Qualifications | | | | | | |
| Degree | University/Institutions | | | | Years | |
| Ph.D. (Zoology) | DR. B.A.M. University, Aurangabad. | | | | 2007 | |
| M.Sc. (Zoology) | DR. B.A.M. University, Aurangabad. | | | | 2000 | |
| B. Sc. | DR. B.A.M. University, Aurangabad. | | | | 1998 | |
| Career Profile | | | | | | |
| 1. Assistant Professor Smt. S. K. Gandhi Arts, Amolak Science and P.H. Gandhi Commerce College Kada – 16/06/2009 to till date. | | | | | | |
| Administrative Assignments | | | | | | |
| <ul style="list-style-type: none">❖ Member of Sexual Harassment Committee❖ Co-coordinator of Internal Quality Assurance Cell (IQAC)❖ Member of Student Grievance Cell❖ Member of Student Welfare Committee❖ Member of Discipline Committee❖ Member of Science Association❖ Member of Web Development Committee❖ Co-ordinaor of Competitive Guidance Cell❖ Member of Action Plan Committee❖ Chairman of Perspective Plan Committee❖ Member of Anti Ragging Committee❖ Member of Research Development Committee❖ Member of College Grievance Committee | | | | | | |
| Areas of Interest / Specialization | | | | | | |
| Physiology and Entomology | | | | | | |

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| Subjects Taught |
| Animal Diversity, Ecology, Physiology, Evolution, Entomology. |
| Training Courses |
| <ul style="list-style-type: none"> ➤ 88th Orientation Programme, ASC Dr. B. A. M. U. Aurangabad ➤ Refresher Course Academic staff college, University of Kerala. ➤ Refresher Course in Biological Science, HRDC Dr. B.A.M.U. Aurangabad ➤ Faculty Development Program, MHRD, PMMNMTT & Shivaji University, Kolhapur |
| Title of M. Phil/ Ph.D. Thesis |
| Effect of Heavy Metals Pesticides And Bioactive Substances on Some Physiological Activities of Earthworm, <i>Perionyx excavatus</i> |
| Research Highlights |
| <ul style="list-style-type: none"> ➤ Isolated and identified bioactive substances from polychaetes that exhibit strong antimicrobial properties against a wide range of bacteria and fungi. It has the potential of antibiotics or antifungal activity. ➤ It exhibits neuroprotective effects. ➤ Mechanistic studies reveal the interaction of enzymes, receptors, and signalling pathways, aiding in the development of targeted therapies. ➤ It demonstrated the potential of marine polychaete-derived compounds as effective agents against various diseases, infectious diseases, neurodegenerative disorders, and inflammatory conditions. ➤ It has also focused on sustainable extraction methods and synthesis strategies. ➤ The effect of heavy metals on the physiological activities of earthworms, specifically <i>Perionyx excavatus</i>, yields several important achievements. ➤ It determines the toxicity thresholds and the adverse effects caused by different heavy metals. ➤ It has potential for heavy metals to bio-magnify in the food chain, as earthworms are a food source for many other organisms. ➤ The enzyme activities (e.g., Catalase, superoxide dismutase) like antioxidant defences, oxidative stress markers, and changes in metabolic pathways are focused ➤ It provided long-term consequences of heavy metal pollution on earthworm populations and ecosystem functioning. ➤ The earthworm's behaviour, burrowing activity, feeding patterns, and overall ecological functions, is helpful to evaluate the implications of heavy metal pollution on soil quality and ecosystem stability. |

Book Publication

| Sr. No. | Title of Book | Publisher Name | ISBN |
|---------|-----------------|----------------------------|-------------------|
| 01 | Insect Taxonomy | Kranti Publication, Georai | 978-81-942471-5-9 |

Research Papers

| Sr. No. | Title of Research Papers | Name of Journals | ISSN /ISBN |
|---------|---|---|------------------------|
| 1 | Zinc sulphate induced changes in catalase activity in different tissues of the earthworm <i>Perionyx excavates</i> | Applied research and development institute journal | 2249-8346 |
| 2 | Zinc sulphate induced changes in xanthine oxidase activity in different tissues of the earthworm <i>Perionyx excavates</i> | Applied research and development institute journal | 2249-8346 |
| 3 | Potential antibacterial activities of <i>Lumbrineris heteropoda</i> | Role of life forms in controlling pollution | 978-93-83389-79-7 |
| 4 | Diversity of aquatic fungi in the Dhanora Reservoir District Beed | Advances in plant sci. For sustainable rural development | 978-63415-707-0 |
| 5 | Potential antibacterial activities of <i>Lumbrineris heteropoda</i> | Science for sustainable development K.P.S.college Mumbai Uni. | ISBN 978-81-920431-3-5 |
| 6 | Copper sulphate induced changes in xanthine oxidase activity in different tissue of the earthworm, <i>Perionyx excavates</i> | Science for sustainable development K.P.S.college Mumbai Uni. | ISBN 978-81-920431-3-5 |
| 7 | Diversity, Distribution abundance of earthworms from Ashti region Dist. Beed | Vision research journal for life sciences | 2348-5817 |
| 8 | Biochemical Response of Earthworms <i>Perionyx excavates</i> Exposed to Mercuric Chloride Contaminated Soil | International Journal of Advanced Research in Biological Sciences | ISSN: 2348-8069 |
| 9 | Observation of competitive plant species and biological control agent of parthenium (<i>parthenium</i>) at Kada | World journal of pharmacy and pharmaceutical science | 2278-4357 |
| 10 | Antifungal activities of marine polychaetes <i>Namalycaestis fauveli</i> | Journal of chemical and pharmaceutical research | 0975-7384 |
| 11 | Pyrethroid pesticides induced changes in the nephridial excretory products of the earthworm, <i>Lampitoma mauritii</i> | National Journal of Life sciences | ISSN 0972-995X |
| 12 | <i>Ostracodecypris notus nudus</i> as bioindicator of pollution in freshwater reservoir "Adhala" at Akole, district. Ahmednagar | Journal of environmental Bio science | ISSN 0973-6913 |

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| 13 | Copper sulphate induced change in catalase activity in different tissues of the earthworm <i>Perionyx excavates</i> | Applied research and development Institute Journal | ISSN:2249-8354 |
| 14 | Copper sulphate induced change in xanthine oxidase activity in different tissues of the earthworm <i>Perionyx excavates</i> | Applied research and development Institute Journal | ISSN:2249-8354 |
| 15 | Toxicity of mercuric chloride to an earthworm <i>perionyxexcavatus</i> | Applied research and development Institute Journal | ISSN:2249-8354 |
| 16 | Toxicity of monocrotophos to an earthworm pheretima elongate | Applied research and development Institute Journal | ISSN:2249-8354 |
| 17 | Toxicity of endosulfan to an earthworm pheretima elongate | Applied research and development Institute Journal | ISSN:2249-8354 |
| 18 | Effect of mercuric chloride on glycogen in the fresh water crab, <i>barytelphusa guerini</i> | Applied research and development Institute Journal | ISSN:2249-8354 |
| 19 | Toxicity of zinc sulphate to an earthworm <i>perionyx excavates</i> | Applied research and development Institute Journal | ISSN:2249-8354 |
| 20 | Toxicity of copper sulphate to an earthworm <i>perionyx excavates</i> | Applied research and development Institute Journal | ISSN:2249-8354 |
| 21 | Effect of crude extract from marine Polychaete <i>Perineriscultrifera</i> on larval settlement of <i>Balanus amphitrite</i> (cirripedia, crustacea) | International journal of pharmacol and bioscience | ISSN 2230-7850 Impact Factor: 3.01 |
| 22 | Investigating The Effect Of Heavy Metals (Mercuric Chloride, Copper Sulphate and Zinc Sulphate) Exposure On Urea Levels In Earthworm | International Journal of Science And Research | ISSN 2319-7064 |
| 23 | The effect of heavy metal contamination of anti-oxidant enzyme activity and oxidative stress in Earthworm <i>Perionyx excavates</i> | Uttar Pradesh Journal of Zoology | ISSN 0256-971x |
| 24 | Zooplankton (<i>Cyprinotus nudus</i>) Biochemical Composition insight in to Aquatic Ecosystem Functioning | International Journal of Science And Research | ISSN 2319-7064 |
| 25 | Biochemical composition and Nutritional value of Zooplankton in aquatic ecosystem from a <i>Brachinous calyciflorus</i> , <i>Moina Maricopa</i> and <i>Cyprinotus nudus</i> | Uttar Pradesh Journal of Zoology | ISSN 0256-971x |

| Chapter in Edited Book | | | |
|---|---|--|------------------|
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| Sr. No. | Title of Chapter | Name of Book | ISBN No. |
| 01 | The effect of heavy metal contamination of anti-oxidant enzyme activity and oxidative stress in Earthworm <i>Perionyx excavates</i> | Uttar Pradesh Journal of Zoology | ISSN 0256-971x |
| Research Projects (Major Grants/Research Collaboration) | | | |
| 01. Live Feed Culture, Nutritional Potential and Biochemical Composition. 02. Isolation and Identification of Biochemical and Bioactive Properties of Zooplanktons. | | | |
| Patents | | | |
| | Sr. No. | Title of Invention | Publication Date |
| | 01 | Analysis of Diversity of Plant Growth Promoting Properties of Microbiomes Associated With Plants In Desert Soils | 17/03/2023 |
| | 02 | Machine Learning and Wireless Sensor Networks Based Approaches For Analysis Environment Pollution on Smart Cities | 12/05/2023 |
| | 03 | Smart and Automated Insecticide and Fertilizer Recommendation System to Support Smart Farming Techniques Using Deep Learning | Accepted |
| Association With Professional Bodies | | | |
| Advisory Board On Applied Research And Development Institute Journal | | | |
| Consultancy | | | |
| <ul style="list-style-type: none"> Providing expert advice and guidance on various aspects related to earthworms, zooplanktons. | | | |
| Other Activities | | | |
| <ul style="list-style-type: none"> Deliver the lecture on competitive examination in lifelong education. Attended orientation meeting concern block level stake holder on various aspects concerning with the new education policy of Government. of India Worked as Co-ordinator Planning Board of College Deliver lecture NAAC process in Siddharth College,Ambernath. Worked in Drought Relief Camp at Devalali. Participated in ‘ Paani Foundation Camp’ at Devalali. | | | |

{Dr. Vaidya V.V.}