

PROFILE

Name Dr. P. Karthika

Qualification Ph. D in Zoology

Department Zoology

Designation Assistant Professor



Official Address Department of Zoology,
Faculty of Biosciences,
Avinashilingam Institute of Home Science and higher Education for
Women,
Coimbatore- 641 043

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Area of Specialization Entomology , Molecular Taxonomy and Phylogenetics

Countries visited --

Teaching experience 1 yr at UG Level 6 months at PG Level

Research experience 2 yrs at M.Phil and 5 yrs Ph.D level

Ph.D Thesis : Insect and host plant interactions: An evolutionary genomics,
phytochemical and *In silico* approach for assessing novel interaction
of the pest *Henosepilachna vigintioctopunctata* (Fabricius, 1772)

Publications International: 13; National 1

NCBI GenBank Accession: 130

Achievements Qualified in Tamil Nadu State Eligibility Test for Assistant
Professorship (SET)- 2016

INSPIRE Fellowship funded by DST, (JRF and SRF)- 2013- 2017

FIRST rank and Gold medalist in M.Sc. Animal Science (2009-2011), Bharathiar University, Coimbatore.

Indira Gandhi Single Girl Child Scholarship funded-UGC during Post-Graduation in 2009-2011

Proficiency in B.Sc. Advanced Zoology and Biotechnology – P.S.G.R. Krishnammal College for Women, Coimbatore (2006-2009)

Sponsored projects: ---

FELLOWSHIP/ SCHOLARSHIP /AWARDS/ MEDALS / QUALIFICATION:

Qualified in Tamil Nadu **State Eligibility Test** for Assistant Professorship (**SET**) – 2016

DST INSPIRE Fellowship funded by DST, (**JRF and SRF**)- 2013- 2017

FIRST rank and **Gold medalist** in **M.Sc. Animal Science** (2009- 2011), Bharathiar University, Coimbatore.

Indira Gandhi Single Girl Child Scholarship funded by **UGC** during post-graduation in 2009-2011

FIRST prize for the **Proficiency** in B.Sc. Advanced Zoology and Biotechnology – P.S.G.R. Krishnammal College for Women, Coimbatore (2006-2009)

WORKING EXPERIENCE

S. NO	INSTITUTION	DESIGNATION	DEPARTMENT	YEARS OF SERVICE
1.	Nirmala College for Women, Red fields, Coimbatore- 641 018	Assistant Professor-Temporary	Zoology	14 th June 2017- 7 th December, 2018
2.	Avinashilingam Institute of Home Science and higher Education for Women, Coimbatore- 641 043	Assistant Professor-Temporary	Zoology	<u>8th December 208- till date</u>

LIST OF THESIS GUIDED: _Completed -5; Ongoing- 3

S. No	Name of the thesis	Name of the candidate	Year	Level and Institution
1.	Competency Of vermicompost on the growth and biochemical parameters of <i>Vigna Radiata</i> L. in the textile effluent treated soil	Dhivya Bharathi. A Divya. P Kowsalya. R Monika Anthoniammal Praveena. N Reshma.A Sowmiya. A Vincy.A	2017-18	UG- Group Project Nirmala College for Women, Coimbatore
2.	Study on the repellency, mortality and control of grain loss by the rhizome extracts of <i>Curcuma Zedoraia</i> Rosc On <i>Sitophilus oryzae</i> (Linnaeus, 1763)	Dhivya Bharathi. A Divya. P Kowsalya. R Monika Anthoniamal Praveena. N Reshma.A Sowmiya. A Vincy.A	2017-18	UG- Group Project Nirmala College for Women, Coimbatore
3.	Study on the repellency and mortality by the rhizome extracts of <i>Alpinia calcarata</i> (Roscoe) and <i>Cyperus rotundus</i> L. on <i>Tribolium castaneum</i> (Herbst)	G. Deepika	2017-18	PG- Dissertation Nirmala College for Women, Coimbatore
4.	Study on the repellency, mortality and control of grain loss by the rhizome extracts of <i>Curcuma Zedoraia</i> On <i>Sitophilus Oryzae</i> (Linnaeus, 1763)	Thahira banu M	2017-18	PG- Dissertation Nirmala College for Women, Coimbatore
5.	Decolourization of Methylene Blue from aqueous solution of rice husk	Ponmozhi	2017-18	PG- Dissertation Avinashilingam Institute of Home Science and higher Education for Women,

LIST OF PUBLICATIONS:(i) GenBank Accession Numbers :(No. 130) <https://www.ncbi.nlm.nih.gov/nucleotide>

NATURE OF ORGANISM	NCBI GENBANK ACCESSION NUMBERS	NO. OF SEQUENCES
Agricultural pests (Beetles, Bugs & moths)	KU234198- KU23421; KJ183100- KJ183106; KJ559395- KJ559409; MF494626-MF494655	65
Medical importance (Mosquitoes)	KT339653-KT339683;; KU920683-KU920697; KR817728-KR817732; KR872404-KR872408	53
Bio indicators (Dragonfly)	JX306647- JX306649; JX308218; JX226065- JX226068; JX261941- JX261944	12

PUBLICATIONS IN INTERNATIONAL/NATIONAL JOURNALS:

S. NO	AUTHOR LIST	TITLE OF THE RESEARCH WORK	PUBLICATION DETAILS
1.	Thirumurugan Durairaj, Ramasamy Vijayakumar, Chithravel Vadivalagan, Pushparaj Karthika , and Khurshid Alam Khan	Isolation, structure elucidation and antibacterial activity of methyl-4, 8- dimethylundecanate from the marine actinobacterium <i>Streptomyces albogriseolus</i> ECR64	Microbial pathogenesis, 121, pp.166-172. Indexing: SCI, WOS, SCOPUS PUBMED Publisher : Elsevier I.F : 2.9
2.	Pushparaj Karthika , Chithravel Vadivalagan, Durairaj Thirumurugan, Rangaswamy Ravi Kumar, Kadarkarai Murugan, Angelo Canale, Giovanni Benelli	DNA barcoding of five Japanese encephalitis mosquito vectors (<i>Culex</i> <i>fuscocephala</i> , <i>Culex gelidus</i> , <i>Culex tritaeniorhynchus</i> , <i>Culex pseudovishnui</i> and <i>Culex vishnui</i>)	Acta tropica, 183, pp.84-91.' Indexing: SCI, WOS, SCOPUS PUBMED Publisher : Elsevier I.F : 2.218
3.	Karthika, P , Vadivalagan, C, Muthusankar A, Murugan K, Krishnaveni N, Del Serrone P, Nicoletti, M. and Benelli, G	Methyl linolenate as a feeding stimulant for the 28-spotted potato ladybird, <i>Henosepilachna</i> <i>vigintioctopunctata</i> ? A	<i>Physiological and Molecular</i> <i>Plant Pathology (2017)</i> Indexing: SCI, WOS, SCOPUS PUBMED Publisher : Elsevier

		molecular docking approach	I.F : 2.139
4.	Karthika, P. , Vadivalagan, C., Krishnaveni, N., Murugan, K., Nicoletti, M., Canale, A. and Benelli, G	Contrasting genetic diversity and intra-population polymorphism of the invasive pest <i>Henosepilachna vigintioctopunctata</i> (Coleoptera, Coccinellidae): A DNA barcoding approach	<i>Journal of Asia-Pacific Entomology</i> (2017) 20(1), pp.23-29 Indexing: SCI, WOS, SCOPUS PUBMED Publisher : Elsevier I.F : 1.060
5.	Karthika, P. , Krishnaveni, N., Vadivalagan, C., Murugan, K., Nicoletti, M. and Benelli, G	DNA barcoding and evolutionary lineage of 15 insect pests of horticultural crops in South India	<i>Karbala International Journal of Modern Science</i> , (2016) 2(3), pp.156-168. Indexing: SCI, WOS, SCOPUS PUBMED Publisher : Elsevier
6.	Vadivalagan C., Karthika, P. , Murugan, K.,Panneerselvam, C., Del Serrone, P. and Benelli, G	Exploring genetic variation in haplotypes of the filariasis vector <i>Culex quinquefasciatus</i> (Diptera: Culicidae) through DNA barcoding.	<i>Acta tropica</i> , (2017) 169, pp.43-50. Indexing: SCI, WOS, SCOPUS PUBMED Publisher : Elsevier I.F : 2.218
7.	Vadivalagan, C., Karthika, P. , Murugan, K., et al.,	Genetic deviation in geographically close populations of the dengue vector <i>Aedes aegypti</i> (Diptera: Culicidae): influence of environmental barriers in South India	<i>Parasitology research</i> , (2016) 15(3), pp.1149-1160. Indexing: SCI, WOS, SCOPUS PUBMED Publisher : Springer I.F : 2.329
8.	Murugan, K., Vadivalagan, C., Karthika, P. , et al.,	DNA barcoding and molecular evolution of mosquito vectors of medical and veterinary importance.	<i>Parasitology research</i> , 115(1), pp.107-121. Indexing: SCI, WOS, SCOPUS PUBMED Publisher : Springer I.F : 2.329
9.	Karthika, P* and Krishnaveni,N	DNA Barcoding of major pests of the pigeonpea <i>Cajanus cajan</i> (L) Millsp using CO1	<i>International Journal of Pharma and Biosciences</i> , 2016 April; 7(2): (B) 333 – 344. ISSN

		gene	0975-6299 Indexing: Google Scholar, EMBASE
10.	Karthika, P* and Krishnaveni,N	Knowledge, perception, incidence of insect pests and other agricultural practice among farmers growing vegetables the Coimbatore region, India	International Journal of Pharma and Biosciences, 2016 April; 7(2): (B) 333 – 344. ISSN 0975-6299 Indexing: Google Scholar, EMBASE
11.	Karthika, P* and Krishnaveni,N	Impact assessment of dragonfly diversity in different wetland ecosystems in Coimbatore with special reference to abiotic factors	<i>International Journal of Advanced Research</i> , (2014), 2(2), pp.639-648. Indexing: Google Scholar, EMBASE
12.	C. Vadivalagan, C. Gunasekaran, P. Karthika and P. Saravana Bhavan	Molecular identification of nymphalidae Butterflies in Mukurthi National Park, India	<i>European Journal of Zoological Research</i> , 2014. 3 (2), 66-75. ISSN: 2278-7356
13.	Karthika, P. , Vadivalagan, C., Gunasekaran, C. and Anandhakumar, S	DNA Barcoding of selected dragonfly species (Libellulidae and Aeshnidae) for species authentication with phylogenetic assessment	<i>European Journal of Experimental Biology</i> , 2012, 2 (6), 2158-2165. ISSN: 2248 – 9215 Indexing: Google Scholar
14.	Vadivalagan C, Karthika P et al.,	Assessing reproductive behavior of Lepidoptera victims on road killed in Coimbatore, (TN) India	<i>Journal of Recent Scientific Research</i> , 2012, 3(5), 340 – 342. ISSN:0976-3031

LIST OF WORKSHOP AND TRAININGS ATTENDED:

1. Three-day workshop on “**Molecular modeling and Computer-aided drug designing**” organized by Department of Biochemistry, Biotechnology and Bioinformatics, Avinashilingam Institute of Home Science and Higher Education for Women, Coimbatore
2. UGC, DBT and DST sponsored national seminar cum workshop on **Microbial Phylogenetics and Proteomics**. Feb 12-14, 2014. Organized by Department of Biotechnology, Alagappa University, Karaikudi, India.

3. Completed **Honours Diploma in Computer Application (HDCA)** during Sep 2007- June 2008.
4. Completed Industrial training program on **Bio-tools and Databases** from 24th May -5th.June 2010.

LIST OF CONFERENCES AND SEMINARS:

Presented:

1. **Paper presented** on “Genetic deviation and haplotype analysis in geographically close population of the potential pest *Leucinodes orbonalis* (Lepidoptera: Crambidae) in *Solanum melongena*” in International Conference On Biodiversity And Sustainable Resources Management (ICBSRM-2018), Department of Environmental Sciences, University of Madaras on March 12th-13th, 2018.
2. **Paper presented on** “Competency of vermicompost on the growth and biochemical parameters of *Cicer arietinum* L. in the textile effluent treated soils” in NARC 2018, December 2018 in Nirmala College for Women, Coimbatore
3. **Paper presented** on “Genetic deviation on the haplotypes of *H. vigintioctopunctata* in geographically close regions of South India” in 2nd International conference on environment and ecology during 9th March 2016 Organised by Department of Environment Science, Bharathiar university, Coimbatore.
4. **Paper presented** on “Contrasting genetic divergence of *H. vigintioctopunctata* haplotypes of South India ” in National Seminar on Frontiers in Biotechnology organised by Department of Biotechnology, Bharathiar University, Coimbatore, India.
5. **Paper presented** on “DNA barcoding and phylogeography of agro-pests inferred from mitochondrial CO1 gene sequences” National level symposium on Phenomenal Science BIOGALAXIA'2014. organised by Department of Biotechnology and Microbial Biotechnology on 12th October, 2014, organised by Department of Bioinformatics, Bharathiar University, Coimbatore-TN, India

Participated

6. **Participated** in National seminar on “Emerging trends in Biosciences” organized by Department of Zoology, Kongunadu arts and science college on 8th December, 2015, Coimbatore.
7. **Participated** in the Seminar on “Current Trends in Biological Research” held on March 3rd 2009, organized by Department of Zoology, Bharathiar University,

Coimbatore, India.

8. **Participated and presented** a paper in one day State Level Seminar on “Current Status of Pollution Hazards to Health”, held on September 17th 2008. P.S.G.R. Krishnammal College for Women, Peelamedu, Coimbatore.
9. **Participated** in a National Conference on the “Impact of Climate Change on Biodiversity of Insects and Environment”, during 15 16th March 2010. organized by Department of Zoology, Bharathiar University, Coimbatore, India.
10. **Participated** in an International Conference on the “3rd Asian Lepidoptera Conservation Symposium and Training Programme” held during 25th-29th October 2010, organized by Department of Zoology, Bharathiar University, Coimbatore, India.

LIST OF CONGRESS ATTENDED:

1. **Participated** in 3rd International congress on global warming on biodiversity of insects: management and conservation strategies (GW-BIMC, 2013) on June 4th-8th, 2010 organized by Department of Zoology, Bharathiar University, Coimbatore.
2. **Participated** in International Congress of 'Global Warming on Biodiversity of Insects: Management & Conservation on Feb- 9th-12th 2009, organized by Department of Zoology, Bharathiar University, Coimbatore, India.