

## RESEARCH PUBLICATIONS

(2014-15)

### Research articles/ Book Chapter

- 1) Ahmed, S.A., Sarkar, C.R., Sarmah, M.C., Ahmed, M. and Singh, N.I. (2015) Rearing Performance and Reproductive Biology of Eri Silkworm, *Samia ricini* (Donovan) Feeding on *Ailanthus* Species and other promising food plants *Advances in Biological Research* 9 (1): 07-14.
- 2) Bhuyan, P. M. Sandilya, S. P., Gogoi, D. K. Neog, K. and Subramanian, S. (2014). Isolation and characterization of gut-bacteria of Muga Silkworm (*Antheraea assamensis*, Helfer) collected from different localities of Assam. *Sericologia*, 54 (1): 28-35.
- 3) Bhuyan, P. M. Sandilya, S. P. and Gogoi, D. K. (2014). Exploration of gut microbial diversity of Muga Silkworm, *Antheraea assamensis*, Helfer and their characterization". Paper presented in the National seminar on "Biodiversity Conservation, Crisis and Sustainable Use" organized by N.N. Saikia College, Titabor, Assam on 29<sup>th</sup> and 30<sup>th</sup> September, 2014.
- 4) Biswas N., Bagchi S.N., Gogoi A.K., Paliwal S. and Giridhar K. (2014) Studies on the rearing and grainage performance of muga silkworm, *Antheraea assama* during seed crops in Terai region of West Bengal, *Abstracts of 23<sup>rd</sup> International Congress on Sericulture and Silk Industry*, Bangalore, 24<sup>th</sup>-27<sup>th</sup> November 2014, pp. 97.
- 5) Borgohain, A., Sonowal, J., Chutia, M. and Das, R. (2014) Seasonal occurrence of fungal diversity in castor plant, *Ricinus communis* L. the primary food plant of eri silkworm, *Samia ricini* (Denovan). *International Research Journal of Biological Science*, 3(8):33-39
- 6) Borgohain, A, Das, K and Chutia, M. (2014) Antibacterial activity of host plant volatiles against the bacterial pathogen of muga silkworm, *Antheraea assamensis* Helfer. In: *Proceedings of the National seminar on Recent Developments in Natural Sciences*, DKD College, Golaghat, Assam, pp153-156.
- 7) Borgohain, A., Das, R. Chutia, M., Bora, D. S. Samanta, R., Dutta, K. and Sonowal, J. (2014) Characterization of cultural gut microflora in infected larvae of muga silkworm, *Antheraea assamensis* Helfer. *Abstracts of National seminar on "Unraveling plant-microbe interactions for supporting plant health"* held on 27-28, 2014 organized by Indian society of mycology and plant pathology & Dept. of Botany, Gauhati University, Assam.pp.14.
- 8) Bhuyan PM, Sandilya SP, Gogoi DK, Neog K, Subramanian S (2014). Isolation and characterization gut-bacteria of muga silkworm, *Antheraea assamensis* Helfer collected from different localities of Assam. *Sericologia*, 54 (1): 28-35.
- 9) Chutia, B. C., Nath, C., Goswami, L. M. , Goswami, B., Gogoi, L. and Neog , K. (2014) Life history of *Antheraea frithi* Moore on *Terminalia arjuna* (Rosb.) W & A Syn in North Eastern Region of India. *Proc. Natl Acad Sci, India Biol Sci*, DOI 10.1007/s40011-014-0411.
- 10) Chutia, P. Kumar, R. and Khanikar D. P. (2014) Host plants relationship in terms of cocoon colour and compactness of eri silkworm (*Samia ricini*). *Biological Forum – An International Journal* 6(2): 340-343.
- 11) Das R, Choudhary B., Sankar M, Giridhar K (2014) Status of muga culture and technology adoption in Assam. Management of Natural resources for Sustainable Development: Challenges and opportunities, p 132-135.
- 12) Giridhar K. and Neog, K. (2014) Trends and potential of eri and muga culture in North eastern states of India *Indian Silk*, 5 (5-7): 50-55.

- 13) Goswami, D., Singh N.I., Ahmed, M., Kumar R., Mech D. and Giridhar K. (2015) Impact of integrated chawki rearing technology on cocoon production of muga silkworm, *Antheraea assamensis* Helfer. *Biological Forum*, 7(1): 146-151.
- 14) Ibotombi Singh N, Goswami D, Ahmed M, Giridhar K (2014) Efficacy of sodium hypochlorite in controlling viral and bacterial diseases in muga silkworm, *Antheraea assamensis* Helfer. *Journal of Applied Biology & Biotechnology*, 2 (02): 012-015
- 15) Mech, D. Ahmed M. and Kumar, R. (2015) Indigenous technical knowledge associated in muga culture. *Biological Forum – An International Journal*, 7(1): 1-6.
- 16) Neog, K. Unni, Bala G., Dey, S., Renthlei, CV. Z. Eswara Reddy, S. G. 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, *World Journal of Pharmacy and Pharmaceutical Sciences*, Volume 3, (1).
- 17) Sarmah MC, Sarkar BN, Ahmed SA, Giridhar K (2014) Performance of C2 breed of eri silkworm, *Samia ricini* (Donovan) in different food plants. *Entomology and Applied Science* [Accepted].
- 18) Sarmah M.S., Sarkar S.A., Ahmed S.A. and Giridhar K. (2014) Advances in Research and Technology development in eri culture- A Review, 23<sup>rd</sup> International Congress on Sericulture and Silk Industry, Bangalore, 24<sup>th</sup>-27<sup>th</sup> November 2014, Abstracts, pp 79.
- 19) Singh G.B, Gogoi A.K. and Giridhar K. (2014) Illustrated manual of muga silkworm management and crop protection, Regional Muga Research Station, Boko, Assam, 24 pp.
- 20) Sonowal L, Singh GP (2014) Demonstration programme at Bamunigaon, Falafung and Batakuchi, Kamrup Assam. *Indian Silk*, 4: 50.
- 21) Wankhade, L. N. Barman, H. D. Rai, M. M. Rathos, M. K. (2014) Performance of eri silkworm for commercialization in Vidarbha region, *Maharashtra Journal of Advanced Zoology*, 35(1): 26-31.

#### **Research papers in Seminar/Symposium/ conference**

- 1) Babu, M. R. Angadi, B.S. and Raviverma, T. (2014) Evaluation of certainm genotypes of eri silkworm *Samia ricini* (Donovan) fed with castor and tapioca under sub-tropical condition of Andhra Pradesh and Telengana *Abstracts of 23rd International Congress on Sericulture and Silk Industry* held on 24th-27th November, 2014 at Bangalore, pp. 78.
- 2) Das, R. Gogoi, A.K., Chutia M. and Das K. (2014) Emerging disease and pest scenario in muga silkworm, *Antheraea assamensis* under the impact of climate change. *Abstracts of 23rd International Congress on Sericulture and Silk Industry* held on 24th-27th November, 2014 at Bangalore, pp. 81.
- 3) Kumar, R. Rajkhowa, G., Chutia, P., Chodhury, B. and Giridhar K. (2014) North East Indian wild silk moth (Lepidoptera : Saturniidae) – diversity, distribution and clarification through illustrated genitalic atlas. *Abstracts of 23<sup>rd</sup> International Congress on Sericulture and Silk Industry*, Bangalore, 24<sup>th</sup>-27<sup>th</sup> November 2014, pp 99.
- 4) Sandilya, S. P., Bhuyan, P. M. and Gogoi, D. K. (2014) Isolation and characterization of promising *Azotobacter sp.* for the development of an INM package in sustainable eri culture”. *Paper presented in the National seminar on “Biodiversity Conservation, Crisis and Sustainable Use”* organized by NN Saikia College, Titabor, Assam on 29<sup>th</sup> and 30<sup>th</sup> September, 2014.
- 5) Singh, G .P. and Gogoi, A. K. (2014) Evaluation of morphotypes of som, *Persea bombycina* Kost for the rearing of muga silkworm *Antheraea assamensis* Helfer

- (Lepidoptera: Saturniidae). *Abstracts of 23<sup>rd</sup> International Congress on Sericulture and Silk Industry* held on 24th-27th November, 2014 at Bangalore, pp. 96.
- 6) Vemananda Reddy, G. Rajanna, K. L., Vijaya Kumari, K.M., Angadi, B. S. Sarkar, B. N. and Sarmah, M. C. (2014) Development of preservation techniques for eri silkworm eggs *Samia ricini* (Donovan). *Abstracts of 23<sup>rd</sup> International Congress on Sericulture and Silk Industry* held on 24th-27th November, 2014 at Bangalore, pp. 94.

### **Books/ manuals**

- 1) G P Singh, AK Gogoi, K Giridhar (2014) Illustrated Manual of Muga Silk Worm Disease Management and Crop Protection.
- 2) R Das, SN Bagchii, N Biswas (2014) Muga Khadya bikhyar knada chdrakari pokar niyantron. REC, Coochbehar
- 3) SN Bagchii, N Biswas, D Goswami, NI Singh (2014) Muga polu palonor nirdesika. REC, Coochbehar
- 4) SN Bagchii, N Biswas (2014) Muga plou palonor soloikal. REC, Coochbehar.
- 5) SN Bagchii, N Biswas (2014) Muga resom chaser sahayika. REC, Coochbehar.
- 6) H Barman, RR Basumatary (2014) Eri polu palonor bodhibodha pronali. REC, Kokrajhar.
- 7) H Barman, RR Basumatary (2014) Eri polur Khadya bikhyar bagicha aru eyar pratipalon. REC, Kokrajhar
- 8) D.Mech, R.Kumar and K. Giridhar (2015) Indigenous Traditional Knowledge of Muga culture
- 9) G. Rajkhowa, R. Kumar and K. Giridhar (2015) Long term preservation schedule of muga seed cocoons during summer
- 10) S A Ahmed, M C Sarmah, B N Sarkar, K. Giridhar and B B Singha (2014) Package of practices for eri silkworm C2 breed.

### **Technical Notes**

- 1) Gogoi AK, Singh GP, Sahu AK (2014) Technical Awareness camp at Dhanubhanga (Goalpara) and Moirapur (Kamrup) Assam *Indian Silk*, 4: 38.
- 2) Gogoi AK, Singh GP, Sahu AK (2014) Field Day at Dhakhin pukhuripar Kamrup and Nelli, Morigaon, Assam. *Indian Silk*, 4 : 39-40.
- 3) Sarmah MC (2014) Golden Muga Silk: An overview of its raw silk production and potentiality. *Silk Mark Vogue.*, 6 (24): 24-26.

### **Leaflets /pamphlets (in Local languages)**

- 1) Salukia eri polur palon padhati (Early stage eri silkworm rearing technology)
- 2) Eri polur khadya bikhya rupon aru pratipalan (Raising and maintenance of eri host plants).

- 3) Muga khadya bikhyar mojja khowa pookor neyantran (Control of stem borer of muga host plants)
- 4) Muga khula hukowa jantra (Muga cocoon drier)
- 5) Muga Silk Plus
- 6) Bani Reeling Machine
- 7) Muga polu palon aru paricharya (Muga silkworm rearing and management)
- 8) Uzi makhir jaybik neyantran (Biological control of Uzi fly)
- 9) Muga polu palonr unnat paddhati (Improved rearing technology of muga silkworm)
- 10) Muga Khydya Bikshya Rupon aru Pratipalan (Raising and maintenance of muga host plants )
- 11) Muga beej utapdanar unnat koushal (Improved techniques of muga silkworm seed production)
- 12) Improved mountage for eri culture
- 13) Eri polur natun unnata jaat – C2 palonor unnata padhatti
- 14) Reshom Krishi byabasthat Jeibik Sarar prayog ( Appllication of Organic manures in sericultural practices.
- 15) Reshom Krishi Pranalit Mati Parikhar bhumika ( Importance of soil analysis in sericultural practices)
- 16) Antahsashyakaran (Intercropping)
- 17) Pranalibaddha somanir majat antarbarti sashyar kheta-projonia nidresavali ( Intercropping in between systematic som plantation – necessary directions)
- 18) Jeibik upayere muga khadya brakhyar pratipalan ( Muga food plant management through organic means)
- 19) Keshusar-ek labhjanak byavasai ( Vermicomposting – one profitable venture)
- 20) Eri Polur Natun Unnat jat – C2 Palanar Unnat Padhati

### **Newsletters**

- 1) CMER&TI 2 **English Newsletter**. Vol. 15.: January-June, 2014 and Vol. 16 July-December, 2014
- 2) CMER&TI 2 **Hindi Newsletter**. Vol. 1; January-June, 2014 and Vol. 2 July-December, 2014