

### Publications 2018-19 (Research Articles)

- 1. Baishya M., Barman H., Rahman S. A. S., (2019), Present Status of Eri - Muga Culture in NE Region and related biodiversity resources as tool for sustainable economic uplifting of seri-Stakeholders, *International Journal of Life Science*, 5(3), 2284-2290.
- 2. Kalita M, Krondashree D, Das K, Chutia M, Das R, Subrahmanyam G. (2018), Diversity and distribution of biosurfactant producing plant growth promoting bacteria (PGPB) from hydrocarbon contaminated soils of upper Assam. *International Journal of Current Microbiology and Applied Science*, 7: 204-215.
- 3. Subrahmanyam G, Chutia M, Das R. (2019), Suitable molecular methods in the rapid diagnosis of microbial pathogens of Muga silkworm, *Antheraea assamensis* Helfer (Lepidoptera: Saturniidae). *Research journal of Agriculture Sciences*, (Accepted).
- 4. Gohain, A., Sarma, R.K., Debnath, R. et al. (2019) Phylogenetic affiliation and antimicrobial effects of endophytic actinobacteria associated with medicinal plants: prevalence of polyketide synthase type II in antimicrobial strains. *Folia Microbiologica* (accepted)
- 5. Gandotra S., Kumar A., Naga K., Bhuyan P. M., Gogoi D. K., Sharma K., Subramanian S., (2018). Bacterial community structure and diversity in the gut of Muga silkworm, *Antheraea assamensis* Lepidoptera: Saturniidae from India. *Insect Molecular Biology*, 27(5): 603-619
- 6. Bhuyan P. M., Sandilya S. P., Nath. P. K., Gandotra S., Subramanian S., Kardong K., Gogoi D. K., (2018). Optimization and characterization of extracellular cellulase produced by *Bacillus pumilus* MGB05 isolated from midgut of muga silkworm (*Antheraea assamensis* Helfer). *Journal of Asia Pacific Entomology*, 21(4):1171-1181.
- 7. Devi S. S., Debaraj Y., Chaudhuri R. S., Singh N. I., (2019) Biology and morphometrics of *Phalera raya* Moore (Lepidoptera: Notodontidae) infesting *Quercus serrata* Thunb, *Munis Entomology and Zoology*, 14(2) (published online).
- 8. Chaudhuri R. S., & Subramanya, G. (2018) Prospects of molecular genetics in silkworm breeding: An Overview, *Indian Journal of Entomology*, 80(4): 1716-1719.
- 9. Chaudhuri R. S., Debaraj Y., & Singh N. I., (2018) Impact assessment of front line demonstration of technologies on oak tasar cocoon yield and economics, *Sericologia*, 58(3&4): 182-188.
- 10. Singh S., Jigyasu D. K., Roy D., Shabnam A. A., Das R., (2018). Feeding Behaviour of Two Important Predator Bugs *Eocantheconafurcellata* Wolff and *Sycanus collaris* Fabricius in Muga Ecosystem. *Research Journal of Agricultural Sciences*, 10(1): 185-188

### Popular articles

Subrahmanyam G, Kalita M, Chutia M, Das R. (2018). Repetitive sequence based polymerase chain reaction (rep-PCR) technique as a suitable diagnostic tool in silkworm pathology. *BioQuest*, 2(1): 13-15.

Kalita M, Subrahmanyam G, Chutia M, Das R. (2018). Biodesulfurization: A step towards sulphur free air. *BioQuest*, 2(1): 23-25.

### Papers presented in Conferences/seminars

Vinodakumar, S. N., Jigyasu, D. K., Das, R. & Tamuly, B., Soil Health Card and Its Impact on Livelihood Security of Seri-Farmers of NE-India, International Conference on Climate Change, Biodiversity and Sustainable Agriculture (ICCBSA) 13-16 December, 2018.

Biswas, N., Rahman, S. A. S., Neog, K., & Bagchi, R. Improvement of cocoon yield of Jethua commercial crop through alteration of crop schedule in Tarai region of West Bengal. APSERI-2019, 2-4th March 2019, Mysuru.

Biswas, N., Rahman, S.A.S., Neog, K., and Das, R., (2019). Jarua pre seed crop of Muga silk worm under changing climatic condition in tarai Region of West Bengal. National Seminar on Recent Trend in Ecological Research. Assam University, Silchar.

Subrahmanyam G, Kalita M, Chutia M, Das R. Isolation, Identification and Characterization of *Gordonia* Sp. Gi, For Biodesulfurization Of Dibenzothiophene”, APSERI-2019, 2-4th March 2019, Mysuru.

Chutia M., Sandilya S. P., Jeevan B., Subrahmanyam G., Vijay N., Das R., Native rhizobacteria as plant growth promoting and biocontrol agents for alternaria blight disease in Castor, a primary food plant of Eri silkworm. APSERI-2019, 2-4th March 2019, Mysuru.

Subrahmanyam G, Debnath R, Kalita M, Sosanka S, Chutia M, R Das. Bacterial diversity associated with flacherie disease of Muga silkworm *Antheraea assamensis* Helfer by high throughput sequencing analysis in International conference on Climate Change, Biodiversity and Sustainable Agriculture, AAU, Jorhat during 13 to 16th December, 2018.

Kalita M, Subrahmanyam G, Chutia M, Das R. Isolation and characterization of biodesulfurizing bacteria from hydrocarbon contaminated soils” in International conference on Climate Change, Biodiversity and Sustainable Agriculture, AAU, Jorhat during 13 to 16th December, 2018.

D.K. Gogoi, P.M. Bhuyan, S.P. Sandilya and R. Debnath. Optimization of extracellular cellulase produced by *Bacillus pumilus* MGB-05 isolated from the gut of *Antheraea assamensis* Helfer. APSERI-2019, 2-4 March 2019, Mysuru.

Sailaja, P. S. Rao, D.K. Gogoi, R. Kumar, S.K. Taj, S. Vidyunmala and R.K. Mishra. Development of a preservation schedule for the eggs of Muga silkworm, *Antheraea assamensis* Helfer, APSERI-2019, 2-4 March' 2019 Mysuru.

P.M. Bhuyan, T.J. Keisa, K. S. Singh, R. Luikham, D.K. Gogoi and R. Das. Semi-Synthetic Diet: Alternative food for Muga silkworm rearing, International Conference on “Climate change, Biodiversity and Sustainable Agriculture” Assam Agricultural University, Jorhat, Assam during 13th-16th December 2018.

P.M. Bhuyan, S.P. Sandilya, T. J. Keisa and D.K. Gogoi. Impact of culture parameters on CMCase and  $\beta$ -glucosidase activity of Muga silkworm (*Antheraea assamensis* Helfer) gut bacteria, National Seminar on “Vanya Sericulture and Ser-Biodiversity for Economic Upliftment: SeriBioEcon-2018” organized by CMER&TI, Central Silk Board from 12th to 13th March' 2018.

S P Sandilya, P M Bhuyan, D Kardong, D K Gogoi, M. Chutia and K Neog. Effect of Integrated Nutrient Management package on the growth and phytochemical properties of *R. communis* L., National Seminar entitled “Vanya Sericulture and Seri-Biodiversity for Economic Upliftment- ‘SeriBioEcon’, 2018” organized by CMER&TI, on 12th-13th March, 2018.

S P Sandilya, P M Bhuyan, R Debnath, M Chutia, D Kardong and D K Gogoi (2018). Impact of nitrate reducing *Achromobacter* strains on plant growth promotion and phytochemical constituents of *Ricinus communis* grown in Assam, India, International Seminar entitled ‘Biodiverse-2018’ organized by IIT, Guwahati in coordination with ADNAT, Hyderabad on 27th -29th Jan’ 2018.

Nang Sena Manpoong, Rajesh Kumar, Preetirekha Chutia, Mustaq Ahmed and D. Goswami, 2018. Use of led in attraction of pests in muga ecosystem, as an IPM component. Abstract Proceedings of 8th International Conference on Wild Silk Moths, 22-24 January, 2018, Guwahati, Pp 34-35

Manpoong NS, Singh Subadas, Roy Dinata, Luikham Reeta and Das Ranjana. Led light trap: physical method of insect pest control in muga ecosystem International Conference on “Climate change, Biodiversity and Sustainable Agriculture, AAU, December 13-16, 2018.

Kartik Neog, M.C Sharmah and R. Das (2018). Silk biodiversity in North East India and their significance to the sustenance of livelihood, soil and water resources. Paper presented in the 27th National Conference of SCSI on "Sustainable management of soil and water resources for doubling farmers’ income" held during 25-27 October 2018 at Assam Agricultural University, Jorhat.

Kartik Neog (2018). Technologies for Sericulture Development in NE India. “Seminar cum NRDC Interactive Meet on Food Processing, Sericulture and Tea” organized by NRDC, New Delhi at Pragna Bhawan, Agartala, Tripura, India on 7th December 2018

Kartik Neog (2018). Sericulture: A profitable agro-based enterprise in IFS. “Model Training Course for Extension Functionaries on Integrated Farming System for Sustainable Agriculture” held w.e.f. 19-26 November, 2018 at Assam Agricultural University, Jorhat.

Kartik Neog, M.C Sharmah and R. Das (2018). Silk biodiversity in North East India and their significance to the sustenance of livelihood, soil and water resources. Paper presented in the 27th National Conference of SCSI on "Sustainable management of soil and water resources for doubling farmers’ income" held during 25-27 October 2018 at Assam Agricultural University, Jorhat.

K. Neog, M. Baruah, P. Dutta, D.K. Gogoi and R. Das. Muga Silkworm seed production: Technology for enhancement of fecundity. Paper presented in the “International Conference Climate Change, Biodiversity and Sustainable Agriculture Dec., 13th-16th, 2018 Organized by Assam Agricultural University and Prof. H.S. Srivastava Foundation for Science, Lucknow, at AAU, Jorhat.

K. Neog and R. Das. Effect of commonly used insecticides on the growth and development of Nuga silkworm. Paper presented in the “International Conference Climate Change, Biodiversity and Sustainable Agriculture, Dec., 13th - 16th, 2018 Jointly organized by - Assam Agricultural University, and Prof. H.S. Srivastava Foundation for Science, Lucknow, at AAU, Jorhat.

M Borkotoky, I Boiss, L John, C Sharma, M Chutia, Evaluation of antibacterial and cytotoxicity activity of different fruit extracts of *Eleaegnuslatifolia*. In: Abstract book of the international conference on 'Climate Change, Biodiversity and Sustainable Agriculture' held at Assam Agricultural University, during 13th-16th December, 2018.

Ponnuvel, K.M., Terenius, O., de Miranda, J., Subharani Devi, S. and Mishra, R.K. Detection of baculovirus infection in Oak Tasar silkworm, *Antheraeaaproylei* and its co-infection with iflavirus. APSERI-2019, 2-4th March 2019, Mysuru.

Y. Debaraj and N.Ibotombi Singh, Biology of *Scymnusposticalis* Sicard (Coleoptera: Coccinellidae) reared on *Dialeuroporadecempuncta*(Quaintance& Baker) (Homoptera : Aleyrodidae)APSERI-2019, 2-4th March 2019, Mysuru.

N.I Singh, Ritwika SChaudhuri, S. Subharani Devi, Y. Debaraj and L. Somen Singh Comparative Rearing Performance Of Oak Tasar Silkworm In Indoor Shoot Feeding And Outdoor Rearing On Oak Bushes. APSERI-2019, 2-4th March 2019, Mysuru.

L. Somen Singh, N.Ibotombi Singh and Ranjana Das, Evaluation and identification of superior interspecific F1 hybrids of oak Tasar silkworm. APSERI-2019, 2-4th March 2019, Mysuru.

Singh S, Jigyasu D K, Neog K (2017). Impact assessment of petroleum crude oil on Muga Silkworm and its host plants in Assam. In: National Seminar on "Economic Insects of NEIndia: Thrust on Recent Advances in Vanya Silks. CMER&TI and BTC organisers, pp-15.

Jigyasu DK, Chetia B, Singh S &Neog K. A case study: impact of petroleum crude oil on muga silkworm (*Antheraea assamensis* Helfer) and its host plants. National Workshop on Vanya Sericulture and Seribiodiversity for Economic Upliftment, 12th-13th March, 2018.