#### **Dr. PAVUNRAJ MANICKAM**

M.Sc., (Zoo), M.Sc., (Med. Sociol), M.Sc., (Coun. Psy), PGDESD., Ph.D., Assistant Professsor Post Graduate & Research Department of Zoology Vivekananda College - Autonomous & Residential Tiruvedakam West, Madurai – 625 234, Tamil Nadu, India

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#### SUMMARY OF CURRICULUM VITAE

୯୫	Eleven Years of Teaching Experience at College and University Level.				
ଔ	Active Researcher in the Field of Bilogical Sciences Since, 2003.				
G	Effective and Strong Communication Skills as Lecturer.				
ଔ	Experts in Innovative Agricultural and Health-Care Bio-Product Development.				
	Recipient of National and International Awards and Recognitions for Outstanding				
ശ്ദ	Contributions to Sustainable Agricultural Research and Academics, Including Young Scientist				
	Awards From DST-SERB, New Delhi, and Banaras Hindu University (BHU), Varanasi, UP.				
G	Life Member of Many Reputed Professional Societies both National and International.				
	Published More Than 35 Research Article in Various Journals. Authored 5 Book Chapters				
୦୫	and Filed a Patent				
ଔ	Major Research Project Completed as Principal Investigator = $\underline{01}$ funded by DST-SERB				
ଔ	Paper Presentations in Seminar / Symposia / Conferences: International = $\underline{25}$ ; National = $\underline{15}$ .				
୯୫	Editorial Board Member of American Journal of Entomology (AJE)				
CB	Accredited Member of the International Society of Zoological Sciences (ISZS), China.				
ശ്ദ	Countries Visited on Academic Assignments: Singapore and Malaysia.				
G	Excellent Relationship Builder with Students, Faculty, Administration and Public.				
୯୪	Recognition of Guideship – Zoology - Madurai Kamaraj University (MKU), Madurai				
	Guideship <u>No.2137/21.</u>				

## ACADEMIC QUALIFICATIONS

YEAR	DEGREE	SUBJECT SPECIALIZATION	INSTITUTIONS
1999	B.Sc.,	Zoology (Ancillary Chemistry & Botany)	Bharathidasan University
2002	M.Sc., <sup>#</sup>	Zoology (General)	Bharathidasan University
2008	Ph.D., *	Zoology – Entomology	University of Madras
2012	PDF. <sup>¥</sup>	Entomology – Phytochemistry	University of Madras
2014	M.Sc.,	Medical Sociology	University of Madras
2017	PGDESD,	Environmental Science	IGNOU – New Delhi
2021	M.Sc., <sup>Ø</sup>	Counseling Psychology	University of Madras

DETAILS OF RESEARCH PROJECT UNDERTAKEN				
	Digestion of Cellulose and Starch by Symbiotic Bacteria in the Gut of the Giant Tiger			
<u>M.Sc.,</u> Dissertation <sup>#</sup>	Prawn Peaneous monodon (F.) and its Environment, M.Sc., Dissertation, Bharathidasan			
Distriction	University, Tiruchirappalli – 620 023.			
<u>Ph.D.,</u>	Bio-Efficacy of Novel Botanical Pesticide Formulations against Some Lepidopteron			
<u>Thesis</u> *	Pests, <u><i>Ph.D. Thesis</i></u> , University of Madras, Chepauk, Chennai – 600 005.			
	Development of Eco-friendly Bio-pesticide Derived from Plant Origin for the Control of			
<u>PDF.,</u>	Agriculturally Important Lepidopteran Insect Pests, DST-Young Scientist Project,			
DST – SERB <u>Project</u> (Grant No. SERC/LS-0412/2010). University of Madras, Guindy Campus, C				
	600 025.			
M.Sc., <sup>Ø</sup>	A Case of Depression, Tobacco Use Disorder and Intellectual Disabilities, <u>Case Study</u>			
Coun. Psychology	Cum Practicum Report. University of Madras, Chepauk, Chennai – 600 005.			

S.	S. Designation Period Name of the Organization			
No	0			
1	Assistant Professor	Till date	Post Graduate and Research Department of Zoology, Vivekananda College, Tiruvedakam West, Madurai District – 625 234.	
2	Young Scientist	June 2012 – July 2014	DST-Fast Track Govt. of India: Department of Zoology, University of Madras, Guindy Campus, Chennai – 600 025.	
3	Assistant Professor	December 2010 – July 2012	Department of Industrial Biotechnology, Bharath University, Selaiyur, Chennai – 600 073.	
4	Guest Lecturer	December 2009 – April 2010	Department of Zoology, University of Madras, Guindy Campus, Chennai – 600 025.	
5	Senior Entomologist	September 2008 – November 2009	AUM Agro-tech Pvt. Limited (MNC), Ssanthome High Road, Raja Annamalai Puram, Chennai – 600 028.	
6	Research Assistant	January 2008 – August 2008	Regional Agricultural Research Station (RARS), Kerala Agricultural University (KAU), Pattambi, Palakkad District – 679 306, Kerala.	
7	Research Associate (RA), CSIR-Project	July 2006 – December 2007	Entomology Research Institute, Loyola College, Nungambakkam, Chennai – 600 034.	
8	Senior Research Fellow (SRF), DST- Project	August 2005 – June 2006	Entomology Research Institute (ERI), Loyola College, Nungambakkam, Chennai – 600 034.	

#### PROFESSIONAL RECOGNITION AND EXPERIENCE

## MISSION STATEMENT OF RESEARCH

Development of an integrated pest management module to promote and protect the major insect-pests of agricultural crops and stored products and to boost up the economy of margin and small scale farmers as well as of the country.

# SKILLS AND EXPERTISE

$\checkmark$	Zoology–Entomology	✓	Biodiversity Conservation
✓	Agricultural Entomology	~	Environmental Science
✓	Biopesticides and Crop Protection	$\checkmark$	Microbiology and Pharmacology
~	Biotechnology and Phytochemistry	$\checkmark$	Vector Management
~	Insect Ecology & Medicinal Plants	~	Environmental Toxicology
~	Insect–Plant interactions	~	Environmental Management
~	Integrated Pest Management (IPM)	$\checkmark$	Green and Nano-Pesticides
~	Stored–Grain Insect Pest Mgnt.	✓	Bioactive Natural Product Development

# RESEARCH EXPERTISE FOR IPM AND VECTOR CONTROL

$\checkmark$	Organic Farming, Insect Collection, Mass Culturing and Rearing Techniques				
$\checkmark$	Bioassay of Antifeedant, Ovicidal, Oviposition deterrent, Insecticidal and				
	Growth Regulating Activities in Agricultural Pests (Helicoverpa armigera,				
	Spodoptera litura, Leucinodes orbonalis, Plutella xylostella & Erias vittella).				
~	Repellent activity in Stored Product Pests (Callosobruchus maculates,				
	Tribolium castaneum, Sitophilus oryzae & Lasioderma serricorne)				
~	Behavioral and Physiological Effects of Plant Defensive Chemicals on Insect pests				
~	Toxicity Studies for Mosquito: Larvicidal, Ovicidal, Oviposition Deterrent,				
	Repellents, Knock-down and Adulticidal Activities				
√	Toxicity Evaluation of Non-Target Organisms				
~	Persistence Effects on Field Pests and Designing IPM Modules				

#### PHYTOCHEMISTRY TECHNIQUES

Isolation & Characterization of Active Molecules from Natural Products using Various Analytical Techniques like Column chromatography, TLC, NMR, IR, GC–MS and Flash Evaporator.

#### **MOLECULAR BIOLOGY TECHNIQUES**

- Gel Electrophoresis (SDS–PAGE)
- A DNA, RNA Isolation
- \* Cytogenetic Studies in Insects

#### MICROBIOLOGICAL TECHNIQUES

- Isolation of Bacteria from Environmental Samples
- Characterization of Bacterial Species from Complex Culture
- Antibacterial and Antifungal Assay (Agar–Well Diffusion Method)

#### **EXPERTISE IN BIO-PRODUCT FORMULATION DEVELOPMENT**

- Hands on Experience in Preparation of Herbal Pesticide Formulations for the Control of Economically Important Agricultural, Stored Products Pests, and Household Insects.
- Hands on Experience in Preparation of Plant Based Bio-pesticides for the Control of Mosquito Larvae.
- Hands on Experience in Mosquito Repellent Products from Essential Oils and Botanical Extracts.
- Hands on Experience in Preparation of Nano-pesticides from Botanicals (Green Synthesis of Silver Nanoparticles).

#### **RESEARCH PUBLICATIONS: [INTERNATIONALLY REFEREED JOURNALS]**

- Manickam Pavunraj, Baskar, K. Arokiyaraj S. *et al.*, (2020). Karyomorphological effects of two new oil formulations on *Helicoverpa armigera* (Hübner) (Lepidoptera: Noctuidae), <u>Saudi</u> <u>Journal of Biological Sciences</u>, 28 (2021) 1514–1518, <u>Impact Factor: 4.219.</u>
- Manickam Pavunraj, Kathirvelu Baskar, Selvaraj Arokiyaraj, Krishnamoorthy Rajapandiya Abdulaziz A. Alqarawie, Elsayed Fathi Abd\_ Allahe (2020). Silver nanoparticles containing stearic acid isolated from *Catharanthus roseus*: Ovicidal and oviposition-deterrent activities on *Earias vittella* and ecotoxicological studies, <u>Pesticide Biochemistry and Physiology</u>, 168:104640, <u>Impact Factor: 3.963.</u>
- S. Rajeshkumar, J. Santhoshkumar, T. Lakshmi, M. Ponnanikajamideen, M. Vanaja and Manickam Pavunraj (2020). Morphological Characterisation of Zinc Sulfide Nanoparticcles Using Electron Microscopy and X-Ray Diffaraction Assay, <u>Plant Cell Biotechnology and</u> <u>Molecular Biology</u>, 21(29&30):97-105. <u>Impact Factor: 0.240.</u>
- Pavunraj M, (2019). Low-Cost and Environmental-Friendly Phyto-Synthesis of Silver Nanoparticles Using 1, 2-Benzenedicarboxylic acid, diisooctyl ester Isolated from Acalypha fruticosa Forssk. Leaf Extract and Its Larvicidal Activity against Aedes aegypti (L.) and Culex quinquefasciatus (Say), <u>International Journal of Health and Life-Sciences</u>, ISSN 2454-5872.p14.
- <u>Pavunraj M</u>, Gaganpreet Kour Bali, Murali Palraju (2018). Antifeedant Efficacy of Some Medicinal Plant Extracts Against *Leucinodes Orbonalis*. <u>World Wide Journal of</u> <u>Multidisciplinary Research and Development</u>, 4 (1): 361-36, <u>IF MJIF: 4.250</u>, (UGC-Approved).
- Pavunraj M, Rajeshkumar S, Bhuvana L. and R. Babujanarthanan (2019). Preparation of *Cassia auriculata* plant extracts using different solvents and its antibacterial and antifungal activities against clinical pathogens, *Drug Invention Today*, 11(1):142-146, *RG-Impact Factor:1.640*, (UGC- Approved).

- Pavunraj M, Kathirvelu Baskar, Veeramuthu Duraipandiyan, Naif Abdullah Al-Dhabi, Venkatachalam Rajendran and Giovanni Benelli (2017). Toxicity of Ag Nanoparticles Synthesized Using Stearic Acid from *Catharanthus roseus* Leaf Extract against *Earias vittella* and Mosquito Vectors (*Culex quinquefasciatus* and *Aedes aegypti*), *Journal of Cluster Science*, DOI 10.1007/s10876-017-1235-8, *Impact Factor:* 3.061.
- Kathirvelu Baskar, Rajan Maheswaran, <u>Paunvraj M</u>, Soosaimanickam Maria Packiam, Savarimuthu Ignacimuthu, Veeramuthu Duraipandiyan, and Giovanni Benelli (2017). Toxicity and antifeedant activity of *Caesalpinia bonduc*(L.)Roxb.(Caesalpiniaceae) extracts and fractions against the cotton bollworm *Helicoverpa armigera* Hub.(Lepidoptera: Noctuidae), <u>*Physiological*</u> *and Molecular Plant Pathology*, <u>Impact Factor: 2.747.</u>
- Kanniah Paulkumar, Gnanadhas Gnanajobitha, Mahendran Vanaja, <u>Pavunraj M</u>, and Gurusamy Annadurai (2017). Green synthesis of silver nanoparticle and silver based chitosan bionanocomposite using stem extract of *Saccharum officinarum* and assessment of its antibacterial activity, <u>Advances in Natural Sciences: Nanoscience and Nanotechnology</u>, 8: 035019. <u>Impact Factor: 2.710.</u>
  - Pavunraj, M. Sakthivelkumar, V. Veeramani, V. Ramesh, V and Janarthanan, S. (2017).
    'Larvicidal and enzyme inhibitory effects of *Acalypha fruticosa* (F.) and *Catharanthus roseus* L (G) Don. Leaf extracts against *Culex quinquefasciatus* (Say.) (Diptera: Culicidae), <u>Asian</u> <u>Journal of Pharmaceutical and Clinical Research</u>, 10 (3):213-220, <u>Impact Factor: 0.48.</u>
  - Pavunraj M, Ramasubbu and Baskar K. (2017). Leucas aspera (Willd.) L.: Antibacterial, antifungal and mosquitocidal activities, <u>Trends in Phytochemical Research</u>, 1(3):135-142.
  - Pavunraj, M. Ramesh, V. Murali P. Janarthanan S.and Igancimuthu S. (2016).
    'Phytopesticidal action of *Hyptis suaveolens*, *Melochia corchorifolia* and their bioactive molecules on cotton bollworm, *Helicoverpa armigera (Hubner)* (Lepidoptera: Noctuidae)' *International Journal of Latest Research in Science and Technology*, 5(5):22-27.
  - 13. <u>Pavunraj M,</u> Baskar K, Paulkumar K, Janarthanan S and Rajendran P. (2016). Antifeedant activity of crude extracts and fractions isolated from *Catharanthus roseus* leaf against spotted

bollworm, *Earias vittella*, <u>*Phytoparasitica*</u>, DOI 10.1007/s12600-016-0521-6. <u>*Impact Factor*</u>: <u>1.130.</u> (Sit – Citation – PuBAg (USDA).

- Ramesh V, Santosh K, <u>Pavunraj M</u>, Karunakaran C, and A. Rajendran (2015). 'In-vitro antifungal and anticancer potential of *Xylaria curta* fruiting body fractions against human fungal pathogen and cancer cell lines. <u>Current Research in Environmental & Applied</u> <u>Mycology</u>, 5(1), 20–26, Doi 10.5943/cream/5/1/4, ISSN 2229-2225.
- Pavunraj M, Baskar, K. Janarthanan, S. and Arumugam M. (2014). 'Feeding inhibition and toxicity effects of *Acalypha fruticosa* Forssk (Euphorbiaceae) leaf crude extracts on some important lepidopteran insect pests', *Asian Pacific Journal of Tropical Disease*; 4 (Suppl 2): S890-S894). *Impact Factor: 0.758.*
- Pavunraj M, S. Janarthanan, and M. Arumugam (2014). 'Phytopesticidal effect of *Spilanthes* acmella leaves on three economically important lepidopteran insect pests', *Journal of Coastal* <u>Life Medicine</u>, 2(7): 569-574.
- Pavunraj M, Baskar, K. Janarthanan, S.and Arumugam M. (2014). 'Antibacterial and antifeedant activities of *Spilanthes acmella* leaf extract against Gram-negative and Grampositive bacteria and Brinjal fruit Borer *Leucinodes orbonalis*', *Journal of Coastal Life* <u>Medicine</u>, 2 (6): 490–495.
- Pavunraj M, K. Baskar, M.G. Paulraj, S. Ignacimuthu, and S. Janarthanan (2013).
  'Phagodeterrence and insecticidal activity of *Hyptis suaveolens* (Poit.) against four important lepidopteran pests', <u>Archives Phytopathology and Plant Protection</u>, DOI: 10.1080/03235408.2013.800694, ISSN: 1477–2906, <u>Impact factor: 1.20.</u>
- Pavunraj M, Paulraj, M.G. Selvakumar, S. Rao, M.R.K. and Ignacimuthu S. (2012). 'Feeding Deterrence, Larvicidal and Haemolymph Protein Profiles of an Indian Traditional Medicinal Plant Alangium salviifolium (L.F.) Wangerin on Cluster Caterpillar, Spodoptera litura (Fabricius) (Lepidoptera: Noctuidae)', <u>Archives of Phytopathology and Plant Protection</u>, DOI:10.1080/03235408.2012.721071, ISSN: 1477–2906, <u>Impact factor: 1.20</u>.

- Selvakumar, S. Rao, M.R.K. and <u>Pavunraj M</u>, and D. Bhattacharya (2012). 'Antibacterial Therapeutic Role of *Thespesia populnea*, *Nerium odorum* and *Ocimum basilicum* on Selected Human Pathogenic Microorganisms', <u>Journal of Pharmacy Research</u>, 5 (8), 4271–4274, ISSN: 0974-6943.
- Pavunraj M, Baskar, K. and Ignacimuthu S. (2012). 'Efficacy of *Melochia corchorifolia* L. (Sterculiaceae) on Feeding Behavior of four Lepidopteran Pests' *International Journal of Agricultural Research*, 7 (2), 58–68, ISSN: 2152–2553. NAAS Rating 4.13, *Impact Factor:* 3.20. (Citation appears Asian Science Citation Index (ASCI Database).
- 22. Pavunraj M, S. Ignacimuthu, S. Janarthanan, V. Duraipandiyan, S. Vimalraj, C. Muthu, and N. Raja (2011). 'Antifeedant Activity of a Novel 2-(4, 7-Dihydroxy heptyl) quinone from the Leaves of the Milkweed, *Pergularia daemia* on the Cotton Bollworm, *Helicoverpa armigera* and Tobacco Armyworm, *Spodoptera litura*', *Phytoparasitica*, 39 (2), 145–150, ISSN: 1876–7184, *Impact Factor: 1.30.*
- Ignacimuthu S, <u>Pavunraj M</u>, V. Duraipandiyan, N. Raja, and C. Muthu (2008). 'Antibacterial Activity of a Novel Quinone from the Leaves of *Pergularia daemia* (Forsk.) a Traditional Medicinal Plant', <u>Asian Journal of Traditional Medicines</u>, 4 (1), 36–40, ISSN: 1817–4337 CN.
- Pavunraj M, Ignacimuthu, S. Karthikeyan, K. and Purushothaman S.M. (2008). 'Antifeedant Activity of *Lippia javanica* (Burm. F) Spreng. Leaf Extracts on Tobacco Cutworm, *Spodoptera litura* (Fab.) Lepidoptera Noctuidae)', *Indian Journal of Plant Protection*, 36 (1), 65–68, ISSN: 0253–4355, <u>NAAS Rating: 4.3.</u>
- <u>Pavunraj M</u>, Paulraj, M.G. and Ignacimuthu S. (2007). 'Effect of Plant Volatile Oils in Protecting Stored Peanuts against *Tribolium castaneum* (Herbst.) (Coleoptera: Tenebrionidae) Infestation', <u>Insect Environment</u>, 13 (1), 3–4, <u>NAAS Rating: 2.9.</u>

- 26. <u>Pavunraj M</u>, Ezil Vendan, S.and Ignacimuthu S. (2006). 'Digestion of Cellulose and Starch by Symbiotic Bacteria in the Gut of the Giant Tiger Prawan *Peaneous monodon* (F.)', *Journal of* <u>Advanced Zoology</u>, 27 (2), 56–60, ISSN: 0253–7214, <u>Impact Factor: 0.</u>
- 27. Ignacimuthu, S. Maria Packiam, S. <u>Pavunraj M</u> and Selvarani N. (2006). 'Antifeedant Activity of *Sphaeranthus indicus* against *Spodoptera litura*, Fab.' <u>Entomon</u>, 31 (1), 41–44, ISSN: 0377–9335, <u>NAAS Score: 4.690.</u>
- Pavunraj M, Subramanian, K. Muthu, C. Prabu Seenivasan, S. Maria Packiam, S. Duraipandiyan, V. and Ignacimuthu S. (2006). 'Bioefficacy of *Excoecaria agallocha* (L.) Leaf Extract against the Armyworm, *Spodoptera litua* (Fab.) (Lepidoptera: Noctuidae)', *Entomon*, 31 (1), 37–40 ISSN: 0377–9335, *NAAS Score: 4.690*.

### **RESEARCH MANUSCRIPTS UNDER PREPARATION**

- Pavunraj M. and Arunkumar T. (2022). *In vitro* Antioxidant and Anticancer Properties of *Cardiospermum halicacabum* Linn. (Sapindaceae) Leaf Extracts against Hepatocellular Carcinoma (HepG2) Cell Line.
- Pavunraj M and Sundara Pandian P (2022). "Antioxidant and Anti-inflammatory Activities of the Chloroform and Methanolic Leaf Extract of Traditionally Used Medicinal Plant *Tinospora cordifolia* (Willd.) Hook. F. and Thoms. (Guduchi).
- Pavunraj M and Ponnarasu S (2022). Termiticidal Efficacy of Chosen Plant Extracts against Subterranean Termites, *Cryptotermes tropicalis* (Isoptera: *Kalotermitidae*).

#### **GOOGLE SCHOLAR CITATIONS**

Total Citations = 307 h-Index\* = 11 i10 Index\* = 11

Dr. PAVUNRAJ M. MANICKAM - Google Scholar https://scholar.google.co.in/citations?user=9r0a5GoAAAAJ&hl=en

\*Google Scholar Data

#### **BOOK CHAPTERS WRITTEN**

- M. Gabriel Paulraj, <u>Pavunraj M</u> and S. Ignacimuthu (2009), 'Impact of Neem Oil and Karanj Oil Formulation with *Hyptis suaveolens* Leaf Extract on Feeding, Survival, Histology and Protein Profile of four Lepidopteran Pests', In National Symposium on "Ecofriendly Insect Pest Management" (Eds. S. Ignacimuthu, and B.V. David), <u>Elite</u> <u>Publishing House, Pvt. Ltd. New Delhi,</u> 200–209, ISBN: 81–88901–37–7.
- M.G. Paulraj, <u>Pavunraj M</u> and S. Ignacimuthu (2008), 'Antifeedant Activity of Alanjium salvifolium (L.F) Wangerin Leaf Extract on Asian Armyworm Spodoptera litura Fab. (Lepidoptera: Noctuidae)' In "National Symposium on Recent Trends in Insect Pest Management" (Eds. S. Ignacimuthu and S. Jayaraj), <u>Elite Publishing House, Pvt. Ltd. New Delhi,</u> 156–160, ISBN: 8188901334.
- Pavunraj M, N. Raja, M.G. Paulraj, V. Duraipandiyan, and S. Ignacimuthu (2007), 'Antifeedant and Larvicidal Effects of *Lippia javanica* (Burm.f) Spreng. Leaf Extract on *Spodoptera litura* (Fab.) (Lepidoptera: Noctuidae)' In "Biotechnology and Insect Pest Management" (Eds. S. Ignacimuthu, and S. Jayaraj), *Elite Publishing House Pvt. Ltd. New* <u>Delhi.</u> 163–168. ISBN: 8188901261.

- Pavunraj M and S. Ignacimuthu (2006), 'Antifeedant Activity of Cymodocea serrulata (R.Br.) against Tobacco Caterpillar, Spodoptera litura (Fab.) (Lepidoptera: Noctuidae)' In "Biodiversity and Insect Pest Management" (Eds. S. Ignacimuthu, and S. Jayaraj), <u>Narosa</u> <u>Publishing House, New Delhi.</u> 360–363, ISBN: 8173197768.
- M.G. Paulraj, <u>Pavunraj M</u> and S. Ignacimuthu (2006), 'Evaluation of Novel Botanical Formulations for Controlling Lepidopteran Pests' In "Organic Crop Protection Technologies for Promoting Export Agri–Horticulture", (Eds. S. Sithanantham, K.P. Sanjayan, C. Muralirangan, and P. Selvaraj), <u>G.S Gill Press, Chennai</u>, 148–156.

#### GENERAL ARTICLES: BIOGRAPHIES - BOOK CHAPTER WRITTEN

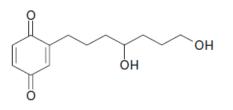
 Pavunraj Manickam – *Biographies Book* – South Indian ASDF Awards (SIAA-2018) Published by Association of Scientists, Developers and Faculties International, (Eds. By Purushothaman Seetharaman, Kokula Krishna Hari Kunasekaran), RMZ, Millennia Business Park, Campus 4B, Phase 2, 6<sup>th</sup> Floor, No.143, Dr. MGR Salai, Kandanchavady, Perungudi, Chennai – 600 096 on 7<sup>th</sup> April 2018, p.7, ISBN: 13:978-81-933584-4-3.

#### PATENT AWARDED

 S. Ignacimuthu, N. Raja, <u>Pavunraj M</u> and V. Duraipandiyan. "A process for preparation of 6-(4, 7-dihydroxy-heptyl) Quinone with antifeedant and antibacterial properties", 494/CHE/2006, 18-03-2006 (Patent No. 232206 dt. 16.3.2009).

#### **ABSTRACT OF PATENT DOCUMENT**

This invention relates to process for the preparation of 6-(4, 7-dihydroxy-heptyl) quinone with antifeedant and antibacterial property from *Pergularia daemia* leaves.



The new quinone, 6-(4,7-hydroxy-heptyl) cyclohex-2,5diene-ene-1,4-dione), isolated from *Pergularia daemia* leaves

#### AWARDS AND HONOURS

- Recipient of <u>"YOUNG SCIENTIST AWARD"</u> Under Fast Track–Department of Science & Technology, Govt. of India, New Delhi on April 2012.
- Recipient of <u>"INDIRA GANDHI SADBHAVANA AWARD</u>" for the Contribution towards Environment and Sustainable Development, given by His Excellency Bhishma Narain Singh Former Governor of Assam and Tamil Nadu and Former Cabinet Minister for Food and Civil Supplies on behalf International Business Council (IBC), held at The Indian Institute of International Law (First Floor Auditorium), Krishna Menon Bhawan, New Delhi on 05<sup>th</sup> February, 2015.
- 3. Recipient of <u>"SCHOLARLY ACHIEVEMENT AWARD</u>" Medal of Merit and Certificate of Honour given by Thol. Thirumavalavan, President of the Viduthalai Chiruthaigal Katchi on behalf of *THUDI Student Movement* and *Radical Student Forum (RSF)* in the Graduation Celebration of African, Dalit and Tribal People on 6<sup>th</sup> January 2018, held at Dr. M.G.R. Janaki College of Arts & Science for Women, Raja Annamalai Puram, Chennai – 600 028.
- 4. Recipient of <u>"BEST RESERCH SCIENTIST AWARD"</u> Shield of Honour and Certificate of Exceptionalism given by the most respected dignitaries Purushothaman Seetharaman, ISRO, Bangalore and Dr. Y.R.M. Rao, Governing Council Member (ASDF), South India on behalf of Council of the Association of Scientists, Developers and Faculties International held at Royal Archid Central, Bangalore on 7<sup>th</sup> April 2018.

- Recipient of <u>IJRULA</u> <u>"BEST ROLE MODEL TITLE AWARD"</u> Shield and Certificate of Honour Powered by "International Journal for Research under Literal Access", Accredited with "Idamas Learning and Training Centre, Malaysia", held at Hotel Femina, Tiruchirappalli on 19<sup>th</sup> June, 2018.
- 6. Recipient of <u>"DR. A.P.J. ABDUL KALAM EDUCATION EXCELLENCE AWARD</u> (<u>IIEM</u>)" (Shield and Certificate of Education Excellence) for the outstanding achievements and remarkable role in the field of education, conferred by International Institute of Education & Management, held at The Indian Institute of International Law (First Floor Auditorium), Krishna Menon Bhawan, New Delhi on 6<sup>th</sup> October, 2018.
- Recipient of <u>"BEST PAPER PRESENTATION AWARD"</u> in the 3<sup>rd</sup> International Conference on Research in Life Science & Health Care (ICRLSH), held at The National University of Singapore Society (NUSS), The Graduate Club, Suntec City, Guild House, Singapore. Organized by Healthcare & Biological Sciences Research Association (HBSRA), on March 16-17, 2019.
- Recipient of <u>"YOUNG SCIENTIST AWARD 2019"</u> Given by the Banaras Hindu University (BHU), Jointly Powered by the Institute of Environment & Sustainable Development (IESD-BHU) and Royal Association for Science-led Socio-Cultural Advancement (RASSA), New Delhi, held at The <u>Banaras Hindu University (BHU)</u>, Campus, Varanasi, UP, on 11<sup>th</sup> -13<sup>th</sup> October, 2019.
- 9. Recipient of <u>"BEST RESEARCHER AWARD"</u> (Shield and Certificate of Merit) Given by Vivekananda College, Tiruvedakam West, Madurai for the Contribution in Recognition of Research Publications in Peer Reviewed Indexed Journals during the Academic Years 2015-16 to 2020-21. This Appreciation Award is given in the 50<sup>th</sup> College Day Celebrations held on 11<sup>th</sup> March 2021 Thursday.

#### PAPERS PRESENTED IN SEMINARS / SYMPOSIA / CONFERENCES

- Participated in the UGC Sponsored National Seminar on "New Horizons in Animal Science" Organized by The Department of Zoology, Sri Meenakshi Government Arts College for Women (Autonomous), Madurai – 2, on 25-02-2019.
- Participated and presented paper on Indo-US International conference on Transcription, Chromatic Structure, DNA Repair and Genomic Instability, "Studies on gene expression and its regulation in bacteria" in Jointly Organized by Indian Institute of Science (IISc), Bangalore and SIU Southern Illinois University Carbondale, USA, on March 6-10 2018, Poster No.PPF3.
- 3. Participated and presented a paper on International conference on Microbiome in Health, Disease and Environment, "Exploration on gene expression, transcription factors, its architecture and regulation in prokaryotes" Organized by Central Inter-Disciplinary Research Facility, Sri Balaji Vidyapeeth, Puducherry- 607 403, 3& 4 March 2017, Poster No.21.
- 4. Participated and presented a paper in the 3<sup>rd</sup> International Conference on Research in Life Science & Health Care (ICRLSH), "Low-Cost and Environmental-Friendly Phyto-Synthesis of Silver Nanoparticles Using 1, 2-Benzenedicarboxylic acid, diisooctyl ester Isolated from *Acalypha fruticosa* Forssk. Leaf Extract and Its Larvicidal Activity against *Aedes aegypti* (L.) and *Culex quinquefasciatus* (Say) held at The National University of Singapore Society (NUSS), The Graduate Club, Suntec City, Guild House, Singapore." Organized by Healthcare & Biological Sciences Research Association (HBSRA), on March 16-17 2019, Registration ID: ERCICRLSH1904058.
- 5. Participated and presented a paper on 2<sup>nd</sup> International Conference on Structural and Functional Genomics (ICSAFT-2016), "Larvicidal and enzyme inhibitory effects of Acalypha fruticosa and Catharanthus roseus leaf extracts against the filarial vector Culex quinquefasciatus" in Organized by School of Chemical and Biotechnology, SASTRA UNIVERSITY, Thanjavur, During August 19-20, 2016, (Abstract No.PS-91 (Page No.89).

- Participated and presented paper on International Conference on Entomology, "Phytoinsecticidal effects of five indigenous plants against spotted bollworm, *Earias vittella* (Fabricius) (Lepidoptera: Noctuidae)" organized by Department of Zoology & Environmental Sciences, **PUNJABI UNIVERSITY**, Patiala, February 21–23, 2014, (Abstract No.AE–5 (Page No.86).
- Participated a two days National Symposium on "Crustacean Biology: Molting, Reproduction and Immunology" organized by Department of Zoology, University of Madras, Guindy Campus, Chennai – 600 025, held between 27<sup>th</sup> and 28<sup>th</sup> June 2014.
- Participated and presented a paper on International Conference on Application of Gene Technology (ICAGT 2014), "Biosynthesis of silver nanoparticles from *Catharanthus roseus* and its insecticidal activity against spotted bollworm, *Earias vittella*" Organized by School of Life Sciences, (SLS), B.S. Abdur Rahman University, Vandalur, Chennai – 600 048, on June 5–6, 2014, (Poster Paper No.Ref.GT/P/22 (Page No.66).
- Participated and presented a paper on 3<sup>rd</sup> National Symposium on System of Rice Intensification in India "Incidence of insect pests in the SRI and Normal system of rice cultivation", held at Tamil Nadu Agricultural University (TNAU), Coimbatore, India, December 1–3, 2008, Poster Paper No.3 (Page No.90–91).
- Participated and presented a paper on National Symposium on Eco-friendly Insect Pest Management, "Evaluation of Botanical Formulations against Insect Pests of Okra" held at Entomology Research Institute, Loyola College, Chennai, February 7–8, 2008, Abstract No. SP12 (Page No.45).
- Participated and presented a paper on National Symposium on Recent Trends in Insect Pest Management, "Bioassay of New Botanical Formulations against some Lepidopteran Pests" held at Entomology Research Institute, Loyola College, Chennai, February 1–2, 2007, Abstract No. SP5 (Page No.41).

- Participated and presented a paper on National Symposium on Recent Trends in Insect Pest Management, "Antifeedant Activity of *Alanjium salvifolium* (L.F) Wangerin Leaf Extract on Asian Armyworm *Spodoptera litura* Fab. (Lepidoptera: Noctuidae)" held at Entomology Research Institute, Loyola College, Chennai, February 1–2, 2007, Abstract No. SP5 (Page No.40).
- 13. Participated and presented a paper on National Symposium on Biotechnology and Insect Pest Management, "Antifeedant and Larvicidal Effects of *Lippia javanica* (Burm. F.) Spreng. Leaf Extract on *Spodoptera litura* (Fab.) (Lepidoptera: Noctuidae)" held at Entomology Research Institute, Loyola College, Chennai, February 2–3, 2006, Abstract No.C3 (Page No.37).
- 14. Participated and presented a paper on Second National Level Biological Congress Perspective and Future Trends in Biological Science, "Isolation and Characterization of Bacteria from *Peaneous monodon* (F.) and its Environment" held at Selvam Arts & Science College, Namakkal, January 7–8, 2005. Abstract No. 69.
- Participated and presented a paper on National Symposium on Biodiversity and Insect Pest Management, "Antifeedant Activity of Mangrove Plants against Tobacco Caterpillar, S. *litura* (Fab.)" held at Entomology Research Institute, Loyola College, Chennai, February 2–3, 2005. Abstract No. 62.

16. Participated and presented a paper on National Seminar on Healthy Environment for the Next Generation, "Antifeedant Activity of Sea Grass, *Cymodocea serrulata* against the American Bollworm, *Helicoverpa armigera* (Hub.)" held at Centre for Natural Resources Management, Loyola College, Chennai, December 2–4, 2004. Abstract No. 82.

#### **PARTICIPATION IN / WORKSHOP / TRAINING PROGRAMMES**

Participated in the UGC – Sponsored Refresher Course in Environmental Studies (MDC), Theme: "Environmental Studies" Conducted by UGC- Human Resources Development Centre, Madurai Kamaraj University (MKU), Madurai – 625 021, held from 18-12-2018 to 07-01-2019.

Participated Workshop on "Bioresource Database in Research & Education" An Outreach Programme of Indian Bioresource Information Network (IBIN), Sponsored by Department of Biotechnology, Government of Indian, Organized by School of Ecology and Conservation, University of Agricultural Sciences (GKVK), Bangaluru, In Association with Indian Institute of Remote Sensing, Dehradun on 10 & 11 December 2018.

- Participated Science Academies' Workshop on "Human Genomics and Genetic Diseases". Sponsored by Indian Academy of Sciences, Bangalore, Indian National Science Academy, New Delhi and The National Academy of Science, Allahabad. Organized by Department of Zoology, Saiva Bhanu Kshatriya College, Aruppukottai – 626 101 on 05<sup>th</sup> and 6<sup>th</sup> October 2018.
- Participated UGC Sponsored 91<sup>st</sup> Orientation Programme organized by UGC-Human Resource Development Centre, Bharathidasan University, Khajamalai Campus, Tiruchirappalli – 620 023, held from 20-05-2016 to 16-06-2016.
- Attended A Six Days Orientation Programme for Newly Appointed Teachers Organized by Vivekananda College, Tiruvedakam West, Madurai District – 625 234, held from 09-08-2014 to 14-08-2014.
- Participated on International Conference on "Emerging Trends in Bioengineering" ICETIB-2011, Organized by Department of Bioengineering, Bharath University, Selaiyur, Chennai, March 28–29, 2011.

 Participated on National Conference on "Recent Biotechnological Perspectives in Human Diseases and Therapeutics" BIOSOME-2011, Organized by Department of Industrial Biotechnology, Bharath University, Selaiyur, Chennai, March 4, 2011.

Participated on International Workshop on "Biosystematics", Sponsored by The Ministry of Environment and Forests, Government of India, held at Centre for Environment Management of Degraded Ecosystems, University of Delhi, September 6–15, 2010.

Participated on "Recent Advances in Host Plant Resistance to Insect and Mite pests", Sponsored by Indian Council of Agricultural Research (ICAR) New Delhi, held at Centre of Advanced Studies in Entomology, Tamil Nadu Agricultural University, Coimbatore, January 3–23, 2007.

#### INVITED GUEST LECTURES DELIVERED AS RESOURCE PERSON

- Delivered Guest Lecture as Invited Speaker on "Role of Phytochemicals in Sustainable Agriculture" Organised by Department of Biochemistry, N.M.S.S. Vellaichamy Nadar College, Nagamalai, Madurai on 19<sup>th</sup> September 2014.
- Acted as Chief Guest and Delivered a Guest Lecture on "Major Environmental Issues" Organised by N.M.S.S. Vellaichamy Nadar College of Education, Nagamalai, Madurai on 19<sup>th</sup> December 2017.
- Acted as Chief Guest and Delivered a Guest Lecture on "Medicinal Plants in Dental Applications" Organised by the Department of Pharmacology, Saveetha Dental College, Saveetha Institute of Medical and Technical Sciences (SIMATS), Chennai – 600 077 on 23<sup>rd</sup> Fubruary 2019.
- Acted as Session Chair and Judge in the International Conference on "Stem Cell and Cancer Therapy ICSC-2K19" Organised by the Department of Pharmacology, Saveetha Dental College, Saveetha Institute of Medical and Technical Sciences (SIMATS), Chennai – 600 077 on 05<sup>th</sup> July 2019.
- Acted as Chief Guest and Delivered Lecture on "Motivational Speech for Students to Create Innovative Ideas" in the CHEM FEST-2021, Organized by NPR Arts and Science College, Natham, Dindigul District – 624 401, on 03-02-2021.

#### SEMINARS / CONFERENCES / WORKSHOPS ORGANIZED

- Organized (as Joint-Secretary) the One Day International Seminar on *"Environmental Issues of Emerging Pollutants"* held on 07<sup>th</sup> August 2014 at PG & Research Department of Zoology, Vivekananda College, Tiruvedakam West, Madurai 625 234, Tamil Nadu.
- Organized (as Organizing Secretary) "Bio-Entrepreneurship Training for Farmers and Students, *Dairy Management and Sericulture Farming*" held on 23<sup>rd</sup> March 2017 at PG & Research Department of Zoology, Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.
- Organized (as Organizing Secretary) the One Day National Seminar on *"Recent Advances in Bio-technology"* held on 23<sup>rd</sup> January 2018 at PG & Research Department of Zoology, Vivekananda College, Tiruvedakam West, Madurai 625 234, Tamil Nadu.
- Acted as Dept. Coordinator in *VISETROM-X-2019-Science Exhibition*, organized by Vivekananda College, Tiruvedakam West for the Benefit of the Rural School Children's and Rural Masses of Madurai District held from 3<sup>rd</sup> and4<sup>th</sup> Oct, 2019.
- 5. Organized (as Organizing Secretary) the One Day National Seminar on "Entrepreneurship Development Program in Sericulture" Sponsored by the Central Silk Board (CSB), Government of India, Research & Training Institute Mysuru's Research Extension Centre, Samayanallur, Madurai, Jointly Organized by The Post Graduate & Research Department of Zoology, Vivekananda College, held on 04<sup>th</sup> February 2020 at Audio Visual Hall, Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.
- Organized (as Organizing Secretary) National Webinar on "Challenges in the Control of COVID 19 – A Molecular Biological Approach" held on 20<sup>th</sup> September 2020 at PG & Research Department of Zoology, Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.

- Organized (as Organizing Secretary) International Webinar on *"Treatment of COVID 19 An Ethnobotanical Perspective"* held on 14<sup>th</sup> October 2020 at PG & Research Department of Zoology, Vivekananda College, Tiruvedakam West, Madurai 625 234, Tamil Nadu.
- Organized (as Organizing Secretary) National Webinar on "An Introduction to Animal Health Economics" held on 22<sup>nd</sup> October 2020 at PG & Research Department of Zoology, Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.
- Organized (as Organizing Secretary) One-Day Online Webinar on "Developing Innovative Entrepreneurship Culture among Students" held on 11<sup>th</sup> November 2020. Organized by the Institution's Innovation Council (IIC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.
- Organized (as Organizing Secretary) Online Webinar on "An orientation Session on New Education Policy (Focus on Innovation and Entrepreneurship)" held on 26<sup>th</sup> November 2020. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.
- Organized (as Organizing Secretary) Online Webinar on "Motivation of Youths towards Innovation & Entrepreneurial Opportunities in Sericulture" held on 26<sup>th</sup> December 2020. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.
- Organized (as Organizing Secretary) Online Webinar on "IPR Management and Patent Drafting" held on 22<sup>nd</sup> January 2021. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.
- 13. Organized (as Organizing Secretary) Online Webinar on "Intellectual Property Rights for Innovative Entrepreneurship" held on 06<sup>th</sup> February 2021. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.

- 14. Organized (as Organizing Secretary) in A One Day National Workshop on "Entrepreneurship Development Programme (EDP) in Apiculture, Sericulture and Mushroom Culture" held on 23<sup>rd</sup> February 2021 at PG & Research Department of Zoology, Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.
- 15. Organized (as Organizing Secretary) Online Webinar on "Application of Machine Learning in Covid - 19" held on 19<sup>th</sup> June 2021. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu. Resource Person: Dr. P. Varalakshmi, Associate Professor, Department of Computer Technology, Madras Institute of Technology (MIT), Campus, Anna University, Chennai – 600025.
- 16. Organized (as Organizing Secretary) Online Webinar on "Business Ideas and Entrepreneurial Opportunities in Herbal Products" held on 23<sup>rd</sup> August 2021. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu. *Resource Person:* Dr. A. Annamalai, Assistant Professor, Department of Botany, Arignar Anna Govt. Arts College, Villupuram – 605602.
- 17. Organized (as Organizing Secretary) Online Webinar on "Orientation Session by Innovation Ambassador on Innovation and Entrepreneurship" held on 3<sup>st</sup> August 2021. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu. *Resource Person:* Dr. N. Sudha, Assistant Professor, Department of Chemistry, Muthayammal College of Arts & Science, Rasipuram, Namakkal – 637408.
- 18. Organized (as Organizing Secretary) Seminar on "Exposure and Digital Field Visit for Problem Identification" held on 29<sup>th</sup> November 2021. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu. *Resource Person:* Dr. V. Parthasarathy, Associate Professor, Department of Zoology, Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu.

- Organized (as Organizing Secretary) Seminar on "Celebration of National Pollution Control Day" held on 02<sup>nd</sup> December 2021. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai 625 234, Tamil Nadu. *Resource Person:* Mr. P. Jayasankar, Assistant Professor, Department of Physics, Vivekananda College, Tiruvedakam West, Madurai 625 234, Tamil Nadu.
- 20. Organized (as Organizing Secretary) Seminar on "Celebration of National Energy Conservation Day" held on 14<sup>th</sup> December 2021. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai 625 234, Tamil Nadu. *Resource Person:* Dr. C. Gopinathan, Chairperson, Professor & Head, Department of Solar Energy, Environment and Natural Resources, Madurai Kamaraj University, Madurai 625 021, Tamil Nadu.
- 21. Organized (as Organizing Secretary) Seminar on "Celebration of National Energy Conservation Day" held on 14<sup>th</sup> December 2021. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu. *Resource Person:* Dr. C. Gopinathan, Chairperson, Professor & Head, Department of Solar Energy, Environment and Natural Resources, Madurai Kamaraj University, Madurai – 625 021, Tamil Nadu.
- 22. Organized (as Organizing Secretary) Workshop on "Design Thinking, Critical Thinking and Innovative Design" held on 26<sup>th</sup> February 2022. Jointly Organized by the Institution's Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu. *Resource Person:* Mr. N. Harikannan, Associate Professor, Department of Mechanical Engineering, PSNA College of Engineering & Technology, Dindigul – 624 622, Tamil Nadu.

- 23. Organized (as Organizing Secretary) Workshop on "Intellectual Property Rights (IPRs) and IP Management for startup" held on 10-05-2022. Organized by the Institution's Innovation Council (IIC), Vivekananda College, Tiruvedakam West, Madurai 625 234, Tamil Nadu. *Resource Person:* Mr. R. Arunkumar, Assistant Professor, Department of Department of Mechanical Engineering, Ramco Institute of Technology, Rajapalayam 626 117.
- Organized (as Organizing Secretary) Session on Business Model Canvas (BMC) held on 18-05-2022. Organized by the Institution's Innovation Council (IIC), Vivekananda College, Tiruvedakam West, Madurai 625 234, Tamil Nadu. *Resource Person:* Mr. Suresh Kumar CS Major Account Manager Amway India Enterprises, Tamil Nadu and Pondicherry.
- 25. Organized (as Organizing Secretary) by a Session on Opportunities and Financial Assistance to Start ups for Aspirant Youth held on 26-05-2022. Jointly organized by the Institutions Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu. In Association with District Industries Centre (DIC), Madurai, Resource Person: Mr. M. Ramalingam General Manager District Industries Center, Alagar Kovil Road Madurai – 625 020.
- 26. Organized (as Organizing Secretary) Impact Lecture Series -I jointly organized by the Institutions Innovation Council (IIC) & Internal Quality Assurance Cell (IQAC), Vivekananda College, Tiruvedakam West, Madurai – 625 234, Tamil Nadu. Sponsored by MoE's Innovation Cell (MIC), AICTE, New Delhi, *Resource Person:* Dr. S. Chittibabu, Adjunct Faculty, National Institute of Food Technology, Entrepreneurship and Management (NIFTEM-T), Thanjavur and Mr. Sakthivel Kaliappan, Founder & CEO, Rainman Enviro Solution, Madurai.

## RESEARCH GRANTS MAJOR RESEARCH PROJECT COMPLETED AS PRINCIPAL INVESTIGATOR

S. No	Title of the project	Funding	Amount	Status (On-going
		Agency	Sanctioned	/ Completed)
1	"Development of Eco- Friendly	DST – SERB,		
	Bio-Pesticide Derived from Plant	New Delhi		Completed
	Origin for the Control of	(Grant No.	24.00 Lakhs	(From June 2012
	Agriculturally Important	SERC/LS-		to July 2015)
	Lepidopteron Insect Pests"	0412/2010).		

#### **EXTENSION ACTIVITIES**

- Acted as Group Leader to Promote Botanical Pesticides and Eco-friendly Insect Pest Management among Farmers of Kancheepuram and Tiruvallur Districts of Tamil Nadu from 2004 to 2007.
- Conducted Environmental Awareness and Training Programmes for Farmers and Women Self-Help Groups in Kancheepuram and Tiruvallur Districts of Tamil Nadu to Promote Vermicompost and Organic Farming for Sustainable Agriculture from 2004 to 2007.
- Served as Programme Coordinator for Village Adoption Programme (VAP) from Vivekananda College Extension Center, Tiruvedakam West to Educate the Rural and Poor School Children's from Vadipatti Taluk, Madurai District of Tamil Nadu since, July 2014 to August 2019.

#### SOCIAL MEDIA PROGRAMME PARTICIPATED

Participated Neeya Naana - Talk Show "Why do men stress? Debate about the stress men go through at home and the face in the office, Episode - S23E632" at Vijay Television Pvt. Ltd. (VTPL) Chennai 600 034 on 018<sup>th</sup> November 2018.

#### **MEMBER OF PROFESSIONAL BODIES**

- Life Membership: National Academy of Biological Sciences (NABS) LM: 012-18.
- Live Member: Association of Scientists, Developers and Faculties (ASDF) International, Membership ID: 9016351337728774.
- Life-Time Member: World Association for Scientific Research and Technical Innovation (WASRTI), Membership ID: WASRTI-M18327, Jaipur – 17, Rajasthan, India.
- Accredited Member of the International Society of Zoological Sciences (ISZS), Beijing, 100101, China, Membership No. 1505-I.
- Member in International Society for Environmental Information Sciences (ISEIS), Canada.
- Senior Member in Asia Pacific Chemical, Biological, Environmental Engineering Society (APCBEES), Hong Kong.' Membership No. 101497.
- Member in International Society of Infectious Diseases (ISID), Brookline.
- Life Member in Healthcare & Biological Sciences Research Association (HBSRA), Membership ID: ERCICRLSH1904058, Address: B-305, World Trade Park, JLN Road, Jaipur – 302017, Rajasthan, India.
- Life Member in Royal Association for Science-Led-Socio-Cultural Advancement (RASSA) and 'RASSA Journal of Science for Society'. Membership Number: SJM-LM1029, (No. RASSA/2019/329.

#### COMPUTER EXPERIENCE

- Technical Skills: Proficient in Microsoft Word, Microsoft Internet Explorer and Microsoft PowerPoint.
- **Statistical Software:** Microsoft Excel and SPSS Software.
- **Typewriting** Junior Grade (English)

#### LANGUAGE PROFICIENCY

Well-versed in English and Tamil

#### EDITOR OF SCIENTIFIC JOURNALS

- Trends in Phytochemical Research (TPR).
- American Journal of Entomology (AJE)
- ♀ Journal of Complementary and Alternative Research

#### **PERSONAL DETAILS**

#### **RESIDENTIAL PERMANENT ADDRESS:**

M. Pavunraj S/o M. Manickam

No.2/5G, Nathiyanur (Gandhi Nagar)

Azhakiyamanavalan (Post)

Religion

Thirumanur (Via), Ariyalur Tk & District – 621715

Date of Birth : 09<sup>th</sup> June 1977

Marital Status : Married

Nationality : Indian

REFERENCES

#### Rev. Fr. Dr. S. Ignacimuthu S.J. Ph.D., D.Sc.

:

Research Supervisor & Guide (Former Vice Chancellor, University of Madras and Bharathiar University) Former Director, Entomology Research Institute (ERI) Loyola College, Chennai – 600 034, India

Hindu

#### Prof. Dr. M. Arumugam, Ph.D.

Former Professor & Head Department of Zoology University of Madras Guindy Campus, Chennai – 600 025, India Tel. : +91 (44) 9444072927 E-mail : marumugam7@hotmail.com

### DECLARATION

I hereby declare that the information furnished above is true to the best of my knowledge and belief.

Yours sincerely,

Alennu (M. PAVUNRAJ)