

Name : Dr. Kaberi Mahanta
Designation : Scientist
Department : Soil Science
Institute : Assam Agricultural University, Jorhat, Assam
Date of Birth : 20/01/1970
Sex : Female

Education details:

SL No	Institution Place	Degree Awarded	Year	Field of study
1	College of Agriculture, Assam Agricultural University, Jorhat	Bsc (Agri)	1993	Soil Science as elective
2	Assam Agricultural University, Jorhat	M.Sc (Agri)	1995	Soil Science (Soil Chemistry)
3	Assam Agricultural University, Jorhat	Ph. D. (Agri.)	2010	Soil Science (Soil Microbiology)

Employment Details:

Sl. No.	Institution Place	Position	From (Date)	To (date)
1.	Assam Agriculture University – Horticulture Research Station, Kahikuchi, Guwahati - 781017	Senior Scientist	01.01.23	Till date
2.	Assam Agriculture University – Horticulture Research Station, Kahikuchi, Guwahati - 781017	Scientist	05/12/2021	31.12.22
3.	Department of Soil Science, College of Agriculture, Assam Agricultural University, Jorhat - 13	Assistant Professor	01/04/2018	04/12/2021
4.	AICRP on Weed Management, College of Agriculture, Assam Agricultural University, Jorhat – 13	Scientist (Soil)	04.02.2014	31.03.2018
5.	AICRP on Integrated Farming System,, College of Agriculture, Assam Agricultural University, Jorhat – 13	Scientist (Soil)	12.07.2011	03.02.2014

Membership Professional /Scientific Bodies:

Professional /Scientific Body	Membership acquired during the year (O/L/H)*	Continuing membership (L/H)*
Indian Society of Soil Science	2009	O
Indian Society of Soil Science and Land Use Planning	2011	L
Crop and Weed Science Society of West Bengal	2012	L
Association of Microbiologists of India	2010	L
Soil Conservation Society of India.	2016	L
Indian Society of Weed Science	2017	L
Indian Association of Hill Farming	2017	L
Academy of Natural Resource Conservation and Management	2020	L
Society for Scientific Development in Agriculture and Technology (SSDAT)	2023	L
Society for Biotic and Environmental Research Today	2022	L
Academy for Advancement of Agricultural Sciences	2024	L

IV). Honors/Awards:

1. Lead paper presentation on “*Productivity enhancement and soil health improvement in rice–wheat system through efficient weed management practices*” authored by **K. Mahanta**, J. Deka, I.C. Barua, N.C. Deka and D.J. Rajkhowa in 26th National Conference “Natural Resource Management for Climate Smart Sustainable Agriculture” 11-13 September 2017, College of Post Graduate Studies, Umiam (Barapani), Meghalaya, org. by Academy of Natural Resource Conservation and Management (ANRCM) Lucknow, UP.
2. Best oral Paper Award on “*Long-term effect of fertilizer and herbicides on soil properties and productivity of rice-rice system in rainfed lowland ecosystem under the subtropical region of eastern Himalayas, India*” authored by **K. Mahanta**, D.J. Rajkhowa, M.J. Konwar, R.K. Parit, and D. Sonowal in the International web Conference on Resource Management and Biodiversity Conservation to Achieve Sustainable Development Goals on Sep 11-12, 2020, College of Post Graduate Studies, Umiam (Barapani), Meghalaya, org. by Academy of Natural Resource Conservation and Management (ANRCM) Lucknow, UP.
3. Best oral Paper Award on “*Effect of tillage practices on some microbial characteristics in acid soils of Eastern Himalayan Region*” authored by **K. Mahanta**, J. Deka, D.J. Rajkhowa, M.J. Konwar, R.K. Parit, and D. Sonowal in the 2nd Asian Web Conference on Managing Hill Resource and Diversities for Zero Hunger and climate Resilience, on Feb. 12-13, 2021, org. by Soil Conservation Society of India, New Delhi.
4. Best oral Paper Award on “*Degradation pattern of herbicides in acid soils of Assam*” authored by “**K. Mahanta**, J. Deka, D. J. Rajkhowa, M.J. Konwar, R.K.Parit, and D. Sonowal” in the 4th International Conference on Global Approaches in Natural

Resource Management for Climate Smart Agriculture (GNRSA – 2021) during Pandemic Era of COVID – 19, on Feb. 26 – 28, 2021.

5. Best oral Paper Award on “*Effects of Pyrazosulfuron - ethyl application on Soil Enzyme Activities under rice - rice sequence in Eastern Himalayan Region, India*” authored by **Kaberi Mahanta**, J. Deka, D. K. Patgiri, N. Baruah, D. J. Rajkhowa and H. Verma in the 2nd International Web-conference of Academy of Natural Resource Conservation and Management, Lucknow (UP), INDIA on Smart Agriculture for Resource Conservation and Ecological Stability on October 29-31, 2021, org. by Academy of Natural Resource Conservation and Management (ANRCM) Lucknow, UP.
6. Best oral Paper Award on “*Bioremediation of Metribuzin by bacterial consortia from polluted soils of Assam*” authored by **Kaberi Mahanta**, J. Deka, B. K. Medhi, D. J. Rajkhowa and Harendra Verma in 3rd International Web-Conference on Natural Resource Management for Global Food Security and Sustainable Development Goals during December 2-3, 2022 org. by Academy of Natural Resource Conservation and Management (ANRCM) Lucknow, UP.
7. Best oral Paper Award on “*Degradation pattern of herbicides in acid soils of Assam*” authored by **Kaberi Mahanta**, J. Deka, D. J. Rajkhowa and Harendra Verma in VIIth International Conference in Hybrid Mode on Global Research Initiatives for Sustainable Agriculture & Allied Sciences (GRISAAS-2022) during 21–23 November, 2022 at Birsa Agricultural University, Ranchi, Jarkhand, India org. by ASTHA FOUNDATION, MEERUT (UTTAR PRADESH) INDIA.
8. Best oral Paper Award on “*Influence of Pyrazosulfuron - ethyl Application on Soil Microflora under rice - rice sequences in Eastern Himalayan Region, India*” authored by **K. Mahanta**, J. Deka, D. J. Rajkhowa and H. Verma in IVth International Conference on ICAAAS-2022 held during 12-14 June 2022 at Himachal Pradesh University, Summer Hill, Shimla, H.P., India org. by Society for Scientific Development in Agriculture and Technology and Society for Scientific Development in Agriculture and Technology.
9. Eminent Scientist Award, 4th Int. Conference on Innovations to Transform Agriculture, Horticulture & Allied Sectors, Indian Society of Agriculture and Horticulture Development (ISAHRD), 21 - 23 June, 2023.
10. Outstanding Achievement Award, ICAAAS - 2023, 10 - 16 July, 2023. Society for Scientific Development in Agriculture and Technology
11. Excellence in Research Award, ICAAAS - 2024, 15 - 20 July, 2024. Society for Scientific Development in Agriculture and Technology.
12. Best paper Award, Indian phytopathological Society, Women Scientist in Plant Health Management for Sustainable Development Goals, 22 – 23 Dec., 2023

Publications:

Sl. No.	Reader	No.
1	International	12
2	National	9

Bulletin:

1. VERMICOMPOSTING Process and Advantages. 2023.

2. Asamatulya rasayanik saror byaboharor dwara hua bhumii swastha khoti ari iyar pora pora tranor upai(31.03. 2024). Seema Bhagowati, Kaberi Mahanta, Krittika bharadwaj and Subangshi Borah.
3. Bibhinna saswar babe unumudito jibanusaror nam, pariman aru prayog padhati(31.03. 2024). Seema Bhagowati, Kaberi Mahanta, Subangshi Borah and Krittika bharadwaj
4. Joibik kitnasak aru bibhinya saswat iyar prayug(31.03. 2024). Seema Bhagowati, , Kaberi Mahanta, Krittika bharadwaj and Subangshi Borah.
5. Kesusar Prastut pranali (31.03. 2024). Seema Bhagowati, , Krittika bharadwaj, Subangshi Borah and Kaberi Mahanta.
6. Planstikore Toiari kom kharasi seuj grehot matir samaswa aru tar pratikar(31.03. 2024). Seema Bhagowati, , Subangshi Borah, Krittika Bharadwaj and Kaberi Mahanta.
7. Training Manual on Soil Nutrient Management for different Trees and Crops in the Agroforestry Systems (January, 2024). Seema Bhagowati, Samiran Pathak, Kusum Kumar Deka, Kaberi Mahanta.
8. Training Manual on Boundary and Bund Plantations of Agroforestry System (January, 2024). Seema Bhagowati, Samiran Pathak, Kusum Kumar Deka, Kaberi Mahanta.
9. Extension Bulletins on Land Use Management Under Agroforestry System (January, 2024). Seema Bhagowati, Samiran Pathak, Kusum Kumar Deka, Kaberi Mahanta.
10. Extension Bulletins on Agroforestry System and Soil Nutrient Build Up (January, 2024). Seema Bhagowati, Samiran Pathak, Kusum Kumar Deka, Kaberi Mahanta.
- 11.

Publication details:

Sl. No.	Title of Paper	Authors	Reference of journal	NAA S	Year
1.	Variations in soil enzyme activities and microbial biomass carbon following herbicide	Rajat Kumar Parit, Kaberi Mahanta, Dipankar Sonowal and Seema Bhagowati	Journal of Natural Resource Conservation and Management 5: (2), pp 145-156,		2025
2.	EFFECT OF TILLAGE AND HERBICIDE (PRETILACHLOR) APPLICATION ON SOIL BIOLOGICAL	Dipankar Sonowal, Kaberi Mahanta, Anjuma Gayan, Dhruba Jyoti Nath, Britan Rahman, Lolesh Pegu, Anirban Saikia and Sanchita Brahma	Plant Archives 25: (2), pp. 2168-2174 e-ISSN:2581-6063 (online), ISSN:0972-5210	5.59	2025

3.	EFFECT OF TILLAGE AND HERBICIDE (PRETILACHLOR) APPLICATION ON PHYSICO-CHEMICAL PROPERTIES OF SOIL IN WINTER RICE	Dipankar Sonowal, Kaberi Mahanta, Anjuma Gayan, Dhruvajoti Nath, Khagen Kurmi, Britan Rahman, Lolesh Pegu and Sanchita Brahma	Plant Archives Vol. 25, No. 1, 2025 pp. 498-502 DOI Url : https://doi.org/10.51470/PLANTARCHIVES.2025.v25.no.1.074	5.59	2025
4.	Year-round growth potential and moisture stress tolerance of	Rangappa K, Rajkhowa D, Layek J, Das A, Saikia US, Mahanta K, Sarma AK	). <i>Frontiers in Sustainable Food Systems</i> (1, 15)	10.7	2023
5.	Residue and soil dissipation kinetics of chlorantraniliprole	Kaberi Mahanta Pranaba Nanda Bhattacharyya Anjan Kumar Sharma	Environmental Monitoring Assessment 105	9.0	2023
6.	Biochar as Soil Amendment in Climate-Smart	Pranaba Nanda Bhattacharyya, Sosanka Protim Sandilya, Bhaskar	24 p. 135-158. https://doi.org/10.1007/s42729-024-	9.9	2024
7.	Effect of herbicides on weed dynamics, soil fertility, energetics and productivity of upland rice in an acidic subtropical soil of the Eastern Himalayas	Rajkhowa, Dipjyoti, Mahanta, Kaberi Kumar, Manoj, Das, Anup, Sharma, Anjan, Rangappa Krisnappa & Uday Sankar Saikia	Archives of Agronomy and Soil Science, (1), 1 – 17. doi.org/10.1080/03650340.2022.2164571		2023
8.	Long Term Cultivation Effect on Soil Health Inside Poly Houses Under Sub-Tropical Condition of North East India	. Kaberi Mahanta , R. Yendrembam, D. Nath, A. Baishya, M. C. Talukder, A. K. Sarma and D. J. Rajkhowa	Int.J.Curr.Microbio l. App.Sci (2020) 9(3): 1648-1658		2020
9.	Soil Organic Carbon Stock as Affected by Different Tillage Practices under Rice-Mustard Cropping System	Rajat Kumar Parit, K. Mahanta , P. K. Bharteey, H. Khanikar and P. K. Maurya	International Journal of Plant & Soil Science 32(2): 78-84, Article no.IJPSS.55211 ISSN: 2320-7035		2020

10.	Biowaste Utilization for Improving Soil Health and Crop Productivity in North Eastern India	Manoj-Kumar, D. J. Rajkhowa, K. Mahanta , B.C. Verma, B.U. Choudhury, K.K. Rao, Kirti Saurabh and Rajiv Rakshit	Research Biotica, 2(0) : 00-00		2020
11.	Changes in carbon pools and microbial activities of soil under conservation agriculture: A review	Rajat Kumar Parit, Kaberi Mahanta , Prem Kumar Bharteey and Shyamal Kishore Bordoloi	The Pharma Innovation Journal 8(10): 178-187		2019
12.	Bioconversion of agricultural waste and its efficient utilization in the hilly ecosystem of North East India.	Rajkhowa, D.J., Sarma, A.K., Bhattacharya, P.N. and Mahanta, K.	Interational Journal of Recycling of Organic Waste in Agriculture Doi.org/10.1007/s40093 – 019 – 0253 – y 10.1016/j.tplants.2017.05.001		2019
13.	Metribuzin dissipation pattern in soil and its residue in soil and chilli	Kaberi Mahanta , A. Sarma and J. Deka	Indian Journal of Weed Science 50(4): 405–407		2018
14.	Long term application of herbicides on soil microbial demography in rice –rice cropping sequence of North-East India.	Mahanta, K. , Dutta, P., Nath, D.J., Deka, J., Barua, I.C., Deka, and Sarma, A.K.	Indian Journal of Weed Science 49(4): 317–323.		2017
15.	Effect of vermicompost on greengram productivity and soil health under hilly ecosystem of NE	Rajkhowa D.J., Sarma, A., Mahanta, K. , Saikia, U. and Krishnappa,	<i>Journal of environmental biology</i> 38 (1); 15-19		2016
16.	Diversity and Distribution of Earthworms in different Soil habitat of Assam, North-East India, an Indo-Burma	D.J. Rajkhowa, P.N. Bhattacharyya A. Sarma and K. Mahanta	<i>Proc. Natl. Academy of Sciences India Section B: Biological science</i> 85(2):389-396		2015

17.	Isolation and evaluation of native cellulose degrading microorganisms for efficient bioconversion of weed biomass and	K.Mahanta , D.K. Jha, D.J.Rajkhowa and Manoj Kumar	<i>Journal of Environmental Biology</i> 35 (4):721-725		2014
18.	Nitrogen mineralization from rice straw as influenced by organic and inorganic	D.J.Rajkhowa, K.Mahanta , M.Kumar and A.K.Sarma	<i>Agrochimica</i> 58 (2):103-113		2014
19.	Microbial enrichment of vermicompost prepared from different plant biomasses and their effect on rice (<i>Oryza sativa</i> L.) growth and soil fertility	K. Mahanta , D. K. Jha , D. J. Rajkhowa & Manoj-Kumar	Biological Agriculture & Horticulture: An International Journal for Sustainable Production		2012
20.	Effect of cellulolytic bio-inoculants and their co-inoculation with earthworm on the	K.Mahanta , D.K.Jha and D.J.Rajkhowa	<i>Journal of Crop and Weed</i> 8(1):47-51		2012
21.	Nutritional Status of Vermicompost Produced from Weed Biomass and Rice Straw as influenced by Earthworm species and	Mahanta, Rajkhowa, K. and Jha,D.K.(2009)	Indian J, Weed Sci.41(3 & 4) : 211 – 215.		2009
22.	Effect of vermicompost and levels of fertilizer on Greengram	D.J.Rajkhowa, M. Saikia and K. M. Rajkhowa	<i>Legume Research</i> 26 (1):63-65		2003
23.	Effect of vermicompost with and without fertilizer on green gram	D.J.Rajkhowa, M. Saikia and K. M. Rajkhowa	<i>Legume Research</i>		2002
24.	Effect of vermicompost on greengarm nutrition	D.J.Rajkhowa, A.K.Gogoi, R.Kanadali, K.M.Rajkhowa	<i>J. Indian Soc. Soil Science</i> 48 (1):207-208		2000

Professional Experiences and Training / Workshop relevant to the project:

Management	Title of course/program	Duration		Place	Organization
		From (date)	To (date)		
1.	Soil Health	25.09.22	27.09.22	On line	Academy of Natural

	Management: Concepts and Practices				Resource Conservation and Management, Lucknow, U.P.
2.	“Creating awareness about Intellectual Property Rights protection for the start-Ups and entrepreneur in Agri-horti sectors”	26.03.21	27.03.21	On line	College of Horticulture and Forestry, Central Agricultural University (Imphal), Pasighat, Arunachal Pradesh, Institutional Development Plan of National Agricultural Higher Education Project
3.	Molecular Biology in Plant Pathogenesis and Disease	09.03.2021	16.03.2021	Department of Plant Pathology, AAU, Jorhat - 13	NAHEP
4.	Statistical Analysis using SPSS, Theory & Practical: A Beginners Module	27.02.2021	04.03.2021	Online	Research Vidya
5.	Integrating gender concerns in agricultural research and extension for improving livelihood of farm women	15.12.2020	19.12.2020	ICAR-CENTRAL INSTITUTE FOR WOMEN IN AGRICULTURE, BHUBANESWAR	ICAR
6.	Advances in Omics of Host- Rhizobacteria- Pathogen interaction and sustainable plant and soil health management.	19.11.2019	.28.11.2019	UASD, Dharwad, Karnataka-580005	ICAR
7.	Conservation Agriculture for	19.08.2015	08.09.2015	ICAR Research	ICAR

	Enhancing Resource Use Efficiency and Arresting Land Degradation .			Complex for NEH Region, Umiam, Meghalaya	
8.	Management of Soil Health: Challenges and Opportunities	29.09.14	19.10.2014	Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P.	ICAR
9.	Herbicide Residue: Review of Research cum –Training Workshop	11.11.2014	17.11.2014	Directorate of Weed Science Research, Jabalpur	ICAR
10.	Application of Remote Sensing and GIS in Land Resource Studies towards Land Use Planning	23.04.2013	13.5.2013	NBSS & LUP (ICAR) Regional Centre Jorhat	ICAR
11.	Attended workshop on Strategy for Harnessing Fish Production Potentialities in Flood Affected areas of Assam	30.08.2012	31.08.2012	AAU, Jorhat	DEE, AAU, Jorhat and Zonal Project Directorate Zone-III, Umiam, Meghalaya

Seminar/Conference attended during the assessment period:

Sl. No.	Title of seminar/ conference	Duration		Place	Organized by	Whether oral/poster presentation or attended	Title of paper presented
		From (date)	To (date)				
1.	National Sem. on Biochemical biotechnological Research Approaches for Bio – resource management of North East India Towards Sustainable Rural Development	11-11 - 2011	12-11 - 2011	BNCA, Biswanath Chariali, Assam AAU	DBT India and AAU	oral	Quality improvement in vermicompost produced from different plant biomass through plant growth promoting Microorganisms and their effect on rice productivity and soil health. Mahanta K
2.	25 th Asia Pacific Weed Science Society Conference	13.10.15	16.10.15	PJT State Agricultural University , Rajendra nagar , Hyderabad	ISWS & Professor Joysankar Telangana State Agricultural University, Hyderabad	Oral	<i>Long term effect of herbicides on soil properties in rice –rice cropping system.</i> by Mahanta K. , Deka, J., Borah,N., Deka, N.C., Borua, I.C. and Rajkhowa ,D.J. Proc.(vol.-II).pp – 130.
3.	National Seminar on Climate change and its impacts on agriculture and allied sectors.	13.11.15		Asian Institute of Technology, Guwahati	NABARD& Asian Institute of Technology, Guwahati	Oral	Soil health management under changing climatic scenario by Mahanta, K. pp. - 40
4.	National Seminar on Climate change and its impacts on agriculture and allied sectors.	13.11.15		Asian Institute of Technology, Guwahati	NABARD& Asian Institute of Technology, Guwahati	Oral (Lead Paper)	Climate Change in North East India: Issues and strategies for adaptation and mitigation. Rajkhowa, D.J., Sarma, A.K.

							and Mahanta, K.. pp – 5.
5.	<i>Biennial Conference on Doubling Farmers' Income by 2022: The Role of Weed Science.</i>	01-03 – 17	03-03 – 17	MPUAT, Udaipur, Rajasthan	Indian Society of Weed Science & Maharana Pratap Agricultural University and Technology, Udaipur, Rajasthan	Oral	Persistence and dissipation of pretilachlor in soil and rice plant under conservation agriculture system in Assam. – Mahanta , Kaberi and Deka ,Jayanta .pp – 286.
6.	<i>Biennial Conference on Doubling Farmers' Income by 2022: The Role of Weed Science.</i>	01-03 – 17	03-03 – 17	MPUAT, Udaipur, Rajasthan	Indian Society of Weed Science & Maharana Pratap Agricultural University and Technology, Udaipur, Rajasthan	Oral	Weed Management in Potato. - Deka, J., Borua, I.C. Mahanta K. , and Deka, N.C. Proc., pp. 54.
7.	National Seminar on - Nutrients and pollutants in soil-plant-animal-human Continuum for sustaining soil, food and nutritional security -way forward	09-06-17	10-06-17	Lake Hall, BCKV, Kalyani, Bidhan Chandra Krishi Viswavidyalaya	Bidhan Chandra Krishi Viswavidyalaya	Oral	Long term effect of nutrient and weed management practices on soil health improvement and productivity enhancement in rice-rice system by Mahanta K. and Deka, J. Proc..pp. -
8.	National Seminar on - Nutrients and pollutants in soil-plant-animal-human Continuum for sustaining soil, food	09-06-17	10-06-17	Lake Hall, BCKV, Kalyani, Bidhan Chandra	Bidhan Chandra Krishi Viswavidyalaya	Oral	Quality enhancement in rice through bio – fortification in eastern Himalayan region. Baishya, L.K., Sarkar, D., Mahanta, K. ,and

	and nutritional security – way forward			Krishi Viswavidyalaya			Rajkhowa ,D.J..Proc. pp – 8.
9.	26 th National Conference Natural Resource Management for Climate Smart Sustainable Agriculture	11-09-17	13-09-17	College of Post Graduate Studies, Umiam (Barapani), Meghalaya.	Soil Conservation society of India and College of Post Graduate Studies, Umiam.	Lead paper	Lead paper titled Productivity enhancement and soil health improvement in rice – wheat system through efficient weed management practices Mahanta, K. , Deka, J., Baruah, I.C., Deka, N.C. and Rajkhowa, D.J., Proc., pp - 222.
10.	National Seminar on “Smart Farming for Enhancing Input Use efficiency, Income and Environmental Security (SFEIES-2017).	19-09-17	21-09-17	ICAR Research Complex, Umiam, Meghalaya.	Indian Association of Hill Farming & ICAR	Oral	Long term effect of herbicides and nutrient management practices on soil microbe, enzyme activity and herbicide residue build up in rice – rice system by Mahanta K. , Deka, J, and Dutta, P., Proc. pp – 32.
11.	National Seminar on “Farmer First for Conserving Soil and Water Resources in North Eastern Region (FFCSWR-2017) .	09-02-17	11-02-17	Guwahati, Assam.		Oral	Soil and Water conservation options for Hill Agriculture by Rajkhowa, D.J., Mahanta, K. and Ngachan , S.V. Proc., pp. -
12.	International Conference on Natural Resource Management for food security and rural livelihoods	10-02-15	15-02-15	New Delhi, India		oral	Tillage, Intercropping and Residue management effects on productivity, soil carbon storage and fertility in maize – rapeseed cropping system. Rajkhowa, D.J., Das, A., Ngachan, S.V., Sarma, A.K., Kumar, A.,

							Krishnappa, R., Mahanta, K. , Saikia, U.S. and Pradhan ,R. Proc., pp - 74
13.	25 th Asia Pacific Weed Science Society Conference	13.10.15	16.10.15	PJT State Agricultural University , Rajendra nagar , Hyderabad	ISWS & Professor Joysankar Telangana State Agricultural University, Hyderabad	Oral	Characterizing weed flora, shifts and nesting capacity of habitats in deep water rice areas of Assam. Borua, I.C., Deka, J., Mahanta, K. , Devi, M. and Sarmah, R., Proc., pp -70.
14.	25 th Asia Pacific Weed Science Society Conference	13.10.15	16.10.15	PJT State Agricultural University , Rajendra nagar , Hyderabad	ISWS & Professor Joysankar Telangana State Agricultural University, Hyderabad		Weed shift, soil health and crop productivity in rice-rice sequence in relation to long term herbicide use. Deka, J., Borua, I.C. , Borah,N., Mahanta K. , Deka, N.C., and Rajkhowa ,D.J. Proc. pp – 53.
15.	International Conference on Climate Change, Biodiversity and Sustainable Agriculture (ICBSA - 2018) Jorhat , Assam ,India	13.12.2018	16.12.2018	AAU, Jorhat - 13, Assam, India	AAU and Prof. H.S. Srivastava Foundation For Science, Lucknow Uttar Pradesh, India	Oral	Mahanta,K. , Deka ,J., Parit ,R.K., and Sharma ,A.K. (2018) Conservation Agriculture – as a way to mitigate Climate Change vis - a - vis to sustain soil health. Proc. Pp – 86.
16.	. 27 th National Conference of Soil Conservation Society of India (SCSI) Jorhat – 13, , Assam ,India	25.10.2018	27.10.2018	AAU, Jorhat - 13, Assam, India	AAU and Soil Conservation Society of India, NewDelhi, India	Oral	Mahanta,K. , Deka ,J., Parit ,R.K., Gayan , A. , Sharma , A.K. and Rajkhowa , D.J. (2018) Soil microflora in rice soils of North East India as

							influenced by pretilachlor application
17.	ISWS Golden Jubilee International Conference on “Weed and Society : Challenges and Oppurtunities” .ICAR – Directorate of Weed Research, Jabalpur, India	21.11.2018	24.11.2018	Jabalpur, India	Directorate of Weed Reasearch, Jabalpur and Indian Society of Weed Science.	Oral	Mahanta , K., Deka , J. and Barua ,I.C. (2018) Mitigation of herbicide residues through efficient bacterial consortia.pp. 118.
18.	27 th National Conference of Soil Conservation Society of India (SCSI) Jorhat – 13, , Assam ,India	25.10.2018	27.10.2018	AAU, Jorhat - 13, Assam, India	AAU and Soil Conservation Society of India, New Delhi, Indiaew Delhi, India		Mahanta , K., Deka , J. and Rajkhowa, D.J.(2018) Mobility of commonly used herbicides with respect to soil properties.pp. – 92.
19.	27 th National Conference of Soil Conservation Society of India (SCSI) Jorhat – 13, , Assam ,India	25.10.2018	27.10.2018	AAU, Jorhat - 13, Assam, India	AAU and Soil Conservation Society of India, New Delhi, India	Poster	Dutta, P., Mahanta, K. and Deka, P (2018) Soil Biological health under long term application of herbicide in rice-rice cropping sequence in acid soils of Assam.pp. – 10.
20.	27 th National Conference of Soil Conservation Society of India (SCSI) Jorhat – 13, , Assam ,India	25.10.2018	27.10.2018	AAU, Jorhat - 13, Assam, India	AAU and Soil Conservation Society of India, New Delhi, India	Poster	Deb Berma , N., Mahanta ,K. , Nath , D.J. and Baishya, 2018) A.Soil microbial community in rice – rice Sequence after long term practice of Integrated Nutrient Management. pp. 16.
21.	International Conference on Climate	13.12.2018	16.12.2018	AAU, Jorhat - 13, Assam,	AAU	Poster	Yendrembam ,R., Mahanta , K., Nath ,D.J., Baishya, A. ,

	Change, Biodiversity and Sustainable Agriculture (ICCBSA - 2018) Jorhat , Assam ,India			India			Talukder , M. and Sarma A.K. (2018) Soil Biological Qualities under Poly house Cultivation for Sustaining Soil Health.
22.	27 th National Conference of Soil Conservation Society of India (SCSI) Jorhat – 13, , Assam ,India	25.10.2018	27.10.2018	AAU, Jorhat - 13, Assam, India	AAU and Soil Conservation Society of India, New Delhi, India	Poster	Parit R.K., Mahanta K. and Barua I.C.(2018) Flooding and management of soil erosion in Brahmaputra valley zone of Assam
23.	. ISWS Golden Jubilee International Conference on “Weed and Society : Challenges and Oppurtunities” .ICAR – Directorate of Weed Research, Jabalpur, India.	21.11.2018	24.11.2018	Jabalpur, India	Directorate of Weed Reasearch, Jabalpur and Indian Society of Weed Science.	Oral	Barua ,I.C. , Deka , J. and Mahanta , K. (2018) A taxonomic assessment of asteracean weed acmella in India
24.	ISWS Golden Jubilee International Conference on “Weed and Society : Challenges and Oppurtunities” .ICAR – Directorate of Weed Research, Jabalpur, India.	21.11.2018	24.11.2018	Jabalpur, India	DWR, Jabalpur	Oral	Rajkhowa ,D.J. , Mahanta , K., and Baishya, L.(2018) Status and strategies of weed management in hill ecosystems of NE Region of India
25.	National Citrus Meet, 10 – 12 January, 2020, Biswanath College of	10 – 01 - 2020	12 – 01 - 2020,	Biswanath College of Agriculture,		Oral	Mahanta, K. ; Rajkhowa, D.J.;R.K. Parit and D.Sonowal (2020) Soil health management

	Agriculture, Biswanath Chariali, Assam.			Biswanath Chariali, Assam			for enhancing citrus productivity – some options.
26.	National Citrus Meet, 10 – 12 January, 2020, Biswanath College of Agriculture, Biswanath Chariali, Assam.	10 – 01 - 2020	12 – 01 - 2020,	Biswanath College of Agriculture, Biswanath Chariali, Assam		Oral	Rajkhowa, D.J.; Seyja, A., Mahanta, K. , Yanthan, A.W.; Sangma, C.B.K. and Sharma, Romen. Enhancing citrus production in Nagaland – Issues and Strategies
27.	International Web-conference on ‘Resource Management and Biodiversity Conservation to Achieve Sustainable Development Goals’ to be held on 11th and 12th September, 2020 on	11.09.20	12.09.20	Zoom platform	Academy of Natural Resource Conservation and Management (ANRCM) Lucknow, UP	Oral	K. Mahanta , D. J. Rajkhowa, M.J. Konwar, R.K. Parit and D. Sonowal. Long term effect of fertilizer and herbicides on soil properties and productivity of rice-rice system in rainfed lowland ecosystem under subtropical region of eastern Himalayas, India
28.	International Web Conference on Perspective on Agricultural and Applied Sciences in COVID-19 Scenario (PAAS-2020)	04.10.20.	06.10.20	Zoom platform	Agricultural & Environmental Technology Development Society (AETDS), U.S. Nagar, Uttarakhand, India; Bangladesh Agricultural Research Institute (BARI), Gazipur,	Oral	K. Mahanta , D. J. Rajkhowa, M.J. Konwar, R.K. Paritand D. Sonowal. Bioremediation of Butachlor by bacterial consortia from polluted soils of Assam

					Bangladesh; Shobhit Institute of Engineering & Technology, Meer ut, India; Soils, Water and Environmental Res. Inst, 29. (SWERI), Agr30.iculture Research Center, (ARC) Giza, Egypt, Rajiv Gandhi Central University, Itanagar, and Corteva agriscience		
29.	2 nd International Web- conference on Smart Agriculture for Resource Conservation and Ecological Stability	29.10.21	31.10.21	Zoom platform	Academy of Natural Resource Conservation and Management, Lucknow (UP), INDIA	Oral	Kaberi Mahanta , J. Deka, D. K. Patgiri, N. Baruah, D. J. Rajkhowa and H. Verma. Effects of Pyrazosulfuron - ethyl application on Soil Enzyme Activities under rice - rice sequence in Eastern Himalayan Region, India.
30.	National web- conference on Sustainable Soil and Water Management for Bio-diversity	29.12.20	30.12.20	Zoom platform	Soil Conservation Society of India, New Delhi	Poster	K. Mahanta , M.J. Konwar, R.K.Parit and D.Sonowal. Impact of Tillage Practices on Soil Organic Carbon build up under Conservation Agriculture

	Conservation, Food Security and Climate Resilience”						System
	International Web-conference on Global Research Initiatives for Sustainable Agriculture & Allied Sciences (GRISAAS-2020)	28.12.20	30.12.20	Zoom platform	Astha Foundation Headquarter, Meerut (U.P.) India.	Oral	K. Mahanta , M.J. Konwar, R.K.Parit and D.Sonowal. Bioremediation of Quizalofop Ethyl by bacterial consortia from polluted soils of Assam
31.	2nd Asian Web Conference on 'Managing Hill Resources and Diversities for Zero Hunger and Climate Resilience'	12.02.21	13.02.21	Zoom platform	Soil Conservation Society of India (SCSI), Meghalaya Chapter, Barapani, India <i>In collaboration with</i> Central Agricultural University, Imphal, India	Oral	K. Mahanta , J. Deka, D. J. Rajkhowa, M.J. Konwar, R.K. Parit and D. Sonowal. Effect of tillage practices on some microbial characteristics in acid soils of Eastern Himalayan Region
32.	3 rd International Conference on “Global Initiative in Agricultural, Forestry and Applied Sciences for Food Security, Environmental Safety and Sustainable Development	17.10.21	18.10.21	Zoom platform	Agricultural & Environmental Technology Development Society (AETDS), U.S. Nagar, Uttarakhand, India; Shri Guru	Oral	K. MAHANTA , J.DEKA. D.J.RAJKHOWA, H.VERMA, S. Dutta and G.G.Kandali. Effect of Tillage practices and Pendimethalin on Soil Biological Properties and its Dissipation Kinetics in an Acid Inceptisol under Subtropical Region

	(GIAFAS-2021)”				Ram Rai University, Dehra dun, Uttarakhand, Indi a; Department of Agronomy, Sher- e-Bangla Agricultural University, Dhaka, Bangladesh; Soil and Water Research Institute (SWRI), Karaj, Iran; Depar tment of Soil Science, Faculty of Agro-Based Industry, UMK, Malaysia; College of Horticulture and Gardening, 33.Yangtze University, P.R. China and Cortev a agriscience at Shri Guru Ram Rai University, Dehra dun, Uttarakhand,		
--	----------------	--	--	--	---	--	--

					India		
33.	85 th Annual Convention of the Indian Society of Soil Science	16.11.21	19.11.21	Palli Siksha Bhavana, Institute of Agriculture, Visva-Bharati (Central University), Sriniketan–731236, Birbhum (District), West Bengal	Zoom platform	Oral	K. MAHANTA , J.DEKA , D.J.RAJKHOWA , H.VERMA , B.DEKA, M. DUTTA. A Laboratory study on Degradation pattern of Herbicides in Acid soils of Assam as influenced by moisture content, Farm Yard Manure and Nitrogen Content
34.	Fifth International Agronomy Congress on “Agri Innovations to Combat Food and Nutrition Challenges.	23.11.21	27.11.21	PJTSAU, Hyderabad, India	The Indian Society of Agronomy, NewDelhi, India	Poster	Kaberi Mahanta , J.DEKA, D.J.RAJKHOWA, H. VERMA. Effect of Tillage practices and Pendimethalin on Soil Enzymes and its Dissipation Kinetics in an Acid Inceptisol under Subtropical Region
35.	30th National Web Conference On “Soil and Water Management Technologies for Climate Resilience, Agricultural and Environmental Sustainability”	14.12.21	16.12.21	Odisha University of Agriculture & Technology, Bhubaneswar , Odisha, India	Soil Conservation Society of India New Delhi & Odisha University of Agriculture & Technology, Bhubaneswar, Odisha, India	Oral	K. Mahanta , Jayanta Deka, D. J. Rajkhowa, Harendra Verma, Bhabesh Gogoi and Danish Tamuli. Effect of Soil depths and tillage practices on microbial population count in soils of Eastern Himalayan Region
36.	Biotechnological Initiatives for Climate	07.01.22	09.01.22	Department of	Department of Agricultural	Oral	K. Mahanta, Jayanta Deka, D. J. Rajkhowa and Harendra Verma

	Resilient Agriculture-2022 (BICRA-2022) (In hybrid mode)			Agricultural Biotechnology & Molecular Biology Dr. RAJENDRA PRASAD CENTRAL AGRICULTURAL UNIVERSITY PUSA, SAMASTIPUR-848125, BIHAR, INDIA	Biotechnology & Molecular Biology Dr. RAJENDRA PRASAD CENTRAL AGRICULTURAL UNIVERSITY PUSA, SAMASTIPUR-848125, BIHAR, INDIA & NAHEP		Effect of Soil depths and tillage practices on biological properties in soils of Eastern Himalayan Region, India
37.	IV th International Conference in Hybrid Mode on Innovative and Current Advances in Agriculture and Allied Sciences (ICAAAS-2022)	12.06.22	14.06.22	HPU, Summer Hill, Shimla (H.P.) India	Society for Scientific Development in Agriculture and Technology, Meerut, (U.P.) India	Oral	K. Mahanta , J. Deka, D. J. Rajkhowa and H. Verma Influence of Pyrazusulfuron - ethyl Application on Soil Microflora under rice - rice sequences in Eastern Himalayan Region, India
38.	Biotic Science Congress, 2022 International Conference on Recent Advances in Agricultural, Biological	08.08.22	09.08.22	Nagaon, Assam, India	Society for Biotic & Environmental Research (SBER), Tripura Nongong College (Autonomous), Naga	Oral	Kaberi Mahanta, J. Deka, D. J. Rajkhowa and H. Verma Effect of Tillage Practices and Pendimethalin on Soil Microflora and Dissipation Kinetics of the Herbicide in an

	and Applied Sciences Research				on,Assam		Acid Inceptisol under Subtropical Region
39.	VII th International Conference in Hybrid Mode on Global Research Initiatives for Sustainable Agriculture & Allied Sciences (GRISAAS-2022)	21.11.22	23.11.22	Birsa Agricultural University, Ranchi, Jharkhand, India.	Astha Foundation, Meerut (Uttar Pradesh) India	Oral	Kaberi Mahanta, J. Deka, D. J. Rajkhowa and Harendra Verma Degradation pattern of herbicides in acid soils of Assam
40.	3rd International Web-Conference of ANRCM on Natural Resource Management for Global Food Security and Sustainable Development Goals (3ICANRCM)	02.12.22.	03.12.22	Zoom platform	Academy of Natural Resource Conservation and Management (ANRCM) Lucknow, India & KSN University of Agricultural and Horticultural Sciences, Shivamogga, India <i>Corporate sponsorer:</i> BioAtlantis India Pvt. Ltd	Oral	Kaberi Mahanta, J. Deka, B. K. Medhi, D. J. Rajkhowa and Harendra Verma Bioremediation of Metribuzin by bacterial consortia from polluted soils of Assam
41	“Women Scientists in Plant Health Management for Sustainable Development Goals” (December 22-23,			AAU, Jorhat	Indian Phytopathological Society	oral	Kaberi Mahanta, Kusum K. Deka, Seema Bhagowati, Naseema Rahman. "Agroforestry – A Provisioning Ecosystem Services for a Better Environment Under Changing

	2023) Organized						Climate"
42	International Conference on "Advancement in Plant Health Research- Retrospect & Prospect"7-8th December, 2023			VISVA BHARATI, West Bengal, India	Society for Biotic and Environmental Research, Tripura, India	Oral	Kaberi Mahanta, Kusum K. Deka, Naseema Rahman, DJ. Rajkhowa.Agroforestry: An Effective Tool to Improve Soil Quality and Food Security under Changing Climate
43	International Conference on "Next-Gen Preparedness for Food Security and Environmental Sustainability"			AAU, Jorhat	Assam Rice Research Institute, Titabar.	Oral	Kaberi Mahanta, Kusum K. Deka, Seema Bhagowati, DJ. Rajkhowa.Enriched Organic Manure – A tool to address soil health deterioration under Changing Climate
44.	International Hybrid Conference on Bioeconomy, 2023	11.10.2023	12.10.2023	IIT, Guwahati	Centre for environment, IIT, Guwahati	Oral	Kaberi Mahanta, Kusum K. Deka, BK. medhi, DJ.Rajkhowa.Converting Biowaste into Wealth: Issues and Strategies under changing climate with particular reference to N.E. India
45	International Hybrid Conference on Bioeconomy, 2023	11.10.2023	12.10.2023	IIT, Guwahati	Centre for environment, IIT, Guwahati	Oral	Kaberi Mahanta, Kusum K. Deka, , Seema Bhagowati, Naseema Rahman, DJ. Rajkhowa.Soil Ecosystem Services Its Role in the Circular Bioeconomy By Sustainable Conservation and Restoration of Biodiversity in Agriculture
46	National Conference on “Rebooting the hill	08.06.2023	09.06.2023	ICAR Research	ICAR Research Complex for	Oral	Kaberi Mahanta, Kusum K. Deka, , Seema Bhagowati,

	farming for future sustainability and livelihood” (RHFFSL 2023)			Complex for NEH Region, Umiam, Meghalaya	NEH Region, Umiam, Meghalaya		Sibani Das. Evidence for the Impacts of Agroforestry on Soil Properties
47	National Conference on NATURAL RESOURCE CONSERVATION AND MANAGEMENT FOR AGRICULTURAL AND ENVIRONMENTAL SUSTAINABILITY	06.12.2023	08.12.2023	ICAR-NBFGR Campus, Lucknow, UP	Academy of Natural Resource Conservation and Management, Lucknow (U.P.)	Oral	Kaberi Mahanta, Kusum K. Deka, , Seema Bhagowati, DJ. Rajkhowa. Agroforestry: Role to Boost Circular Bioeconomy and to Tackle Climate Change
48	VIII th International GLOBAL RESEARCH INITIATIVES FOR SUSTAINABLE AGRICULTURE & ALLIED SCIENCES (GRISAAS-2023)	18.12.2023	20.12.2023	MEERUT (UTTAR PRADESH) INDIA	ASTHA FOUNDATION, MEERUT (UTTAR PRADESH) INDIA	Oral	Kaberi Mahanta, Kusum K. Deka, BK. medhi, DJ. Rajkhowa. “Agroforestry: A Way Forward to Climate Change Adaptation and Mitigation through Carbon Sequestration”
49	Vth International Conference in Hybrid Mode on INNOVATIVE AND CURRENT ADVANCES IN AGRICULTURE AND ALLIED SCIENCES (ICAAAS-2023)	10.07.2023	16.07.2023	MEERUT (U.P.) INDIA	SOCIETY FOR SCIENTIFIC DEVELOPMENT IN AGRICULTURE & TECHNOLOGY, MEERUT (U.P.) INDIA	Oral	Kaberi Mahanta, Kusum K. Deka, Harendra Verma. Evidence for the Impacts of Agroforestry on Soil Biological Properties
50	6th International	15 July,	20 July,	MEERUT	SOCIETY FOR	Oral	Kaberi Mahanta, Kusum

	Conference in Hybrid Mode on INNOVATIVE AND CURRENT ADVANCES IN AGRICULTURE AND ALLIED SCIENCES ICAAAS-2024	2024	2024	(U.P.) INDIA	SCIENTIFIC DEVELOPMENT IN AGRICULTURE & TECHNOLOGY and ASTHA FOUNDATION, MEERUT (U.P.) INDIA		Deka, Seema Bhagowati, Naseema Rehman and P.K. Mahanta Soil characteristics under some sub humid dominant agroforestry systems at the Foot Hills of Eastern Himalayan Region, India
51	National Conference on Agro-ecological Basis of Agroforestry: Interaction, Innovation and Invention 18-19 June, 2024	18 - June, 2024	19 June, 2024	Jhansi 284003 [U.P.] India	Indian Society of Agroforestry [ISAF] in association with ICAR-Central Agroforestry Research Institute Jhansi 284003 [U.P.] India	Oral	Kaberi Mahanta, Kusum Deka, Seema Bhagowati and Samiran Pathak Soil Ecosystem Services and agricultural sustainability in Subhumid Single and Mixed Agroforestry Systems at the Foot Hills of Eastern Himalayan Region, India
52	1 st International Conference on Natural Resource Management and Environmental Sustainability for Future Generations, 20 th April, 2024, Hisar, Haryana					Oral	Kaberi Mahanta, Kusum Deka, Naseema Rahman1, Seema Bhagowati and Pradip Mahanta Soil Organic Carbon Fractions and Carbon Stocks in Different Agroforestry system under subtropical regions of Himalayan Foot Hills

Other publications:

Title of publication	Type of publication
A.K. Sharma, D.J.Rajkhowa, K. Mahanta , U. S. Saikia and A, Kumar Efficient recycling of farm waste – significance in climate resilient agriculture, Proc. Natl. Sem. on Emerging challenges and Prospective strategies for Hill agriculture in 2050 held at ICAR RC for NEH Region, Nagaland centre, on 23-25 th Jan. 2014	Proc. paper
D.J.Rajkhowa, L.K.Baishya, K.Mahanta and S.V. Ngachan (2016) Climate Change and Agriculture in Hill Ecosystem- issues and strategies, Stakeholder Meet on Agriculture development and Agromet advisory services in Nagaland, 21st Nov pp26-31	Review Article
D.J.Rajkhowa, A.K.Sarma, K.Mahanta and S.V.Ngachan (2016). Options for Soil and Water conservation in the context of climate change for sustainable hill agriculture. National Seminar on Integrating Agri-horticultural and allied research for food and nutritional security in the era of Global Climatic Disruption, pp 114-122	Review Article
D.J.Rajkhowa, K.Mahanta and S.V.Ngachan (2016). Soil and Water conservation options for Hill Agriculture. . National Seminar on “Farmer First for Conserving Soil and Water Resources in North Eastern Region (FFCSWR-2017) Feb 09-11, 2017 Guwahati, Assam. (Lead Paper)	Review Article
D.J.Rajkhowa, U. S. Saikia, K. Mahanta and A.K.Sarma (2015).Adaptation and mitigation options for agriculture in NEH Region under changing climatic scenario. (In) Souvenir, North eastern Zone Regional Agriculture Fair. Pp 15-20	Review Article
D.J.Rajkhowa, A.das, S.V.Ngachan, a.K.sarma, A.Kumar, R.Krishnappa, K.Mahanta , U.s.Saikia and R. Pradhan (2015).Tillage, intercropping and residue management effects on productivity, soil carbon storage and fertility in maize – rapeseed cropping system. Abstract, International Conf. on Natural Resource Management for food security and Rural livelihoods (oral presentation) 10-13 Feb., at New Delhi, pp 74	Review Article
DJ Rajkhowa, Azeze Seyie, Kaberi Mahanta , Aabon W. Yanthan, Christy BK Sangma and Ph. Romen Sharma (2020) Enhancing Citrus production in Nagaland- Issues and strategies. Souvenir and Abstracts. Development of Citrus in North Eastern Region. National Citrus Meet 2020. Organized by ICAR-CCIR, Nagpur in collaboration with AAU, Jorhat, CAU-Imphal, and ICAR-RC-NEHR, Umiam. Pp. 275-282 (Lead Paper)	Souvenir Article
D.J.Rajkhowa, Anup Das, Subhasbabu, K.Mahanta and S.V.Ngachan Water Management for Sustaining Agriculture in Hill Ecosystems – Issues and Strategies. National Seminar on Smart Farming for Enhancing Input Use Efficiency, Income and Environmental Security 19-21 September,,2017	Souvenir Article
Kaberi Mahanta, D. J. Rajkhowa and Harendra Verma <i>Soil Health</i>	E-Journal

<i>Management for Sustainable Crop Production with Special Emphasis on Oilseeds Cultivation in North Eastern Hill Region</i> Vigyan Varta 3(11): 1-5. Dec., 2022	
Kaberi Mahanta & Abu Saleh Nizamuddin Ahmed <i>Weed management in winter vegetable</i> Ghare – Pathare P.N. 4. 1 st Dec., 2022.	E-Journal
Kaberi Mahanta & Abu Saleh Nizamuddin Ahmed Integrated Nutrient Management in Crop foelds. Ghare – Pathare P.N. 2. 16 th Jan., 2023.	E-Journal
Kaberi Mahanta, D. J. Rajkhowa, Manoj Kumar, H. Verma, K. K. Rao and Kirti Saurabh <i>Vermicomposting for Efficient Recycling of Biowastes</i> . Biotica Research Today 2021, Vol 3:6 492 – 496.	E-Journal
Kaberi Mahanta, D.J.Rajkhowa, Harendra Verma and Manoj Kumar <i>Aquaponics- a way forward to urban agriculture, Just Agriculture</i> , Nov. 2021, P.N. 16 – 19.	E-Journal
Impact of Herbicides Used in Agriculture: Benefits and Hazards. Biotica Research Today 2021, Vol 3:11. P.N. 999 – 1001.	E-Journal
Kaberi Mahanta, D.J.Rajkhowa, Harendra Verma and Manoj Kumar <i>PARTHENIUM NICHE UNDER CLIMATE CHANGE SCENARIO</i> . Nature Science. 2021, P.N. 1 – 3.	E-Journal
Kaberi Mahanta & Abu Saleh Nizamuddin Ahmed <i>VERMICOMPOSTING AN EFFICIENT WAY TO RECYCLE BIOWASTE: PROSPECTS IN ASSAM</i> . Nature Science.02, (01): 9 – 15. NOVEMBER 2022.	E-Journal
Kaberi Mahanta, D. J. Rajkhowa and Harendra Verma. <i>Leaching Behavior of Herbicides Concerning Depth and Texture of Soil</i> . Vigyan Varta 2(11): 54-57. Nov., 2021	E-Journal
Mahanta K. and Nizamuddin A. Noxious Parthenium and its Management, Vigyan Varta, Bhubaneswar, Odisha-751001, 01.02.2024	E-Journal
Mahanta K. Kesur dara Pasan sar Prastut [01-01-2024], Ghare Pathare	
Mahanta K. Shasya Utpadanat Jaibik Sarar Gurutta [01-08-2023], Ghare Pathare	
Mahanta K., Swa Nirbahi Krishit shasyar paripusti, August 22,2017,Dainik Janambhumi	Popular article
Mahanta K., Parthenium and its management , August 25,2017,The Assam Tribune.	Popular article
Mahanta K., Apatrinar pora kesu sar,September 12,2017,Dainik Janambhumi.	Popular article
Mahanta K., Bisakta Apatreen - Parthenium, October 13, 2017, Dainik Janambhumi.	Popular article
Mahanta K., Matir Urbarata bridhir upay,November 28 2017,Dainik Janambhumi.	Popular article

Mahanta K., Parthenium – a noxious weed, Dainik Janambhumi, 13 th Oct., 2016.	Popular article
Mahanta K., Importance of organic manure in crop production, Dainik Janambhumi, Nov., 2016.	Popular article
Mahanta K., Weed Management in Vegetable crops, Dainik Janambhumi, 8 th Dec., 2016.	
Mahanta K., Integrated Crop Nutrition Management and its importance., Dainik Janambhumi, 8 th Apr., 2015.	Popular article
Mahanta K., Preparation and Application of Vermicompost in crop field, Dainik Janambhumi, 23 rd Apr., 2015.	
Mahanta K., Importance of Organic Manure in Crop Nutrition, Dainik Janambhumi, 23 rd Apr., 2015.	

Book Chapters

Rajkhowa D J. and Mahanta, K..	2019	Doubling Farmer's Income- Issues and strategies for the North eastern Hill Ecosystems. (In) Souvenir cum Book "Technological Interventions in Organic Farming for doubling farmer's income" R.K.Avasthe, Ashis Yadav and R. Sing edtd	Joint Director, ICAR Research Complex for NEH Region, Sikkim Centre	107-111
D.J.Rajkhowa, A.Das, Subhasbabu, K.Mahanta and S.V.Ngachan	2017	Water Management for Sustaining Agriculture in Hill Ecosystems – Issues and Strategies, Souvenir, National Seminar on Smart Farming for Enhancing Input Use Efficiency, Income and Environmental Security (SFEIES), Sept. 19-21 st held at ICAR RC for NEH Region, Umiam, Meghalaya	Director, ICAR Research Complex for NEH Region, Umiam, Meghalaya	35-37
D.J.Rajkhowa and K.Mahanta	2013	Production of Vermicompost from Biowaste Vis-à-vis their use for increasing Productivity of Underutilized Fruit Crops (In) Developing the	Today and Tomorrow's Printers and Publishers, New Delhi	493-501

		potential of underutilized horticultural crops of hill regions, edt. By N.Prakash, S.S.Roy, P.K.Sharma and S.V.Ngachan		
D.J.Rajkhowa, L.K.Baishya, K.Mahanta and S.V. Ngachan	2016	Climate Change and Agriculture in Hill Ecosystem- issues and strategies, Souvenir, Stakeholder Meet on Agriculture development and Agromet advisory services in Nagaland, 21st Nov	Joint Director, ICAR Research Complex for NEH Region, Nagaland Centre	26-31
D.J.Rajkhowa, A.K.Sarma, K.Mahanta and S.V.Ngachan	2016	Options for soil and water conservation in the context of climate change for sustainable hill agriculture. Souvenir, National seminar on Integrating Agri-horticultural & allied research for food and nutritional security in the era of global climate disruption,	Joint Director, ICAR Research Complex for NEH Region, Manipur Centre	114-122
D.J.Rajkhowa, K.Mahanta and M.Saikia.	2015	Weeds and their management in Rice. (<i>In</i>) Integrated Soil and Water Resource Management for Livelihood and Environmental Security.D.J.Rajkhowa, A.Das, S.V.Ngachan, A.K.Sikka and M.Lyngdoh edtd.	Director, ICAR Research Complex for NEH Region, Umiam, Meghalaya	422-445
D.J.Rajkhowa, M.Saikia, K.Mahanta , A.K.Sikka and S.V.Ngachan	2015	Efficient water management for increasing rice productivity in the North Eastern region of India.(<i>In</i>) Integrated Soil and Water Resource Management for Livelihood and Environmental	Director, ICAR Research Complex for NEH Region, Umiam, Meghalaya	201-218

		Security.D.J.Rajkhowa, A.Das, S.V.Ngachan, A.K.Sikka and M.Lyngdoh edtd		
D.Bhattacharyya, S. R.Borah, K.Mahanta and D.J.Rajkhowa	2015	Acid soils and their Management.(<i>In</i>) Integrated Soil and Water Resource Management for Livelihood and Environmental Security.D.J.Rajkhowa, A.Das, S.V.Ngachan, a.K.Sikka and M.Lyngdohedtd	Director, ICAR Research Complex for NEH Region, Umiam, Meghalaya	35-56
Nandita Baruah, B.K.Medhi, K.Mahanta and D.J.Rajkhowa	2015	Soil-less Agriculture: A Modern Technique in 21 st Century. (<i>In</i>) Integrated Soil and Water Resource Management for Livelihood and Environmental Security.D.J.Rajkhowa, A.Das, S.V.Ngachan, A.K.Sikka and M.Lyngdohedtd.	Director, ICAR Research Complex for NEH Region, Umiam, Meghalaya	145-151
Kaberi Mahanta, Anshuman Kohli, DJ. Rajkhowa, BK. Medhi and Ranjita Bezbaruah	2023	Resource conservation strategies in sustaining agriculture with special reference 15 to NE India] [Book : Sustainable Interventions for Resource Conservation, Climate Resilience and Natural Farming] (2023)	Academy of Natural Resource Conservation and Management ISBN NO.: 978-81-957292-5- 8	15 - 21
Kaberi Mahanta and DJ. Rajkhowa	2023	Soil Carbon Sequestrations through Conservation Agriculture under Changing Climate] [Book : Advances in Water Management under Climate Change] (2023)	CRC Press is an imprint of Tavlör & Francis Group, LLC ISBN: 978-1-032- 39851-8 (hbk) ISBN: 978-1-032-	189 - 209

			39853-2 (pbk) ISBN: 978-1-003-35167-2 (ebk) DOI: 10.1201/9781003351672	
D.J.Rajkhowa, S.V.Ngachan, K.Mahanta and U.S.Saikia	2015	Agriculture in NEH Region under Climate Change Scenarion: Issues and Strategies . (In)Technological options for Climate Resilient Hill Agriculture S.V.Ngachan, R.K. Singh, U.S.Saikia, B.K. sethy and D.J.Rajkhowa edtd	Director, ICAR Research Complex for NEH Region, Umiam, Meghalaya	15-23
Mahanta, K. , Bora, N ,Deka, J. and Barua, I.C.	2019	Herbicide Residues in Rice Based Cropping System in Assam. In Environmental Chemistry for a sustainable world vol. 12 (Herbicide Residue Research in India). (Ed. Sobha Sondhia, Partha P. Choudhury & A R Sharma). Pp. 305 – 324. Print ISBN:978 – 981 – 13 – 1037 – 9 Online ISBN: 978 – 981 – 13 – 1037 – 6. Springer Nature Singapore Pvt. Ltd. DOI: Org./10.1007/978 – 981 – 13 – 1038 – 6.	Directorate of Weed Research, Jabalpur.	305 - 324

Book

1. Agroforestry Systems of Hill Zones, Upper & Central Brahmaputra Zones of Assam - A Pictorial Treatise (2023)
2. Thirty Five Years of Agroforestry Research in Assam !984 - 2020 (2023)
3. Sustainable Interventions Towards Resource Conservation and Natural Farming (2023)

Involvement in extension training & radio talk :

Particulars of involvement	
Involved in imparting training on entrepreneur ship development programme on Scientific Tea Cultivation for the small tea growers of tea community of Assam at at Dept. of Tea Husbandry & Technology, AAU, Jorhat on 12-17 Sept., 2016	
Involved in imparting training programme on production of vermicompost at AAU, Jorhat on 19 th Sept., 26 th Sept. and 3 rd Oct, 2016 ,College of Home Science Jorhat – 13 in collaboration with SNEHPAD (NGO).	
Involved in imparting training programme on ‘Husbandry Practices & processing of Organic Tea at Dept. of Tea Husbandry & Technology, AAU, Jorhat on 23-28 Oct., 2016	
Involved in imparting training on vermi compost in the exposure visit of rural woman ,organized by Home Science, Extention component,AAU, Jorhat on 31.10.17	
Involved in imparting training on Commercialization of vermi compost organized by Dept.of Extention and communication management, College of Home Science, AAU, Jorhat on 16.05.17	
Involved in imparting training programme on ‘ Husbandry Practices and Processing of organic tea ’ at Dept. of Tea Husbandry & Technology, AAU, Jorhat on 21-28 Oct, 2017.	
Involved in imparting training programme on media preparation for isolation of Azospirillum (P) on 08.11.17,11.30 am-1.00 pm.	
Involved in imparting training programme on media preparation for isolation of Azotobacter (P) on 08.11.17,02.00 pm-4.30 pm.	
Isolation of Azospirillum from crop rhizosphere (P) on 09.11.17, 09.30 am-1.00 pm.	
Isolation of Azotobacter from crop rhizosphere (P) on 09.11.17, 02.00 pm-4.30 pm	
Micronutrient (Zn) solubilizing bacteria (T) on 10.11.17, 09.30 am- 11.00 am.	
Culture media preparation for isolation of Micronutrient (Zn) solubilizing bacteria (P)) on 10.11.17, 11.00 am- 1.00 pm..	
Isolation of Zn solubilizing Bacteria and setting for invitro tests (P)) on 10.11.17, 2.00 pm- 4.30 pm..	
Involved in imparting training programme on media preparation for isolation of Potash Solubilizing Bacteria (P)) on 10.11.17, 09.30 pm- 11.00 am..	
Quality assessment of mass multiplication of Azospirillum,Azotobacter,ZSB and KSB for biofertilizer production (P)) on 24.11.17, 11.30 am- 1.00 pm.	
Mixing and packaging of mass multiplied Azospirillum,Azotobacter,ZSB and KSB (P)) on 24.11.17, 02.00 pm- 4.30 pm..	
Steps for liquid formulation of Biofertilizers and inoculation of Biofertilizer Microbes for liquid Formulation (P)) on 25.11.17, 02.00 pm- 4.30 pm.	
Involved in imparting training on entrepreneur ship development programme on Scientific Tea Cultivation for the small tea growers of tea community of Assam at at Dept. of Tea Husbandry & Technology, AAU, Jorhat on 12-17 Sept., 2016	
Involved in imparting training programme on production of vermicompost at AAU, Jorhat on 19 th Sept., 26 th Sept. and 3 rd Oct, 2016 ,College of Home Science Jorhat – 13	

in collaboration with SNEHPAD (NGO).	
Involved in imparting training programme on 'Husbandry Practices & processing of Organic Tea at Dept. of Tea Husbandry & Technology, AAU, Jorhat on 23-28 Oct., 2016	
Involved in imparting training in the institutional training prog. on "Tea production Technology for small tea growers" of Udalguri district of Assam on "Method demonstration on preparation of enriched compost and vermicompost from from weed biomass." at dept. of Tea Husbandry and Technology, AAU Jorhat from 28 th Aug to 1 st Sept.2018.	
Involved in imparting training in the institutional training prog. on "Tea production Technology for small tea growers" of of Karbi Anglong district of Assam on "Method demonstration on preparation of enriched compost and vermicompost from from weed biomass." at dept. of Tea Husbandry and Technology, AAU Jorhat from 4 th Sept to 8 th Sept.2018.	
Involved in imparting training in the institutional training prog. on "Tea production Technology for small tea growers" of Tripura on "Method demonstration on preparation of enriched compost and vermicompost from from weed biomass." at dept. of Tea Husbandry and Technology, AAU Jorhat from 22 th Sept to 26 th Sept.2018.	
Involved in imparting training in the institutional training prog. on "Tea production Technology for small tea growers" of Kokrajhar district of Assam on "Method demonstration on preparation of enriched compost and vermicompost from from weed biomass." at dept. of Tea Husbandry and Technology, AAU Jorhat from 22 th Sept to 26 th Sept.2018.	
Involved in imparting training in the institutional training prog. on "Tea production Technology for small tea growers" of of Tinsukia district of Assam on "Method demonstration on preparation of enriched compost and vermicompost from from weed biomass." at dept. of Tea Husbandry and Technology, AAU Jorhat from 27 th January to 31 st January,2019.	
Involved in imparting training in the institutional training prog. on "Tea production Technology for small tea growers" of of Karbi Anglong district of Assam on "Method demonstration on preparation of enriched compost and vermicompost from from weed biomass." at dept. of Tea Husbandry and Technology, AAU Jorhat from 3 rd February to 7 th February,2019.	
Involved in imparting training in the institutional training prog. on "Tea production Technology for small tea growers" of of Tinsukia district of Assam on "Method demonstration on preparation of enriched compost and vermicompost from from weed biomass." at dept. of Tea Husbandry and Technology, AAU Jorhat from 11 th February to 15 th February,2019.	
Involved in imparting training in the institutional training prog. on "Tea production Technology for small tea growers" of Nagaland on "Method demonstration on preparation of enriched compost and vermicompost from from weed biomass." at dept. of Tea Husbandry and Technology, AAU Jorhat from 18 th Feb. to 22 nd Feb.2018.	
Involved in imparting training in the institutional training prog. on "Tea production	

Technology for small tea growers” of Nagaland on “Method demonstration on preparation of enriched compost and vermicompost from weed biomass.” at dept. of Tea Husbandry and Technology, AAU Jorhat from 25 th Feb. to 1 st March, 2018.	
Training Manual on Tea Production Technology, Dept.of Tea Husbandry and Technology, AAU, Jorhat 13, and Tea Board of India	
Involved in transfer of technology on vermicompost production and use under AICRP on Weed Management(State trial).	
Kaberi Mahanta, Seema Bhagowati, Samiran Pathak and Kusum Kumar Deka Environmental Degradation: Cause and Effect on Earth, Agrigate. 4 (6): 278 – 280, June 2024.	
Kaberi Mahanta, Samiran Pathak & Pradip Mahanta. Environmental Degradation: Cause and Effect on Earth, The Assam Tribune, Friday, June 28, 2024.	
Kaberi Mahanta, Kusum Kumar Deka, Samiran Pathak, and Dalim Pathak Agroforestry: A Tool to Save the Planet. Vigyan Varta, 5 (7): 54 – 58. July, 2024.	
Radio Talk on Discussion onImportance of Soil Testing, All India Radio, Nagaon, Recorded on 02.07.24 Broadcasted on 11.07.24	
Radio Talk on Discussion on Integrated Farming, All India Radio, Jorhat, Broadcasted on 13.02.15	
Radio Talk on Discussion on Weed Control, All India Radio, Jorhat, Broadcasted on 21.09.16	
Radio Talk on discussion on Kechu sar Prastut Pranali, All India Radio, Jorhat, 06.01.17	
Radio Talk on Discussion – Saisa Khetrat Jaibic Sarar Gurutwa, All India Radio, Jorhat, 19.05.17	

*O=Ordinary, L=Life, H=Honorary

TEACHING

Taught undergraduate and post graduate courses on Soil-122 (Agricultural Microbiology), Soil (Elect.)-223(Biofertilizer and Biowaste Management), ELP-420 (Production of Biofertilizer, Biopesticide and Bioagents),Soil-506 (Soil Biology and Biochemistry), Soil-608 (Advances in soil microbiology), Agron-503(Principles and Practices of Weed Management).

Students Guided:

Name of the Student	Regd.No.	Thesis work	Year
Ms. Nandita Debbarma	2012-AMJ-68	Impact of long term Integrated Nutrient Management on Soil Biological and Physico-chemical Properties in rice–rice sequence	2012 - 2014

Ms. Rebati Yendrembam	2013-AMJ-110	Assessment of soil quality under polyhouse cultivation for sustainability	2013 - 2015
Mr Poran Kishore Dutta	2014-AMJ-146	Effect of Long term Herbicide Application in Rice-Rice System on Population Dynamics of Soil Microbes, Enzyme Activity and Soil Carbon Stock	2014 - 2016
Ms. Nilakhi Dutta	2016-AMJ-147	Isolation and screening of cyanobacteria from rice fields	2016 - 2018
Mr Rajat Kumar Parit	2017-AMJ-129	Effect of conservation tillage and herbicide application on soil microbial activity in rice-mustard sequence	2017 - 2019
Mr Dipankar Sonowal	2018-AMJ-123	Effect of tillage and herbicide (Pretilachlor) application on soil biological properties in winter rice	2018 - 2020

- Guided three (3) M.Sc (Agri) students as member of Advisory committee

Name of the Student	Regd.No.	Thesis work	Year
Ms. Smrita Buragohain	2013-AMJ-106	Potassium Solubilization Bacteria : Isolation and characterization	2013 - 2015
Ms. Jimni Phukan	2017-AMJ-28	Effect of plant growth promoting rhizobacteria and weed management in direct – seeded upland rice	2017 - 2019
Ms Sanghamitra Phukan	2017-AMJ-123	Ecological occurrence of Methylophils in phyllosphere of crops	2017 - 2019

- Guided four (4) PhD students in soil science as member of Advisory committee

Name of the Student	Regd.No.	Thesis work	Year
Dr Anjuma Gayan	2011-ADJ-38(i)	Assessment of soil quality indicators under rice ecosystem in Upper Brahmaputra Valley Zone of Assam	2011 - 2015
Dr Pranjit Sutradhar	2012-ADJ-13	Improved farming system technology inclusion into existing farming system for sustainable agriculture	2012 - 2016
Dr Dhrubajyoti Ojah	2013-ADJ-70	Encapsulation of plant growth promoting microbes and their persistence in crops rhizosphere	2013 - 2018
Dr Rupjyoti	2014-ADJ-65	Assessment of carbon footprint in rice – rice cropping system as affected by fertilizer management	2014 - 2019

Borah			
-------	--	--	--

RESEARCH

Involved in research activities like Integrated Farming System, Weed management practices in field crops, vegetables, analysis of herbicide residue build up in soil and water, Agroforestry for livelihood security as adaptation under climate change and conservation agriculture under soil health management and highlighting some major findings as given below.

- Weed causes a 25-65 % loss in productivity in the rice-rice system and warrants the development of sustainable weed management practices. Contributed to the development of **Integrated Weed Management in rice- rice cropping system**. Sequential application of Pyrazosulfuron 25 g ha⁻¹/ pretilachlor 0.75 kg⁻¹ followed by 2, 4-D 0.5 kg⁻¹ provided effective, economic, and sustainable weed management in rice–rice systems. Detail study in relation to the possible effects of herbicides on soil micro-biota showed no deleterious effect on microbial community and enzyme activities such as dehydrogenase, phosphomonoesterase (PMEase), and urease at the recommended dose of herbicides.
- Sustaining and improving soil health is important for realizing higher crop productivity. Long–term study in relation to herbicide application on soil Physico-chemical properties was undertaken in a rice-rice system which revealed improvement in soil macro (N,P, and K) and micro (Zn, Cu, Mn, Fe) nutrient status, improvement in soil organic carbon (SOC) and carbon stock following herbicide and balanced fertilizer use. The bulk density of soil was also reduced significantly indicating improvement in aeration and water holding capacity (WHC).
- Study in relation to the possible negative impact of herbicide on residue (herbicide) buildup in soil and crop is important. As such study in relation to the persistence and dissipation of the recommended herbicides (butachlor and pretilachlor) in rice was undertaken. The results clearly indicated that the degradation of butachlor and pretilachlor followed the first-order kinetics in soil. No butachlor and pretilachlor residue were detected in soil, grain, and straw at harvest of summer and winter rice applied at the recommended rate.
- Evaluation of new herbicides is important as the repeated application of the same herbicide may lead to developing herbicide resistance in weeds. As such, **Pyrazosulfuron-ethyl**, a new herbicide belonging to the sulfonyleurea group on rice – rice sequence was studied for its efficacy for weed control as well its effect on soil health. Results showed that pyrazosulfuron –ethyl provided economic, efficient broad-spectrum weed control in rice. A study undertaken in relation to improvement in soil Physico-chemical properties under the influence of herbicide and nutrient management practices showed significant improvement in available nutrients (N – 285.4 kg ha⁻¹, P₂O₅ - 22.4 kg ha⁻¹, K₂O - 96 kg ha⁻¹) following conjoint use of chemical fertilizer and organic manure. The soil organic carbon (SOC) and carbon stock (CS) in the soil were significantly increased due to organic manure addition for partial nitrogen fertilizer substitution. Water holding capacity (WHC) and porosity were higher in plots receiving a

conjoint application of organic and inorganic manure. There was no significant increase in mean weight diameter.

- Herbicide application may alter **soil microbial population vis-a-vis their activity**. Azotobacter and phosphate-solubilizing bacterial populations in soil are important for their role in nutrient availability. As such we studied the effect of herbicide application on the population of the said microbes. Results revealed a temporary reduction in their population up to the 14th day of application of herbicide after which there is an increasing trend in the azotobacter and phosphate-solubilizing bacterial population. Results further showed the application of organic manure along with fertilizer could ameliorate the temporary inhibition of the population of azotobacter and phosphate-solubilizing bacteria.
- **Conservation Agriculture** is becoming increasingly popular in different countries of the world in view of the fast degradation of natural resources and the emerging problem of climate change. Weed management under conservation agriculture is a major challenge. Contributed to the development of **Integrated Weed Management in Rice-Mustard-Green manure cropping system** under conservation agriculture and studied the effect of **pretilachlor and pendimethalin** on soil enzyme activities. Application of herbicide resulted in inhibition of enzyme activities and the highest inhibition was recorded 15 days after application of the herbicide after which there was an increasing trend and finally declined at the harvest time. Significantly higher enzyme activity has resulted from minimum tillage and direct seeding rice over conventional tillage and transplanted rice. Results also revealed that the surface soil had higher organic carbon content (0.74 %) compared to sub-surface soil and had lower bulk density (1.34 g/cc) indicating improvement in aeration and water holding capacity. The carbon stock at the surface (0-15 cm) soil (14.9 Mg/ha) was higher followed by the soil depth (15 – 30 cm) (13.7Mg/ha) and 30 – 45 cm (12.4Mg/ha). A study in regards to herbicide residues under conservation agriculture revealed the lowest residue of pretilachlor and pendimethalin with the combination of minimum tillage with direct seeding rice over conventional tillage with transplanted rice. No pretilachlor and pendimethalin residue was detected in soil and plant samples at harvest.
- High efficacy, low-dose herbicides are important for environment-friendly and cost-effective weed management programs. However, their possible impact on residue build-up in crops is important before recommending their large-scale use. As such, a study was undertaken to evaluate **the residue level of Metribuzin**, a low dose high efficacy, wide spectrum new herbicide in chili. Results revealed that the metribuzin residue at recommended dose was observed below the detection limit (BDL) from the 45th day of application of metribuzin in chili and half-life recorded with single and double the recommended doses as 3 and 4 days respectively.
- Study on the **Adsorption and Persistence behavior of new herbicide molecules** in the soil is important for developing an eco-friendly weed management program. As such, **Quizalofop –ethyl**, a new post-emergence grass killer was evaluated for its leaching behavior in soil columns in PVC pipes. The results revealed relatively higher residue in the soil column and leachate under light textured soil over the heavy textured soil.

- **Herbicide degradation study** in the soil is important to avoid active residue that may impair soil functions. As such, a number of new herbicide molecules were evaluated for their degradation pattern. The results indicated that the persistence of herbicides in soil varied due to factors like soil texture, structure, soil WHC, soil p^H, soil organic carbon, degradation due to solar energy and soil microbes, and the chemical properties of herbicides.
- **Mitigating the persistence of herbicides** is important to avoid soil contamination. Bioremediation is one of the important methods of mitigating the persistence of herbicides in soil. As such, bioremediation of **quizalofop-ethyl, Butachlor, Pretilachlor, Metribuzin**-new post-emergence herbicides for grassy weed control was undertaken with five (5) bacterial consortia isolated from different polluted locations viz. oil fields, coal fields, brickfields, paper industry, cement industry of Assam along with vermicompost. Results revealed that vermicompost degrades the herbicide molecules within a shorter time period. Similarly, some bacterial isolates and their consortia were effective in degrading herbicide residues with shorter half-lives.
- Weed Biomass is a valuable source of organic carbon and plant nutrients if properly utilized. Such biomass is abundantly available in and around farmland. Therefore, technology for its efficient conversion utilizing earthworms was standardized for the production of quality vermicompost. The study revealed that biomass of weed species like *Ipomoea carnea*, *Eichhornia crassipes*, etc. could be efficiently converted into quality vermicompost within 2-3 months having higher nutrient content (N 1.5 -2.3 %, P 0.8-1.2 % K 0.98 – 1.6 %) and microbial load besides containing other secondary and micronutrients.
- Survey has been done on existing agroforestry systems in some parts of Assam. Collection and evaluation of *Gmelina arborea* germplasm for quality timber production. A management study was carried out on existing agroforestry systems in the station. A growth and development study was carried out on *Bambusa balcooa*, *Bambusa tulda*, *Melocanna baccifera*. Minor station activities like the establishment of a Nursery for QPL (quality planting material), Block plantation of *Tectona grandis*, bamboo plantation, and Multiple cropping in a coconut-based system. A compilation study was done on the basic soil nutrient status of the existing agroforestry systems in the station. For the management of the huge leaf litter produced, a composting unit was set up for the production of quality compost.

EXTENSION

- Actively involved in the transfer of technology in the field of vermicomposting, weed management in crops and cropping systems, management of Alien Invasive Weeds, Soil health management, etc. to the farming community as well as other stakeholders through training, demonstration, lecture as well as print and electronic media.
- Training conducted on boundary plantation, bund plantation, and Silviculture in the agroforestry system.

- Awareness programs conducted on the importance of the Agroforestry system in agriculture, Boundary plantation, Bund plantation, vermicomposting and honey bee rearing.

Sl. No.	Project name		Funding agency	Duration	Total budget (Rs)
1	DBT project on Popularization of Biofertilizer and Biopesticide	Co PI	DBT, India	3 yrs	25,70,998/-
2	Nursery Project under RKVY-QPM Project	PI	RKVY	1yr	2,95,000/