

Curriculum Vitae

Name: Dr. S.G. Eswara Reddy

Date of Birth: 05.07.1973

Designation: Senior Scientist (Entomology)

Division: Entomology Laboratory, Agrotechnology Division

Address: CSIR-Institute of Himalayan Bioresource Technology, Palampur-176 061,
Kangra District, Himachal Pradesh

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Qualifications

Name of University	Degree Awarded	Year	Percent
University of Agricultural Sciences, GKVK, Bangalore, Karnataka	Ph.D. (Agricultural Entomology)	2005	93.33
University of Agricultural Sciences, GKVK, Bangalore, Karnataka	M.Sc. (Agricultural Entomology)	2000	84.33
University of Agricultural Sciences, GKVK, Bangalore, Karnataka	B.Sc. (Agriculture)	1997	78.40

Ph. D dissertation: Pest incidence and management strategy on capsicum and tomato grown under protected and open field cultivation.

M. Sc. dissertation: Evaluation of brinjal varieties, selected botanicals and synthetic insecticides against pest complex of brinjal.

Research Experience:

Organization/Institute	Designation	Period	Research work
Indian Institute of Horticultural Research (ICAR), Bangalore	SRF	29.9.2000 to 31.12.2004	Pest management in Horticultural crops
Indian Institute of Horticultural Research (ICAR), Bangalore	SRF	13.12.2005 to 21.5.2006	Pest management in Horticultural crops
E I D Parry (I) Ltd, R & D Centre, Bangalore	Entomologist	22.5.2006 to 29.6.2007	Pest management in Sugarcane
Indofil Chemicals Company, Nirlon House, Dr. A B Road, Mumbai	Scientist	1.7.2007 to 3.2.2009	Evaluation of new insecticide molecules for pest management in crop plants.
Central MugaEri Research & Training Institute, Central Silk Board, Jorhat, Assam	Scientist-B	05.02.2009 to 30.06.2011	Muga silkworm and Host Plant protection
CSIR-Institute of Himalayan Bioresource Technology, Palampur (HP).	Scientist (E1)	07.07.2011 to 07.07.2015	Pest management and Development of Biopesticides
CSIR-Institute of Himalayan Bioresource Technology, Palampur (HP).	Senior Scientist	07.07.2015 to till date	Development of Biopesticides

Research experience:

- Development of biopesticides for pest management.
- Screening of plant extracts/fractions/essential oils/pure compounds for their insecticidal properties.
- Isolation, characterization and evaluation of entomopathogenic fungi for the control of insect pests.
- Study of insect diversity in tea, ornamental and medicinal crops ecosystem.
- Effect of elevated temperature and carbon dioxide on insect pests.

List of Publications (Last 5 years)

Papers published in SCI Journals (Impact factor Journals)

1. Rajeev Rattan, **S.G. Eswara Reddy**, ShudhKirti Dolma, Bharat Inder Fozder, VeenaGautam, Ritika Sharma and Upendra Sharma (2015). Triterpenoid saponins from *Clematis graveolens* and evaluation of their insecticidal activities. *Natural Product Communications*. 10(9):1525-1528 (I.F.-0.95).
2. Awasthi P, Ram R, **Eswara Reddy SG**, GireeshNadda, Zaidi AA and Hallan V (2015) Himalayan wild cherry (*Prunus cerasoides*) as a new natural host of Cherry necrotic rusty mottle virus (CNRMV) and a possible role of insect vectors in their transmission. *Annals of Applied Biology*, 166:402-409 (I.F.-2.19).
3. Vishal Kumar, **S.G. Eswara Reddy***, Urvasi Chauhan, Neeraj Kumar and Bikram Singh (2016). Chemical composition and insecticidal activity of *Zanthoxylum armatum* against diamond back moth, *Plutella xylostella*. *Natural Product Research*, 30(6):689-692 (I.F.-1.80).
4. Singh AK, Dwivedi V, Rai A, Pal S, **Eswara Reddy SG**, Rao DKV, Shasany AK and Dinesh AN (2015). Virus-induced gene silencing of *Withaniasomniferasqualene* synthase negatively regulates sterol and defence-related genes resulting in reduced withanolides and biotic stress tolerance. *Plant Biotechnology Journal*, 13:1287-99 (I.F.-7.80).
5. **S.G. Eswara Reddy***, ShudhKirti Dolma, RajkeshKoundal and Bikram Singh (2016). Chemical composition and insecticidal activity of essential oils against diamond back moth, *Plutella xylostella*. *Natural Product Research*, 30(16):1834-1838 (I.F.-1.928).
6. Vishal Kumar, **S.G. Eswara Reddy***, Anuja Bhardwaj, Shudh Kirti Dolma and Neeraj Kumar (2016). Larvicidal activity and structure activity relationship of cinnamoyl amides from *Zanthoxylum armatum* and their synthetic analogues against diamondback moth, *Plutella xylostella*. *EXCLI Journal*, 15:229-237 (I.F.-2.424).
7. Vishal Kumar, **S.G. Eswara Reddy***, Urvasi Chauhan, Neeraj Kumar and Bikram Singh (2016). Chemical composition and insecticidal activity of *Zanthoxylum armatum* against diamond back moth, *Plutellaxylostella*. *Natural Product Research*, 30(6):689-692 (I.F.-1.928).
8. **S.G. Eswara Reddy*** and ShudhKirti Dolma (2017). Acaricidal activities of essential oils against two spotted spider mite, *Tetranychus urticae* Koch. *Toxin Reviews*, DOI: 10.1080/15569543.2017.1320805 (I.F.-1.887).
9. ShudhKirti Dolma, Eshita Sharma, Ashu Gulati and **S.G. Eswara Reddy*** (2017). Insecticidal activities of tea saponin against diamondback moth, *Plutella xylostella* and aphid, *Aphis craccivora*. *Toxin Reviews (Formerly Journal of Toxicology)*. DOI: 10.1080/15569543.2017.1318405 (I.F.-1.887).
10. **S.G. Eswara Reddy***, ShudhKirti Dolma, Praveen Kumar Verma and Bikram Singh (2017). Insecticidal activities of *Parthenium hysterophorus* L. extract and parthenin against diamondback moth, *Plutella xylostella* (L.) and aphid, *Aphis craccivora* Koch. *Toxin Reviews*, DOI: 10.1080/15569543.2017.1339281 (IF-1.887).

11. G.D. Kiran Babu, Shudh Kirti Dolma, Mohit Sharma and **S. G. Eswara Reddy*** (2018). Chemical composition of essential oil and oleoresins of *Zingiber officinale* and toxicity of extracts/essential oil against diamondback moth (*Plutella xylostella*). Toxin Reviews (IF-1.887). DOI:10.1080/15569543.2018.1491056.
12. **S.G.Eswara Reddy*** and ShaliniSahotra (2018). Multiplication of entomopathogenic fungus (*Lecanicilliumlecanii*) on apple pomace and its toxicity against aphid (*Aphis craccivora*). Toxin Reviews DOI: 10.1080/15569543.2018.1504222 (I.F.-1.887)
13. Rohit Rana, ShudhKirti Dolma, Sushil K. Maurya* and **S.G. Eswara Reddy*** (2018). Insecticidal activity and structure–activity relationship of sugar embedded macrocycles for the control of aphid (*Aphis craccivora* Koch). Toxin Reviews (Formerly Journal of Toxicology). DOI:10.1080/15569543.2018.1498897 (I.F.-1.887).
14. Rajkesh Koundal, ShudhKirti Dolma, Gopichand, Vijai K. Agnihotri and **S.G. Eswara Reddy*** (2018). Chemical composition and insecticidal properties of essential oils against diamondback moth, *Plutellaxylostella* (L.). Toxin Reviews (Formerly Journal of Toxicology). DOI:10.1080/15569543.208.1536668 (I.F.-1.887).
15. Adebisi O, Dolma SK, Verma PK, Singh B and **Reddy SGE*** (2019). Volatile, non-volatile composition and insecticidal activity of *Eupatorium adenophorum* Spreng against diamondback moth, *Plutellaxylostella*(L.)andaphid, *Aphis craccivora*Koch. Toxin Reviews (Formerly Journal of Toxicology). 38 (2): 143-150 (I.F.-1.887).
16. **S.G. Eswara Reddy*** and AlkaKumari (2019). Seasonal incidence of black scale, *Saissetiaoleae* (Olivier) on the fern, *Thelypteristylodes* (Kunze) from western Himalaya. Indian Journal of Experimental Biology, 57:59-62 (I.F.- 1.47).

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Non-SCI Journals (peer-reviewed)

1. Neog K, Unni BG, Dey S, Renthlei C Z, **Reddy SGE***, Dutta P, Sonowal P and Rajan R K (2014). Studies on the endocrine regulation of reproduction and ultra-structure of brain and reproductive organs of muga silkworm *Antheraea assamensis*, Helfer (Lepidoptera: Saturniidae). World Journal of Pharmacy and Pharmaceutical Sciences, 3(2):1407-1432 (IF-0.63).
2. **Reddy SGE***, Chauhan U, Kumari S, Nadda G and Singh M K (2014). Comparative bio-efficacy of acaricides against two spotted spider mite, *Tetranychusurticae* (Koch) on chrysanthemum in poly house. International Journal for Research in Chemistry and Environment.4 (4):15-19.
3. **S.G. Eswara Reddy***, Vishal Kumar, Anuja Bhardwaj, Shudh Kirti Dolma and Neeraj Kumar(2015). Insecticidal activity and structure activity relationship of natural cinnamomyl amides against aphid, *Aphis craccivorra*. International Journal of Tropical Agriculture, 33(2):1668-1674.
4. Kumar A, Bhardwaj A, Gopi Chand, Agnihotri VK and **EswaraReddy SG*** (2015). Insecticidal activity of plant extracts of *Costus speciosus* Koen against diamondback moth, *Plutellaxylostella* (L.).Current Biotica, 10(2):144-148.
5. **S.G. Eswara Reddy*** and AlkaKumari (2016). Seasonal incidence of aphid, *Amphorophora ampullata* Bukton (Homoptera: Aphididae) on fern, *Hypolepis polypodioides*(Blume) Hook (Hypolepidaceae) from Western Himalaya. Archives of Phytopathology and Plant Protection, 49 (13-14): 335-342.

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Book chapters

1. **S.G. Eswara Reddy***, ShudhKirti Dolma and Anuja Bhardwaj (2016). Plants of Himalayan region as potential source of bio-pesticides for Lepidopteron insect pests. pp. 63-83. Herbal Insecticides, Repellents and Biomedicines: Effectiveness and

Commercialization. ISBN 978-81-322-2702-1; ISBN 978-81-322-2704-5 (eBook);
Vijay Veer and R. Gopalakrishnan (eds.), Springer India.

Patents (Filed in India)

- ❖ **S.G. Eswara Reddy*** and Shalini Sahrotra (2016). A novel medium composition for culturing the entomopathogenic fungus *Lecanicillium lecanii* (Reference number 0285NF2015 dated 11/1/2016).
- ❖ **S.G. Eswara Reddy***, SK Dolma and Sushil K Maurya (2019). Insecticidal activities of *Sapimsebiferum* for the control of insect pests (Submitted to IHBT Patent Unit).

List of on-going projects

Sl. No.	Title of the project	Project out lay (Lacs)	Responsibility (PI/Co-PI)	Period		Funding agency
				From	To	
1	Bio-efficacy testing of botanical and microbial formulations for the control of pests and diseases (MLP-0131)	169.98	PI	Aug 2018	March 2020	CSIR
2	Development of customized flow hive for quality honey extraction (MLP-0141)	34.90	PI	Nov 2018	March 2020	CSIR
3	CSIR Aroma Mission (HCP-007)		Co-PI	July 2017	March 2020	CSIR
4	Agro-technologies for promotion of potential medicinal, aromatic and commercially important crops for societal and environment benefit (MLP-0202)		Co-PI			CSIR

List of external projects completed

Sl. No.	Title of the project	Project out lay (Lacs)	Responsibility (PI/Co-PI)	Period		Funding agency
				From	To	
1	Development of biopesticide formulation by utilization of apple pomace as substrate for mass production of entomopathogenic fungus, <i>Lecanicillium lecanii</i> for the management of aphids and whiteflies	27.17	PI	18.4.2013	17.10.2015	DBT, New Delhi
2	Introduction, adaptation and value addition of important medicinal and aromatic plants in trans Himalayan region	34.48	Co-PI	8.7.2014	7.7.2017	DST, New Delhi
3	Crop weather relationship studies in damask rose (<i>Rosa damascena</i> Mill) under western Himalayas	30.73	Co-PI	24.11.2014	15.10.2017	DST, New Delhi

List of CSIR projects completed (as PI and Co-PI)

Sl. No	Title of Project	Project Category	Participating Agencies	Your Role as defined
1	Bio-efficacy of new/safer insecticides and bio-pesticides (entomopathogenic fungi) against major insect and mite pests of IHBT mandate crops and its residual analysis	In-house (MLP-0077)	IHBT	PI
2	Introduction, domestication, improvement, and cultivation of economically important plants (AGTEC)	In-house (BSC-0110) (12 FYP-Network)	CSIR-IHBT, CIMAP, IIIM, NBRI & NEIST	Co -PI
3	Plant diversity: Studying adaptation biology and understanding / exploiting medicinally important plants for useful bio actives (SIMPLE)	In-house BSC-109- (12 FYP-Network)	CSIR-IHBT, CIMAP, CSMCRI, IIIM, NBRI, NCL, NEIST	Co -PI
4	Processes and products from Himalayan region and their toxicological evaluation (PROMOTE)	In-house IHBT(BSC-0213)	IHBT	Co -PI
5	Centre for High Altitude Biology (CeHAB)	In-house IHBT(BSC-0209)	IHBT	Co -PI

(Dr. SGE Reddy)