

CENTRAL MUGA ERI RESEARCH AND TRAINING INSTITUTE, CENTRAL SILK BOARD, MINISTRY OF TEXTILES, GOVT OF INDIA, LAHDOIGARH, JORHAT, ASSAM-785700

LIST OF SCIENTIFIC PUBLICATIONS: 2021-22 (with Impact factor/ NAAS rating)

- 1) Devi, V., Atique, M.M., Raju, A., Upreti, G., **Jigyasu, D.K.**, Yadav, J.K., Singh, S., Kar, R., Singh, M. (2021). Mercury transportation dynamics in the Ganga Alluvial Plain, India: rainwater-groundwater-river water interaction study from hotspot region. *International Journal of Environmental Science and Technology* <https://doi.org/10.1007/s13762-021-03334-x> (IF=3.083; NAAS=8.86)
- 2) Gupta, A.K., Kumar, P., Rathore, A.C., Kumar, P., Kaushal, R., Islam, S., Yadav, D.D., **Jigyasu, D.K.**, Mehta, H. (2021). Soil and water conservation techniques based land degradation neutrality: a need-based solution for degraded lands in Indian perspective. *Current Science*, 121(10), 1343-1347. doi: 10.18520/cs/v121/i10/1343-1347. IF= 1.102; NAAS=7.10)
- 3) Jalaja S. Kumar, Amit Kumar, Dharmender Kumar Jigyasu and **Aftab Ahmad Shabnam** (2021). Prioritizing Sericulture through Agroforestry intervention in North East India. Accepted for publication in Indian Silk under Article ID-DA00102.
- 4) Krishna Kumar Yadav, Santhana Krishnan, Neha Gupta, Shiv Prasad, Mohammed A. Amin, Marina M.S. Cabral-Pinto, Gulshan Kumar Sharma, Riadh Marzouki, Byong-Hun Jeon, Sandeep Kumar, Neeraja Singh, **Amit Kumar**, Shahabaldin Rezania, Saiful Islam (2022). A review on the evaluation of renewable bioenergy potential for sustainable development: Bright future in energy practice in India, *ACS Sustainable Chemistry & Engineering*, American Chemical Society. (IF =8.1; NAAS Score = 14.2)
- 5) **Kumar A**, Kumar A, Kumar M and Bhat JA (2022) Editorial: Greenhouse Gas Emissions and Terrestrial Ecosystems. *Front. Environ. Sci.* 10:834444. (IF =4.5; NAAS Score = 10.58)
- 6) Kumar, Amit; S.N., Vinodakumar; Tamuly, Borsha; Krishna, Gopal; Rai, Ashish; Shabnum, Aftab A.; Jigyasu, Dharmendra K.; Luikham, Reeta; Hazarika, Urmimala; Ahmed, Siddique A. (2021). Assessment of Nutritional Status of the Acidic Soils of Manipur Vanya Sericulture: Levels and Spatial Distributions, *Journal of Soil Salinity and Water Quality*, 13, 2, 204-213, 2021, *Indian Society of Soil Salinity and Water Quality*. (IF =NA; NAAS Score = 4.94)
- 7) **Mahesh, D.S.**, Arunkumar, K.P., Kumar, A., Shabnam, A.A., Luikham, R. and Vijayakumari, K.M. (2021). Leafhopper (*Empoasca flavosrens* Fabricius): A Major Pest of

Castor Affecting Ericulture in Northeast India. *Biological Forum – An International Journal*, 13(3): 617-620. (**NAAS rating: 5.11**).

- 8) **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**).
- 9) Malyan, S.K.; Singh, O.; Kumar, A.; Anand, G.; Singh, R.; Singh, S.; Yu, Z.; Kumar, J.; Fagodiya, R.K.; **Kumar, A.** (2022). Greenhouse Gases Trade-Off from Ponds: An Overview of Emission Process and Their Driving Factors. *Water*, 14, 970. (**IF =3.1; NAAS Score =9.1**)
- 10) Manickam, Jayakumar; Udayarpillai, Surendran; Pushpanathan, Raja; **Amit, Kumar**; Venkatramanan, Senapath (2021). A review of heavy metals accumulation pathways, sources and management in soils, *Arabian Journal of Geosciences*, 14, 2156, Springer. (**IF =1.82; NAAS Score =7.83**)
- 11) Marwein R, Singh S, Maharana J, Kumar S, **Arunkumar KP**, Velmurugan N and Chikkaputtaiah C (2021). Transcriptome-wide analysis of North-East Indian rice cultivars in response to Bipolaris oryzae infection revealed the importance of early response to the pathogen in suppressing the disease progression. *Gene*. 809:146049. doi: 10.1016/j.gene.2021.146049. (**Impact factor: 3.68; NAAS Score =9.69**)
- 12) Mondal Raju, K Madhurya, Prosanta Saha, Sanjib Chattopadhyay, Sreya Antony, **Amit Kumar**, Sovan Roy, Debraj Roy (2021). Expression profile, transcriptional and post-transcriptional regulation of genes involved in hydrogen sulphide metabolism connecting the balance between development and stress adaptation in plants: a data-mining bioinformatics approach. *Plant Biology*, 1, 23, Wiley. (**IF =3.08; NAAS Score = 9.08**)
- 13) Mondal, Raju; **Kumar, Amit**; Chattopadhyay, Sanjib Kumar (2021). Structural property, molecular regulation and functional diversity of Glutamine Synthetase in higher plants: a data-mining bioinformatics approach, *The Plant Journal*, 10.1111/tpj.15536, Wiley. (**IF =6.41; NAAS Score =12.42**)
- 14) Mondal, Raju; **Kumar, Amit**; **Shabnam, Aftab**; Chaturvedi, Ashish (2022). Elucidation of molecular and physiological mechanism addressing integrated omic approaches for heavy metal stress tolerance in crops, *Crop and Pasture Science*, *CSIRO PUBLISHING* (Accepted). (**IF =2.3; NAAS Score = 8.3**)

- 15) 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). Recent trends in Seri-Biosciences: Its prospects in modern Sericulture. *The Pharma Innovation Journal*, 11(1): 604-611. (**NAAS rating: 5.23**).
- 16) Rajan R, Chunduri AR, Siripurapu P, Satti AB, Kottakota SK, Marupilla B, Arunkumar KP* and Mamillapalli A (2021) DFMO feeding lowers polyamine levels and causes developmental defects in the silkworm *Bombyx mori*. *Journal of Asia-Pacific Entomology* 25: 101835. (**Impact factor: 1.303; NAAS Score =7.30**)
- 17) Roy Dinata, Singh Subadas, Talukdar, S, Tamuly B, and Maji S. (2021). Studies on morphological character and polyphenism of *Melanitis leda* (Satyrinae: Nymphalidae) in Brahmaputra valley of Assam, India. *Ecology Environment and Conservation*. (**NAAS: 6.45, IF 0.45**).
- 18) Singh, P., Yadav, J.K., **Jigyasu, D.K.**, Singh, S., Kumar, N., Singh, I.B., Singh, M. (2021). Biotite as a geoindicator of rare earth element contamination in Gomati River Basin, Ganga Alluvial Plain, northern India. *Environmental Monitoring Assessment*, 193, 361. <https://doi.org/10.1007/s10661-021-09105-y> (**IF=2.513; NAAS=8.513**)
- 19) Srinivasaraghavan A, KPS Kushwaha, **Vijay N**, Shrishti Lingwal and Ram Niwas (2021). Status of legumoviruses infecting mungbean and urdbean in Tarai region of India. *The Pharma Innovation Journal*. SP-10(12): 188-194. (**NAAS:5.23**)
- 20) Srinivasaraghavan A., **N. Vijay** and Ram Niwas (2021) Evaluation Of Insecticides And Botanical Extracts For The Management Of Whitefly (*Bemisia Tabaci*) - Vector Of Yellow Mosaic Disease Of Urdbean. *J. Exp. Zool. India*. Vol. 24, No. 2, pp. 1835-1838. (**NAAS:5.25**)
- 21) Subadas Singh, T. James Keisa, DK Jigyasu, Reeta Luikham and Jalaja S. Kumar (2021) *Nesolynx thymus*: a biocontrol agent to control uzify in muga ecosystem. *Indian Silk*, Vo 12 (old 60) No. 2, Pp. 17-19.
- 22) Subharani, S., Debaraj, Y and VijayaKumari, K.M. Impact of abiotic factors on the seasonal incidence of major insect pest of *Quercus serrata* Thunb., primary food plant of oak tasar silkworm, *Antheraea proylei* J. in Manipur, India. Accepted in *Annals of Plant Sciences*, (2022).
- 23) Subharani, S., Ponnuvel, K.M., Debaraj, Y and VijayaKumari, K.M. Sodium hypochlorite: A boon to protect oak tasar silkworms against tiger band disease, Accepted in *Indian Silk*, (2022).
- 24) T. James Keisa, Aftab Ahmad Shabnam, Vijay N and Palash Datta (2021). Resham Krishi Mela. *Indian Silk*, 11(59-5):41.

- 25) Thakur, Tarun Kumar; Patel, Digvish Kumar; Thakur, Anita; Kumar, Anirudh; Bhat, Jahangeer A.; Bijalwan, Arvind; Kumar, Amit; Dobriyal, Manmohan; Kumar, Munesh; **Kumar, Amit** (2021). Biomass production assessment in a protected area of dry tropical forest ecosystem of India: A Field to satellite observation approach, *Frontiers in Environmental Science*, 10.3389/fenvs.2021.757976, Frontiers. (**IF =4.9; NAAS Score = 10.58**)
- 26) सूरज पाल, धर्मेन्द्र जिज्ञासु और जलजा एस कुमार (2021). उत्तर प्रदेश में एरी अनुसंधान विस्तार कार्यक्रम का प्रभाव. *Indian Silk*, 11(59-5):44-46.

Books:

1. Kumar, A., Kumar, A., Bhat, J. A., Kumar, M., eds. (2022). Greenhouse Gas Emissions and Terrestrial Ecosystems. Lausanne: Frontiers Media SA. Pp: 1-113 (ISBN 978-2-88974-656-9).

Book Chapters

1. Mina, Usha; Kumar, Amit; Chaturvedi, Ashish K.; Kumar, Pramod (2021); Climate Change and Plant Diversity: Threats and Opportunities Climate Change and the Microbiome, Sustenance of the Ecosphere, 10.1007/978-3-030-76863-8_20, 2021, Springer
2. Subrahmanyam G., Kumar A., Luikham R., Kumar J.S., Yadav A.N. (2021) Global Scenario of Soil Microbiome Research: Current Trends and Future Prospects. In: Yadav A.N. (eds) Soil Microbiomes for Sustainable Agriculture. Sustainable Development and Biodiversity, vol 27. Springer, Cham. https://doi.org/10.1007/978-3-030-73507-4_18

Booklets:

1. Jigyasu DK, Kumar A, Shabnam AA, Vijayakumari KM. (2022). Kesseru nursery raising techniques and management. CMERTI, CSB, Lahdoigarh, Jorhat Assam, Booklet (03): 1-12.
2. Mahesh D.S., Arun Kumar K.P. and K.M. Vijaya Kumari (2022). Eri Chawki Rearing Practices. CMERTI, CSB, Lahdoigarh, Jorhat Assam, Booklet (01): 1-37.
3. Subadas Singh, T. James Keisa, D.K. Jigyasu, Reeta Luikham, Vijayakumari K.M. (2022). Package of practices for Uzi fly Management in Muga ecosystem. CMERTI, CSB, Lahdoigarh, Jorhat Assam, Booklet (02): 1-22.

Technical Bulletin:

1. Jigyasu DK, Kumar A, Shabnam AA, Singh S, Vijayakumari KM. (2021). Ready reckoner for abatement of petroleum affects on Muga fields. CMERTI, CSB, Lahdoigarh, Jorhat Assam, *Bulletin* (02): 1-6.
2. Kumar A, Shabnam AA, Sangannavar P, Gogoi DK, Jigyasu DK, Vijayakumari KM. (2021). A ready reckoner for nutrient management in Som (*Persea bombycina*). CMERTI, CSB, Lahdoigarh, Jorhat Assam, *Bulletin* (01): 1-6.

3. Subadas Singh, Vijay N., D.K. Jigyasu, T. James Keisa, Reeta Luikham (2022). Solar ELD light traps- an efficient technology to control insect pests. CMERTI, CSB, Lahdoigarh, Jorhat Assam, *Bulletin* (03): 1-6.