

## ISHITA GARAI

Scientist-B

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Research & Training Institute, Ministry of Textiles - Govt. of India,  
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### EDUCATION QUALIFICATION

#### **M.Sc. Sericulture**

2020-2022

Forest College and Research Institute, Mettupalayam, TNAU- 641301

*Thesis Title:* Juvenile Hormone Mimics for the Enhancement of Growth and  
Development of Silkworms

#### **B.Sc. Sericulture**

2016-2020

College of Sericulture, Chintamani, UAS Bangalore- 563125

### EXPERIENCE (TRAINING/ WORKSHOPS/CONFERENCE)

1. Training programme on Integrated Pest Management (Kharif-2019) (21.11.2019 -22.11.2019)
2. Training and awareness programme on energy efficient pumps and its operation (29.11.2019)
3. Training on Beej Aadhar App. (29.11.2019)
4. Training on Technology Orientation Programme at Eri Silkworm Seed Production Centre, MESSO, Hosur (21.02.2022-25.02.2022)
5. National Conference on Sericulture Based Multi-Disciplinary Approaches for Climate Resilience, Sustainability and Livelihood Security (26.08.2022-27.08.2022)
6. Represented UAS, Bangalore as Laision Officer at the “G20 Ministerial Conference on Women Empowerment (MCWE) and the G20Empower Summit” organised by Ministry of Women and Child Development from 03-04<sup>th</sup> August,2023 at Gandhinagar, Gujarat.
7. International conference ConSept23 with a theme “Seed Developmental Biology and its Relevance to Food and Nutritional Security” held at GKVK, UAS, Bangalore (30.09.2023)
8. International Conference on Silkworm seed Industry: Opportunities and Future Prospects – Silkworm SeedCon- 2024 (30.01.2024-31.01.2024)
9. Training programme entitled entrepreneurship development Programme in Sericulture on Waste to Wealth at DoS, GKVK, UAS, Bangalore (23.07.2024)
10. 21-day National Training- cum- Workshop on Livestock, Agriculture and Sustainable Practices (1.12.2024-21.12.2024)

### PUBLICATIONS (RESEARCH ARTICLES/ REVIEW/ POPULAR ARTICLES/ BOOK CHAPTERS)

1. **Ishita Garai**, K Chozhan, KA Murugesh And P Radha, 2022, Investigations on dynamics of juvenile hormone mimics on the economic parameters of silkworm, *Bombyx mori* L., *The Pharma Innovation Journal*,**11**(6): 739-743. (NASS -**5.23**)
2. **Ishita Garai**, Murugesh KA, Karthick Mani Bharathi, Naveen Chandra Reddy, Shruthi GH, Ramya Harika K, Lohithashwa KM and Vasanth V, 2024, Effect of juvenile hormone

- mimics on the economic parameters of silkworm, *Bombyx mori* L., *International Journal of Advanced Biochemistry Research*, **8**(8): 1144-1148. (NASS -5.29)
3. **Ishita Garai**, Lohithashwa KM, Ramya Harika K, Shruthi GH, Naveen Chandra Reddy, Karthick Mani Bharathi And Vasanth V, 2024, Juvenile hormone mimics as biochemical enhancers for silk production in *Bombyx mori* L.: Evidence from Plant Extracts, *Journal of Advances in Biology & Biotechnology*, **27**(9):1485-1495. (NASS -5.30)
  4. K. M. Lohithashwa, **Ishita Garai** and G. H. Shruthi, 2024, Rearing performance of silkworm on different mulberry hybrids and their correlation with biochemical parameters, *Biochemical and Cellular Archives*, **24**(2):1-10. (NASS – 4.95)
  5. Karthick Mani Bharathi B, Susikaran S, Parthiban KT, Vasanth V, Ramya Harika K, **Ishita Garai**, Mithilasri M, Sabarish M, Kalpana R, Navaneethan S, Ashwin Niranjana M And Vijay, 2024, A study to evaluate the effect of using different concentrations of rooting hormone on root and shoot characters of apical cuttings of V1 mulberry (*Morus indica* L.) raised using mini clonal technology at nursery level, *International Journal of Research in Agronomy*, **7**(8): 38-42. (NASS – 5.20)
  6. Karthick Mani Bharathi B, Susikaran S, Parthiban KT, Vasanth V, Navaneetha Krishnan S, Ramya Harika K, **Ishita Garai**, Ashwin Niranjana M, Vijay S, Gajjala Nitish, 2024, Mechanization in moriculture, *International Journal of Zoology and Applied Biosciences*, **9**(3): 46-50. (NASS – 4.13)
  7. Karthick Mani Bharathi B, Susikaran S, Parthiban KT, Vasanth V, **Ishita Garai**, K Ramya Harika, Navaneethan S, Ashwin Niranjana M, Vijay S, Gajjala Nitish, 2024, Effect of auxins on biochemical composition of apical cuttings of mulberry (*Morus indica* L.) using mini clonal technology, *International Journal of Zoology and Applied Bioscience*, **9**(3): 40-45. (NASS – 4.13)
  8. Karthick Mani Bharathi B, Rubeesh Kumar B, Susikaran S, C. Kiruthika, Ramya Harika K, Bhuvana S And **Ishita Garai**, 2024, Analysis of economic viability of commercial mulberry saplings regeneration using conventional stem propagation method, *International Journal of Zoology and Applied Biosciences*, **9**(4): 83-87. (NASS – 4.13)
  9. Lohithashwa KM, Mahantesh B Nagangoudar, Kotresh DJ, Vinay M Gangana Gowdra And **Ishita Garai**, 2024, Heavy metal accumulation in mulberry and its implications on silkworm, *International Journal of Advanced Biochemistry Research*, **8**(9): 100-109. (NASS -5.29)
  10. Naveen Chandra Reddy, Ramakrishna Naika, Mahesh M., **Ishita Garai**, Bharath K.B And Thrilekha D, 2024, *In Vitro* evaluation of bio control agents and botanicals against mulberry root rot pathogen *Lasiodiplodia theobromae*, *Journal of Advances in Biology & Biotechnology*, **27**(7):1288-1296. (NASS -5.30)
  11. Mohammad Rafiq Bhat, P. Radha, Abdul Faruk, Mukil Vas, Dipankar Brahma, Nilav Ranjan Bora, Karthick Mani Bharathi And **Ishita Garai**, 2024, Climate change and its impact on sericulture, *International Journal of Zoology and Applied Biosciences*, **9**(4): 13-25. (NASS – 4.13)
  12. K.R. Harika, S. Susikaran, P. Tejasree, B. K. M. Bharathi, **I. Garai**, S. A. B. Bharathi, V. Vasanth and K. Deepa, 2025, Diallel analysis of growth trait inheritance in mulberry (*Morus* Sp.), *Journal of Environmental Biology*, **46**(3):365-372. (NASS – 6.7)
  13. Kama Ramya Harika, Karthick Mani Bharathi, Susikaran S, Ulaganathan V, **Ishita Garai** and Vasanth V, 2024, Breeding methods in mulberry, *Agri Articles*, **4**(5): 428-432.
  14. Kama Ramya Harika, Karthick Mani Bharathi, Susikaran S, Ulaganathan V, **Ishita Garai** and Vasanth V, 2024, Steps involved in mulberry variety release, *Agri Articles*, **4**(5): 433-436.

15. GH Shruthi, S Ashrith, KM Lohithashwa, MR Pavithra And **Ishita Garai**,2024, Investigating the performance of thermotolerant bivoltine silkworm breeds and hybrids infected with *Beauveria bassiana*, *International Journal of Advanced Biochemistry Research*, **8**(8): 1355-1362. (NASS -5.29)
16. Vasanth V, K. Senguttuvan, Navaneetha Krishnan S, Karthick Mani Bharathi, Prety Rekha Nazary, Ashwin Niranjana M, **Ishita Garai**, Kama Ramya Harika, Ashick Rajah R And Nilav Ranjan Bora, 2024, Morphological and structural characterization of algae-based nanoformulation, *Journal of Advances in Biology & Biotechnology*, **27**(8):1078-1083. (NASS -5.30)
17. Vasanth.V, Karthick Mani Bharathi, **Ishita Garai**, Navaneetha Krishnan. S, Rajaram. R, R. Nandha Kumar And R. Moulidharshan, 2024, Effects of spirulina platensis mediated tio2nps on biochemical analysis (*Bombyx mori*. L), *International Journal of Zoology and Applied Biosciences*, **9**(2): 1-4. (NASS – 4.13)
18. Kapil Attri, Shruthi G. H., Dukare Pradip Gulabrao, Katta Subramanya Sai Teja, **Ishita Garai**, Amit Kumar Pandey, Gadde Anil Kumar, Jeevitha P. G And B Karthick Mani Bharathi, 2024, Silk Biomaterials: Applications and future prospects in biomedical engineering, *Uttar Pradesh Journal of Zoology*, **45**(16):205-216. (NASS- 5.24)
19. Kapil Attri, Sujatha G S, Basanagouda Jekinakatti, Thrilekha D , Dharanikota Lalithambica Devi, **Ishita Garai**, Satya Narayan Satapathy And Abhisek Tripathy, 2024, Advancements In Sericulture: Innovations and sustainability in silk, *Uttar Pradesh Journal of Zoology*, **45**(16):305-317. (NASS- 5.24)
20. Bharath Kumar BM, Chandana HS, Mili Gajendra Pusdekar, Karthick Mani Bharathi, **Ishita Garai** And Shruthi GH, 2024, A study to analyse pros and cons of different propagation methods in mulberry (*Morus* Sp.), *International Journal of Advanced Biochemistry Research*, **8**(9): 28-32. (NASS -5.29)
21. **Ishita Garai**, S. Susikaran, B. Karthick Mani Bharathi and V. Vasanth, 2024, Role of Probiotics in Enhancing Silkworm Gut Health, *Advances in Sericulture*, **1**:143-151.
22. Kama Ramya Harika, S. Susikaran, Allwin Loveson and **Ishita Garai**,2024, Impact of High-Altitude Sericulture on Silk Fiber Characteristics, *Advances in Sericulture*, **1**:153-160.
23. B. Karthick Mani Bharathi, **Ishita Garai**, KA Murugesha and Kama Ramya Harika, 2024, Development of High-Performance Silkworm Strains for Enhanced Silk Production, *Recent Innovations and Current Advancements in Sericulture*, **1**:55-63.
24. V. Vasanth, K. Senguttuvan, B. Karthick Mani Bharathi and **Ishita Garai**, 2024, Utilization of Nanotechnology in Silk Fabrication: Enhancing Properties and Applications, *Recent Innovations and Current Advancements in Sericulture*, **1**:85-90.
25. B. Karthick Mani Bharathi, K. Deepa, **Ishita Garai** and S. Bhuvana, 2024, Smart Rearing Facilities: Automation and Robotics in Silkworm Management, *Recent Innovations and Current Advancements in Sericulture*, **1**:93-101.