

## BIO-DATA

### 1. Name and address:

**Dr. Berin Pathrose**

Assistant Professor

Department of Agricultural Entomology, College of Horticulture, Vellanikkara

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### 2. Date of Birth

01/05/1978

### 3. Academic qualification

	Degree	Year	Subject	University/Institution	% of marks
1	B.Sc.	2001	Agriculture	Kerala Agricultural University	88.00
2	M.Sc.	2003	Entomology	IARI, New Delhi	85.50
3	Ph.D.	2007	Entomology	IARI, New Delhi	83.50

### 4. Ph.D. thesis title, guide's name, Institute/Organisation/University, year of award

Antifeedant and growth regulatory activity of Kalmegh, *Andrographis paniculata* against *Spodoptera litura*, Dr. Chitra Srivastava, Indian Agricultural Research Institute, New Delhi, 2007

### 5. Work experience

Sl. No.	Positions held	Name of the institute	From	To
1.	Agricultural Officer	Department of Agriculture and Farmers Welfare	April 2017	November 2018
2.	Assistant Professor	Kerala Agricultural University	28.11.2008	27.11.2020
3.	Associate Professor	Kerala Agricultural University	28.11.2020	Till date

## 6. Positions of responsibility

<b>Sl. No.</b>	<b>Positions held</b>	<b>Name of the institute</b>	<b>From</b>	<b>To</b>
1.	Officer-in-Charge, Pesticide Residue Laboratory	College of Agriculture, Vellanikkara	August 2016	Till date
2.	Associate Director of Research (Plant Protection)	Kerala Agricultural University	31.05.2022	19.08.2022
3.	Director (Planning)	Kerala Agricultural University	19.08.2022	Till date

## 7. Professional recognition/award/prize/certificate/fellowship received by the applicant

<b>Sl. No.</b>	<b>Name of Award</b>	<b>Awarding agency</b>	<b>Year</b>
1.	Best Outgoing Student	College of Agriculture, Padannakkad	2001
2.	Junior Research Fellowship	Indian Council of Agricultural Research	2001
3.	Institute fellowship	Indian Agricultural Research Institute, New Delhi	2003
4.	IARI – Merit medal for outstanding academic performance in Doctor of Philosophy degree programme	Indian Agricultural Research Institute, New Delhi	2007
5.	Young Scientist Award	ICAR-NCIPM and ICAR-IARI	2015
6.	ICAR Zonal best KVK Award for Zone VIII	Indian Council of Agricultural Research	2016
7.	Pt. Deen Dayal Upadhyay Rashtriya Krishi Vigyan Prothsahan Puraskar	Indian Council of Agricultural Research	2017
8.	Best Extension Professional Award	Kerala Agricultural University	2019
9.	International Agriculture and Rural Development	Cornell University	2019
10	Associate Editor	Indian Journal of Entomology	2018 onwards
11	Editorial board member	Journal of Tropical Agriculture	2022 onwards

12	Krishi Vigyan Award	Department of Agriculture and Farmers Welfare, Government of Kerala	2021
13	Best University level facilitator of YIP	KDISC	2023

#### 8. Publications

Sl. No.	Authors	Title	Name of journal	Volume	Page	Year
1	Mattupurath S, Bhaskar H, Pathrose B and Athikurissi S	Susceptibility to acaricides and detoxifying enzyme activity in <i>Tetranychus gloveri</i> Banks (Acari: Tetranychidae) populations from India	<i>International Journal of Acarology</i>	10.1080/01647954.2023.2195865		2023
2	Nivya EM, Panjikkaran ST, Aneena ER, Sharon CL, Surendra Gopal K, Pathrose B, Suman KT, Lakshmy PS, Rajeesha CR and Rammya Molu K	Quality evaluation of virgin coconut oil extracted from different processing methods	<i>The Pharma Innovation Journal</i>	12(1)	44-48	2023
3	Ibrahim SM, Nilamudeen M, Pathrose B, Karthikeyan K and Anitha N	First record of black thrips <i>Thrips parvispinus</i> (Karny) Thysanoptera: Terebrantia: Thripidae, from Muthalamada, the mango city of Kerala	<i>Insect Environment</i>	26(1)	21-23	2023
4	NU Visakh, B Pathrose, M Chellappan, MT Ranjith,	Chemical characterisation , insecticidal and antioxidant	<i>Food Bioscience</i>	50	1021-63	2022

	PV Sindhu, D Mathew	activities of essential oils from four <i>Citrus</i> spp. fruit peel waste				
5	Netravati, Gomez S, Pathrose B, Mini Raj N, Meagle Joseph P and Kuruvila B	Comparative evaluation of anthocyanin pigment yield and its attributes from Butterfly pea ( <i>Clitoria ternatea</i> L.) flowers as prospective food colorant using different extraction methods	<i>Future Foods</i>	6	100199	2022
6	Jawaher J Albaqami, Hamida Hamdi, Arunaksharan Narayanankuttu, Naduvilthara U Visakh, Anju Sasidharan, Aswathi Moothakoottil Kuttithodi, Ademola C Famurewa, Berin Pathrose	Chemical Composition and Biological Activities of the Leaf Essential Oils of <i>Curcuma longa</i> , <i>Curcuma aromatica</i> and <i>Curcuma angustifolia</i>	<i>Antibiotics</i>	11	1547	2022
7	V Vineetha, Mani Chellappan, Berin Pathrose	A Rapid and Easy Bioassay Method for Stingless Bees, <i>Tetragonula travancorica</i> Shanas and Faseeh	<i>Indian Journal of Entomology</i>	10.55446/IJE.2022.582		2022
8	Arunaksharan	Chemical Composition,	<i>Molecules</i>	27(23)	8329	2022

	Narayanankutti, Naduvilthara U Visakh, Anju Sasidharan, Berin Pathrose, Opeyemi Joshua Olatunji, Abdullah Al- Ansari, Ahmed Alfarhan, Varsha Ramesh	Antioxidant, Anti-Bacterial, and Anti- Cancer Activities of Essential Oils Extracted from <i>Citrus limetta</i> Risso Peel Waste Remains after Commercial Use				
9	Menon JS, Pathrose B, Asna AC, Tomer RS and Dineshkumar B	Morphological, biochemical, molecular marker, GC-MS analysis of garlic ( <i>Allium sativum</i> )L. landraces in the rainshadow high hills of Kerala	<i>Pharmacognosy Magazine</i>	18	121- 127	202 2
10	Visakh, NU., Pathrose, B., Narayanankutti, A., Alfarhan, A and Ramesh V	Utilization of Pomelo ( <i>Citrus maxima</i> ) Peel Waste into Bioactive Essential Oils: Chemical Composition and Insecticidal Properties	<i>Insects</i>	DoI: 10.3390/ insects1305048 0		202 2
11	Vineetha, V., Chellappan, M and Pathrose, B.	A Rapid And Easy Bioassay Method For Stingless Bees <i>Tetragonula travancorica</i> Shanas And Faseeh	<i>Indian Journal of Entomology</i>	10.55446/IJE.20 22.582		202 2

<b>12</b>	Sruthi, A., Panjikaran, S.T., Aneena, ER., Pathrose, B and Mathew, D	Utilization of biowaste from commercial lotus cultivation by incorporating rhizome flour for low glycaemic cookies	<i>Journal of Tropical Agriculture</i>	60(1)	31-41	2022
<b>13</b>	Raju S., Pathrose, B., Chellappan, M., Bhaskar, H and Sudheer, K.P.	Susceptibility of life stages of <i>Tribolium castaneum</i> (herbst) to microwave radiation	<i>Indian Journal of Entomology</i>	10.55446/IJE.2022.521		2022
<b>14</b>	Netravati, N., Gomez, S., Pathrose, B., Joseph, M., Mini Raj, N., Suma, A. and Shynu M	Comparison of Anthocyanin Pigment Extraction Techniques to Evaluate the Free Radical Scavenging Capacity of Butterfly Pea ( <i>Clitoria ternatea</i> L.) Flower	<i>Biological Forum – An International Journal</i>	14(3)	995-998	2022
<b>15</b>	Netravati, N., Gomez, S., Pathrose, B., Mini Raj, Joseph, M., N., Shynu M and Suma, A.	Assessment of free radical scavenging activity of Mangosteen ( <i>Garcinia mangostana</i> L.) fruit peel anthocyanin pigment obtained through different extraction methods	<i>The Pharma Innovation Journal</i>	11(9)	1333-1336	2022
<b>16</b>	Athira KA, Thomachan S, Aneena	Phytochemical composition in	<i>The Research Journal of PJTSAU</i>	50(3)	130-134	2022

	ER, Sharon CL, Surendra Gopal K and Pathrose B	<i>Moringa oleifera</i>				
17	Mathew, D.K., Kannan, A., Joseph, M., Suraj, P.T., Sunil, B., Shyama, K and Pathrose, B	Bioconversion of food waste by black soldier fly larvae under natural settings	<i>Journal of Indian Veterinary Association</i>	19(3)	73- 81	202 1
18	Ashraf, A., Pathrose, B., Chellappan, M. and Indirabai, B.V.	Efficacy of gamma radiation against pulse beetle, <i>Callosobruchus maculatus</i> (F.)	<i>Indian Journal of Entomology</i>	DoI: 10.5958/IJE.20 21.1		202 1
19	Athira, K.A., Panjikaran , S.T., Aneena, E.R., Sharon, C.L., Pathrose, B., Gopal, S.K. and Lakshmi, P.S.	<i>Moringa oleifera</i> – Proximate and antinutritional composition	<i>The Indian Journal of Nutrition and Dietetics</i>	58(3)	390- 397	202 1
20	Ummer N., Pathrose B and Indulekha V.P.	A new record on the infestation of a millipede in agricultural crops of Kerala	<i>Insect Environment</i>	24(4)	553- 554	202 1
21	Silpa, R., George, S.T., Anitha, P., Pradeepku mar, T., Sujatha, V.S., Bastin, D., Pathrose, B. and Laly John C	Genetic divergence analysis in oriental pickling melon ( <i>Cucumis melo</i> var. <i>conomon</i> Mak.)	<i>Research Journal of Agricultural Sciences</i>	11(1)	115- 119	202 0

22	Sunil, V.G., Sujanapal, P., Pathrose, B. and Prasanth, K	Design and development of a crop information system for technology transfer	<i>Journal of Krishi Vigyan</i>	8(2)	54- 59	202 0
23	Sunil, V.G., Pathrose, B., Chandran, K.P. and Prasanth, K	Design and development of a mobile application for agricultural technology transfer	<i>Journal of Tropical Agriculture</i>	58(1)	83- 89	202 0
24	Shahanaz, M.R., Pathrose, B. and Chellappan, M	A phagostimulant based bait composition for tobacco caterpillar, <i>Spodoptera litura</i> (Fabricius) (Lepidoptera: Noctuidae).	<i>Journal of Tropical Agriculture</i>	57(1)	54- 58	201 9
25	Anusree, R.P., Pathrose, B. and Chellappan, M	Malathion resistance in red flour beetle ( <i>Tribolium castaneum</i> ) (Herbst) (Coleoptera: Tenebrionidae) from FCI godowns of Kerala, India	<i>Journal of Tropical Agriculture</i>	57(2)	201- 205	201 9
26	Sunil, V.G., Pathrose, B and Prasanth, K	Design and development of an expert system for fertilizer calculation	<i>Journal of Krishi Vigyan</i>	8(1)	38- 42	201 9
27	Bachhar, A., Bhaskar, H., Pathrose, B. and Shylaja, M.R	Resistance to acaricides in <i>Tetranychus truncatus</i> Ehara on vegetables	<i>Indian Journal of Entomology</i>	81(1)	130- 133	201 9



28	Sruthi A., Panjikkaran S.T., Aneena E.R., Pathrose, B. and Mathew, D	Insights into the composition of lotus rhizome	<i>Journal of Pharmacogno sy and Phytochemist ry</i>	8(3)	3550 - 3555	201 9
29	Menon, J.S., Hariprasad, C., Pathrose, B., Manoj, M.K. and Satheesan, N.V	Alternate host plants to sustain red ant population for biological control of tea mosquito bus in cashew plantation – A case study	<i>The Cashew and Cocoa Journal</i>	VIII (1)	28- 34	201 9
30	Preethy, T.T., Elsy, C.R. and Pathrose, B	Genetic Diversity through Morphological Characterisatio n in Betel Vine ( <i>Piper betle</i> L.) of Malappuram District, Kerala, India	<i>Indian Journal of Plant Genetic Resources</i>	31(3)	295- 302	201 8
31	Preethy, TT, Elsy, CR and Pathrose, B	A preliminary study on spike characters of betel vine ( <i>Piper betle</i> L.)	<i>Journal of Medicinal Plants Studies</i>	5(3)	199- 201	201 7
32	Sunil, V.G., Pathrose, B. and Habeeburra hman, P.V.	Development of Decision Support System for Banana Pest Management	<i>Journal of Tropical Agriculture</i>	53(1)	17- 20	201 5
33	Pathrose B Srivastava C and Walia S	Insect growth regulatory activity of <i>Andrographis paniculata</i> (Fa. Acanthaceae) extracts against tobacco caterpillar <i>Spodoptera litura</i>	<i>Indian Journal of Entomology</i>	69(1)	17- 21	200 7

34	Pathrose B Srivastava C and Reddy DS	Toxicity of EC and WP formulations of Insecticides against susceptible and phosphine resistant strains of <i>Tribolium castaneum</i> .	<i>Pesticide Research Journal</i>	17(2)	55- 59	200 5
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#### 9. Books/Reports/Chapters/General Articles/etc

Sl. No.	Title	Author's Name	Publisher	Year of Publication
1	Ecofriendly insecticides against pests of vegetables – collection, formulation and market value. In: Thomas CG and Preetha N (Eds) Bioresources and Commercial Utilization: Trends, Market, Supply chain and Sustainability	Pathrose B	Kerala State Biodiversity Board	57-66
2	Plant essential oils from an agrowaste product: a key approach for the management of major stored-product insect pests. In: Ahanchi P, Babayeva-Shukurova F and Agayev ERO (Eds) Proceedings of 2nd International Azerbaijan Congress on Life, Social, Health, Artsciences	Visakh NU and Pathrose B	BZT AKADEMI YAYINEVI	714
3	Guidelines for production of cool season vegetables in Vattavada and	Menon, J.S. and Pathrose, B	Kerala Agricultural University	2019

	Kanthalloor (ISBN No. 978-81-938225-0-0)			
4	<i>Uthama Krishi Murakal: Pradhaana Vilakalil</i> (Good Agricultural Practices of Major Crops)	Pathrose, B., Menon, S.S., John, S.K., Aneesha, A.K., Gleena Mary, C.F., Ranjith, M.T., Cheriyan A.K. and Subramanyam, M	Kerala Agricultural University	2019
5	Crop Health Management 1: <i>Nellu</i> (Rice) 6th ed.	Pathrose, B., Sunil, V.G., and Habeeburrahman, P.V.	Krishi Vigyan Kendra, Malappuram	2018
6	Crop Health Management 2: <i>Pachakkary</i> (Vegetables) 9th ed.	Pathrose, B., Sunil, V.G., Asha Sankar, M., Habeeburrahman, P.V., and Praveena, A	Krishi Vigyan Kendra, Malappuram	2018
7	Crop Health Management 3: <i>Vazha</i> (Banana) 5th ed.	Pathrose, B., Sunil, V.G., Habeeburrahman, P.V., and Praveena, A	Krishi Vigyan Kendra, Malappuram	2018
8	Crop Health Management 4: <i>Thengu</i> (Coconut) 7th ed.	Pathrose B., Sunil, V.G. Habeeburrahman, P.V., and Praveena, A.	Krishi Vigyan Kendra, Malappuram	2018
9	<i>Injiyile keetangalum niyanthrana maarggangalum</i> (Insect pest management in ginger). In: Menon, J.S. (ed.): <i>Inji: Uthpaadanavum Samskaranavum.</i>	Pathrose, B.	Kerala Agricultural University	2018
10	<i>Sugandhivilakalile surakshitha keeta prathirodha murakal</i> (Prophylactic pest management strategies in spice crops). In: Mini Raj, N (Ed.): <i>Sugandhivilakal Nagarodyanangalilekku</i>	Pathrose, B.	Kerala Agricultural University	2018

11	Crop Health Management 5: <i>Sugandha Vilakal</i> (Spice crops), 3rd edn.	Pathrose, B., Vijayaraghavan, R., Deepthi, K.B., Sunil V.G., Habeeburrahman, P.V., and Praveena, A.	Krishi Vigyan Kendra, Malappuram	2017
12	<i>Maavile keetangalum niyanthrana maarggangalum</i> (Insect pests of mango and their management). In: Krishnankutty, J., Kuruvila, A., and Menon, M.V. (eds.): Enhancing competitiveness of producer farmers in the mango value chain of Palakkad district.	Pathrose, B.	Kerala Agricultural University	2017
13	Farmer field schools for technology transfer in plantation crops. In: Thamban, C., Jaganathan, D., Kalavathi, S., Anithakumari, P., Chandran, K.P. and Jayasekhar, S (eds.). <i>Innovative Extension Approaches for Plantation Crops</i>	Sunil, V.G., Pathrose, B. and George, N.	ICAR-Central Plantation Crops Research Institute, Kasaragod	2016
14	<i>Green House Management and Operations.</i>	Abdul Hakkim, V.M., Pathrose, B., and Nair, H.M.	Farm Information Bureau, Department of Agriculture, Government of Kerala	2014
15	Insecticide resistance in IPM. In PC Bhargava and MC Jain (ed.) <i>Entomology: Novel Approaches.</i>	Srivastava C and Pathrose B	New India Publishing Agency: New Delhi	2007
16	Termite Management : Past, Present and Future. In D Prasad	Pathrose B and Dhingra S	Daya Publishing House, New Delhi	2005

	(ed.) <i>Crop Protection: Management Strategies.</i>			
<b>17</b>	Induced Plant Resistance. In D Prasad (ed.) <i>Crop Protection: Management Strategies.</i>	Thomas VP., Pathrose B and Prasad D	Daya Publishing House, New Delhi.	2005
<b>18</b>	Codex Alimentarius Commission and its role in regulation of pesticide residues. <i>Souvenir: National symposium on Frontier Areas of Entomological Research.</i>	Dhingra S., Pathrose B and Sharma D	Division of Entomology and Entomological Society of India, New Delhi.	2003

### 10. PI, Co-PI and associate in research projects

#### Externally aided projects as Principal Investigator (PI)

Sl no	Year	Name of the Project	Funding Agency	Outlay (Rs. lakhs)
1.	2013-2016	Developing alternate strategies for pest and disease management in Ginger	RKVY	4.70
2.	2013-2016	Development and adoption of microbial inoculants technology for various cropping systems of Kerala	State Plan	23.89
3.	2013-2016	Effective dissemination of IPM technologies through production of bio agents at KVK Malappuram	State Plan	25.00
4.	2015-2016	Evaluation of sustainable, eco-friendly and cost effective pest management alternatives for the Western Ghats region of Kerala	Western Ghats Cell	7.84
5.	2015-2016	Pest Surveillance based crop advisory for plant health management in Malappuram district	Department of Agriculture	6.00
6.	2016-Till date	Establishment of pesticide residue lab at College of Horticulture, Vellanikkara	RKVY	293.00
7.	2017-18	Multilocational Trial of Avana at Thrissur and Malappuram districts	EID Parry	4.00
8.	2018-2019	Monitoring susceptibility of insect pests to insecticides in different parts of Kerala	State Plan	2.00

9.	2018-19	Monitoring pesticide residues in/on vegetables and fruits in central districts of Kerala	State Plan	10.00
10.	2018-19	'Monitoring of pesticide residues in/on vegetables and fruits from GAP clusters/ecoshops in the central districts of Kerala'	Department of Agriculture	20.00
11.	2019-20	Network project on monitoring pesticide residues in/on vegetables and fruits in central and northern districts of Kerala and obtaining NABL accreditation (ISO 17025) to the existing Pesticide Residue Laboratories of College of Horticulture, Vellanikkara, RARS, Kumarakom and College of Agriculture, Padannakkad	State Plan	28.00
12.	2020-21	Augmentation of small farm mechanisation in Kerala	State Plan	6.00
13.	2021-22	Biofumigation for the development of an integrated pest management strategy for vegetable cowpea	State Plan	1.25
14.	2021-22	Research on Pesticide Residues in fruits and vegetables	State Plan	16.00
			<b>TOTAL</b>	<b>447.68</b>

**Externally aided projects as Co-Principal Investigator (PI)**

Sl no	Year	Name of the Project	Funding Agency	Outlay (Rs. lakhs)
1.	2014-2015	District level seminar on cocoa cultivation	DCCD	0.50
2.	2014-2016	Development of a Farming System Based Cyber-Extension Model for the State Of Kerala	State Plan	25.00
3.	2015-2016	Enhancing vegetable seedling production in KVK Malappuram	State Plan	8.69
4.	2017-19	Participatory farm level evaluation of garlic genotypes in Devikulam block	Department of Agriculture	10.00

5.	2019-20	Standardisation of technology, on farm testing and technology demonstration for cultivation of cool season vegetables in plains and high ranges of Kerala	State Plan	5.00
6.	2019-20	Location specific adaptive trials on edible alliums	State Plan	2.00
7.	2019-20	Station wise funding to Department of Agricultural Economics, CoH, Vellanikkara	State Plan	3.00
8.	2019-20	RKVY-RAFTAAR – Agribusiness Incubator (R-ABI)	RKVY-RAFTAAR	233.00
9.	2020-till date	Genetic stock development, standardization of Good Agricultural Practices (GAPs) and market analysis of <i>Pseudarthria viscida</i> (L.) - a red listed high volume trade medicinal plant	NMPB	35.15
10.	2017-2020	Bioecology and management of myrmecophilous root mealybugs in Kerala	RKVY	40.00
			<b>TOTAL</b>	<b>362.34</b>

#### 10. Student guidance and teaching experience

M.Sc. students – 4 completed

M.Sc. students – 1 ongoing

Ph.D. students – 3 ongoing

Dr. Berin Pathrose