

Dr. Mahesh D S

Scientist

Central Muga Eri Research & Training Institute

Central Silk Board

Ministry of Textiles: Govt. of India

Lahdoigarh, Jorhat-785 700, Assam, INDIA

Email: maheshdnpura@gmail.com / maheshds.csb@gov.in

Mobile: +91 7829139213/ +91 7411632124



Areas of research interest and working

- ✓ Silkworm rearing technologies and improvement.
- ✓ Silkworm seed production.
- ✓ Host plant production and improvement.
- ✓ Value addition byproduct utilization in Sericulture.

Educational qualification:

Degree	University	Year of completion	Percentage
Ph.D in Sericulture	UAS, GKVK, Bengaluru	2017	92.70 %
M.Sc. (Agri.) in Sericulture	UAS, GKVK, Bengaluru	2014	93.10 %
B.Sc. (Agri.)	College of Agriculture, V C Farm, Mandya under UAS, GKVK, Bengaluru	2012	74.60 %

Research work experiences

2018- till date Scientist, Central Muga Eri Research & Training Institute, Central Silk Board, Ministry of Textiles, Govt of India (Regular position since 1st November 2018).

2017-2018 Scientist (Sericulture), Krishi Vigyan Kendra (KVK), V.C.Farm, Mandya under UAS, GKVK, Bengaluru.

2015-2017 Junior Research Fellows (UAS, GKVK, Bengaluru)

Awards / Honor / Fellowship

- a) Awarded UAS Gold Medal for Ph.D from UAS, GKVK, Bengaluru (2017).
- b) Recognition on the services for meritorious contribution in R&D sector under silkworm division for the year 2020-21 by CMER&TI.
- c) Appreciation award received by CMER&TI on the occasion of Vanya Resham Krishi Mela (2021-22) in recognition for popularization of eri commercial chawki rearing practices.
- d) “Young scientist award” in the field of Sericulture in International conference on “New Trends in Agriculture, Environmental & Biological Sciences for Inclusive development” during June 21-22, 2020.

Projects undertaken

Sl. No.	Project code	Title of the Project	Funding Agency	Budget (In Lakhs)
1.	APR 05007 SI (PI)	Standardization of chawki rearing practices for Eri silkworm, <i>Samia ricini</i> D.	CSB, Ministry of Textile, Govt. of India	18.15
2.	APS 05020 MI (PI)	Commercial egg production technology in ericulture		13.49 (Collaborative)
3.	BPS 01013 CN (Co-PI)	Utilization and diversification of silkworm pupae products for human & animal consumption and composting		155.02 (Collaborative)
4.	AIB 05006 SI (Co-I)	Breeding of muga silkworms for improved silk quality and disease tolerance		18.32
5.	CFC 5019 MI (Co-I)	Development of honeycomb mountages and harvesting technology for muga Cocoon production with improved uniformity and raw silk recovery		10.95
6.	AIP 5895 (Co-I) Concluded	Biology, population dynamics and control of <i>Sycanus collaris</i> Fab. And <i>E. furcellata</i> Wolff (Insecta: Heteroptera)-potential predators of muga silkworm		9.40
7.	MOE 5022 (Co-I)	Evaluation and popularization of improved technologies developed in the field of Muga, Eri & Oak tasar sector for North-eastern India (OST-Muga silkworm eggs treatment)		19.39

Position of responsibility

- ✓ In-Charge, Germplasm Conservation Centre (GCC), Chenijan farm.
- ✓ Nodal officer of two Sericulture Resource Centers.

Publications

- 1) **Mahesh, D.S.**, Arunkumar, K.P. and Vijayakumari, K.M. (2022), Eri chawki rearing practices, *Booklet No.1, CMER&TI. p.1-37.*
- 2) **Mahesh, D. S.** and Arunkumar, K. P. (2020), Status of ericulture in Northeast India, *Insect Environment*, 22:68-69.
- 3) **Mahesh, D.S.**, Arunkumar, K.P., Kumar, A., Shabnam, A.A., Luikham, R. and Vijayakumari, K.M. (2021). Leafhopper (*Empoasca flavoscens* Fabricius): A Major Pest of Castor Affecting Ericulture in Northeast India. *Biological Forum – An International Journal*, 13(3): 617-620. (NAAS rating: 5.11).
- 4) Arunkumar, K. P., Sandeep Kalitha, Mahesh, D. S. and Vijay, N. (2021), *Xanthopimpla* endoparasitoid: A minor pest on *Antheraea assamensis*, *Indian Silk*, 11(59-5):24-25.
- 5) KP Arunkumar, **DS Mahesh**, H Gadad, IG Prabhu, KhSubadas Singh, James Keisa, A A Shabnam, Reeta Luikham, Niranjan Kumar and KM Vijay Kumari (2021). Vanya sericulture: new technologies and future prospects. *Indian Silk* (In press: Indian silk)
- 6) Prety R Narzary, Apurba Das, M Saikia, R Verma, S Sharma, P K Kaman, R C Boro, S Goswami, **D S Mahesh**, B Linggi, A Rajkhowa, J P Baruah. (2021), A review article on recent trends in Seri-Biosciences: Its prospects in modern Sericulture. *The Pharma Innovation Journal*, 11(1): 604-611. (NAAS rating: 5.23).
- 7) **Mahesh, D.S.**, Doreswamy, C., Ramakrishna Naika, Chikkalingaiah, Subbarayappa, C. T. and Venkatesh, M. (2021), Impact of the various organic manures supplemented with standard package on soil properties for mulberry production in Chamarajanagar district under southern dry zone of Karnataka. *Biological forum- An International Journal.*, 13(2):31-38. (NAAS rating: 5.11).
- 8) **Mahesh, D.S.**, Muthuraju, R., Vidyashree, D.N., Vishaka, G.V., Narayanaswamy, T.K. and Subbarayappa, C.T. (2020), Silkworm pupal residue products foliar spray impact in silkworm (*Bombyx mori* L.), *Journal of Entomology Zoology Studies*, SP-8(4):38-41. (NAAS rating: 5.53).
- 9) **Mahesh, D.S.**, Narayanaswamy, T.K. Muthuraju, R., Vidyashree, D.N. and Subbarayappa, C.T. (2020), Influence of silkworm pupal residue biocompost (SPRB) on growth and yield parameters of mulberry, *International Journal of Agriculture Sciences*. 12(02): 9464-9466. (NAAS rating: 4.58).
- 10) **Mahesh, D.S.**, Muthuraju, R., Vidyashree, D.N., Narayanaswamy, T.K. and Subbarayappa, C.T.(2020), Effect of Silkworm Pupal Residue Protein (SPRP) and Silkworm Pupal Residue Extract (SPRE) Spray on Major and Micronutrients Status of Mulberry, *Ind. J. Pure App. Biosci.* 8(1):110-114. (NAAS rating: 4.74).
- 11) G. V. Vishaka, T. K. Narayanaswamy, D. N. Vidyashree, R. Muthuraju and **D. S. Mahesh**. (2020), Investigations on utilization prospects of silkworm (*Bombyx mori* L.) pupal residue bio soft descent (SPRBD) as nutrient source for tomato crop, *J. Exp. Zool. India*, 23(2): 1165-1170. (NAAS rating: 5.25).
- 12) Madhu, H.R., A.D.Ranganatha, G. Nagesha., and **Mahesh, D.S.** (2020), Knowledge difficulty index and attitude level of farmers about soil health card in Mandya district of Karnataka, *Ind. J. Pure App. Biosci.* 8(3):594-601. (NAAS rating: 4.74).
- 13) Madhu, H.R., A.D.Ranganatha, G. Nagesha., and **Mahesh, D.S.** (2020), Personal, socio-economic and psychological characteristics of the soil health card beneficiaries in Mandya district of Karnataka, *International Journal of Agriculture Sciences*. 12(13): 10008-10011. (NAAS rating: 4.58).
- 14) Madhu, H.R., A.D.Ranganatha, G. Nagesha., and **Mahesh, D.S.** (2020), A study on knowledge and attitude of farmers and constraints faced by them on soil health cards in Mandya district of Karnataka, *Ind. J. Pure App. Biosci.* 8(3):727-736. (NAAS rating: 4.74).
- 15) Atheekur Rehman, H.M, Ranganatha, A.D., Kowsalya, K.S., and **Mahesh, D. S.** Integrated farming system for sustainability, *Adv. Biores.*, Vol 9 (5) 2018: 197-200.
- 16) **Mahesh, D. S.**, Muthuraju, R., Vidyashree, D. N., Narayanaswamy, T. K., Subbarayappa, C. T. and Ramakrishna Parama, V. R., 2017, Influence of Silkworm pupal residue biocompost (SPRB) on chemical and biochemical traits of V-1 mulberry. *Trends in Biosci.*, 10(36): 7530-7534.

- 17) **Mahesh, D. S.** and Narayanaswamy, T. K., 2017, Bio responses of mulberry to foliar spray of silkworm (*Bombyxmori*. L.) pupal protein. *Mysore. J. Agric. Sci.*, 51 (3): 660-665.
- 18) **Mahesh, D. S.**, Vidhathri, B. S., Vidyashree, D. N., Narayanaswamy, T. K., Muthuraju, R. and Subbarayappa, C. T. 2015, Mulberry biochemical composition (*Morus* spp.) – A Review. *Int. J. Curr. Microbiol. App. Sci.* 6(7): 2207-2217.
- 19) **Mahesh, D. S.**, Vidhathri, B. S., Narayanaswamy, T. K., Subbarayappa, C. T., Muthuraju, R. and Shruthi, P., 2015, A Review – Bionutritional Science of Silkworm Pupal residue to Mine New ways for utilization. *Int. J. Adv. Res. Biol. Sci.*, 2(9): (2015): 135–140. (Impact Factor: 1.615).
- 20) Vidhathri, B. S., Ramakrishna Parama, V. R., Subbarayappa, C. T., Narayanaswamy, T. K., Muthuraju, R., **Mahesh, D. S.** and Vidyashree, D. N., 2017, Isolation and detection of alpha linolenic acid from silkworm pupal residue oil (*Bombyxmori* L.) using HPLC. *Int. J. Curr. Microbiol. App. Sci.* 6(7): 2202-2206. (NAAS Rating: 5.38).
- 21) Madhuri Thinnaluri, Bhaskar, R. N., **Mahesh** and Narayanaswamy, K., 2014, Effect of plant products on incidence of tukra on mulberry. *Int. J. Develop. Res.*, 4(8): 1485-1490.
- 22) Madhuri Thinnaluri, Bhaskar, R. N., **Mahesh** and Narayanaswamy, K., 2014, Evaluation of botanical extracts on the repellency property against the pink mealy bug, *Maconellicoccushirsutus* (green) in mulberry. *Int. J. Develop. Res.*, 4(8): 1504-1507.
- 23) Madhuri Thinnaluri, Bhaskar, R. N., **Mahesh** and Narayanaswamy, K., 2014, Effect of plant products on morphological parameters of tukra affected mulberry leaves, *Int. J. Sci. & Res. Pub.*, 4(8): 1-6.
- 24) **Mahesh, D. S.** and Doreswamy, C., 2015, Effect of different organic manures on soil properties in relation to growth and yield of mulberry and cocoon productivity. *Mysore. J. Agric. Sci.* 49(1): 157.
- 25) Vidhathri, B. S., Ramakrishna Parama, V. R., **Mahesh, D. S.**, Vidyashree, D. N., Narayanaswamy, T.K., Muthuraju, R. 2017, Isolation and analysis of alpha linolenic acid from mulberry silkworm pupal oil., XIII Agricultural science congress, p. 35.
- 26) Shantahnu, K., Muthuraju, R., Vidyashree, D. N., **Mahesh, D. S.**, Narayanaswamy, T. K. and Subbarayappa, C.T., 2017, Isolation and characterization of silkworm pupal residue degrading microorganisms. XIII Agricultural science congress, p. 34.
- 27) Vidhathri, B. S., Vijayalakshmi, Vishaka, G.V., Narayanaswamy, T. K., **Mahesh, D. S.** Muthuraju, R., and Vidyashree, D. N., 2017, Silkworm pupal residue value added products for human consumption. XIII Agricultural science congress, p. 34.

Institutional Building activities/Infrastructure developed:

A model Eri chawki rearing centre at CMER&TI and equipped all the facilities required for eri chawki rearing.

Dr. Mahesh D S