

Judith Mary Lamo

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Current Position

Assistant Professor, Department of Biotechnology, St. Anthony's College, Shillong

Educational Qualifications

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| 2017 | Ph.D.
'Assessment of genetic diversity and species relationship in genus <i>Curcuma L.</i> '
Supervisor: Prof. S. Rama Rao
North-Eastern Hill University |
| 2010 | Course Work
North-Eastern Hill University |
| 2008 | M.Sc. in Biotechnology
St. Anthony's College, North-Eastern Hill University
I Class |
| 2006 | B.Sc. in Biotechnology
St. Anthony' Colege, North-Eastern Hill University
I Class |
| 2003 | HSSLC
Meghalaya Board of School Education
I Class |
| 2001 | SSLC
Meghalaya Board of School Education
I Class |

Achievements/Award

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| 2016 | Best Poster Presentation at the National Seminar on "Inventory, Sustainable Utilization and Conservation of Bioresources" Nagaland University, Lumami, Nagaland; 26-27 February, 2016 |
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2012-2016	DBT Senior Research Fellow
September 2010-March 2012	DBT Junior Research Fellow
2009	Cleared DBT-JRF (BET)
2009	Cleared CSIR-NET-LS
2009	UGC Post-Graduate Scholarship for ST/SC

Work Experience

April, 2021-Till date	Assistant Professor at the Department of Biotechnology, St. Anthony's College, Shillong
October, 2017- April, 2021	(On-lie)Assistant Professor at the Department of Biotechnology, St. Anthony's College, Shillong
August, 2009 to September, 2010	Research Fellow at Regional Center, National Afforestation and Eco-development Board, Government of India, North-Eastern Hill University, Shillong

Ongoing Project

1. "Characterization of *Hedychium* germplasm from Meghalaya" for a period of two years. Total Cost: Rs. 50,000/- (Rupees Fifty thousand only)vide Sanction Letter No. SAC/ALD/165/ARG/2024-07 dated 13.03.2024. [Funded by: Anthonian Research Grant Award].
2. "Network Programme for Enrichment and Update of Database on Genome Related Information for Indian Spermatophyta and Archegoniatae Taxa- Phase II" for a period of 3 years. Total Cost: Rs. 2,22,88,080/- (Rupees Two crores twenty two lakhs eighty eight thousand and eighty only) vide Sanction letter no. BT/PR34491/NDB/39/678/2020 dated 28.10.2021. [Funded by: DBT]

Publications

1. **Lamo, J.M.**, John, L., & Rao, S.R. (2023). Medicinal Plants of North-East India: Biodiversity and Their Ethnomedicinal Values. In Medicinal Plants: Biodiversity, Biotechnology and Conservation (pp. 219-247). Singapore: Springer Nature Singapore.
2. **Lamo J.M.** & Rao S.R.(2023). DNA markers in analysis of genetic diversity of *Curcuma longa* from Meghalaya. *The Nucleus*. <https://doi.org/10.1007/s13237-023-00424-8>.
3. Warlarphih D., Suchiang W., Susngi A.M. & **Lamo J.M.** (2022).Genetic diversity and species relationship of *Hedychium* J. Koenig as revealed by DAMD and ISJ markers. *The Nucleus* 65:359–367.

4. Phukan P., Laskar M.A., Myllemngap B.J. & **Lamo J.M.** (2021). Cytogenetical analysis of *Clitoria ternatea*. *Spectrum: Science and Technology*. <https://doi.org/10.54290/spec/2021.v8.1.0006>.
5. Ahmed J., **Lamo J.M.** & Myllemngap B.J. (2021). Comparative study of active and allosteric interaction in protein kinases. *Spectrum: Science and Technology*. <https://doi.org/10.54290/spec/2021.v8.1.00063>.
6. Satyawada R.R., Wahlang D.R. & **Lamo J.M.** (2020). Molecular and cytogenetical approaches for genetic diversity analysis of wild and cultivated medicinal plant species from north-east india with focus on genus *Curcuma*. In: Khasim S.M., Long C., Thammasiri K., Lutken H. (eds) Medicinal Plants: Biodiversity, Sustainable Utilization and Conservation. Springer, Singapore. https://doi.org/10.1007/978-981-15-1636-8_41.
7. Wahlang, D.R. **Lamo, J.M.**, Goel S. & Rao, S.R. (2019). Karyo-morphological consistency and heterochromatin distribution pattern in diploid and colchitetraploids of *Vigna radiata* and *V. mungo*. *Meta Gene* <http://dx.doi.org/10.1016/j.mgene.2019.100569>.
8. **Lamo, J.M.** & Rao, S.R. (2017). Meiotic behaviour and its implication on species inter-relationship in the genus *Curcuma* (Linnaeus, 1753) (Zingiberaceae). *Comparative Cytogenetics* 11(4): 691-702.
9. **Lamo, J.M.** & Rao, S.R. (2017). Chromosome counts in wild and cultivated species of *Curcuma* Linn. *Cytologia* 82(2): 141-144.
10. **Lamo, J.M.** & Rao, S.R. (2017). Wild Curcumas as genetic resources with medicinal importance. *The NEHU Journal* XV(1): 25-30.
11. **Lamo, J.M.**, Devi, S.P., Devi, K.M., Shamurailatpam, A. & Rao, S.R. (2016). Heterochromatin distribution pattern in aid of understanding plant species inter-relationships. *Electronic Journal of Biology* 12(4): 426-427.
12. **Lamo, J.M.**, Wahlang, D.R. & Rao, S.R. (2016). Comparative analysis of heterochromatin distribution pattern in wild and cultivated species of *Curcuma* L. *Medicinal and Aromatic Plants*. <http://dx.doi.org/10.4172/2167-0412.S3-006>.
13. **Lamo, J.M.**, Hynniewta, M. & Rao, S.R. (2015). Morpho-genetic diversity between and within the species of the genus *Curcuma* L. and its relevance for conservation efforts. In: Biology, Biotechnology and Sustainable Development (H. Choudury ed.). Research India Publications. Pp. 197–207.
14. **Lamo, J.M.** & Satyawada, S.R. (2014). Chromosome counts in two species of *Curcuma* Linnaeus (Zingiberaceae) from North-East India. *Pleione* 8(2): 435–438.
15. Rao, S.R., Kumar, A., Sharma, S.K., **Lamo, J.** & Ojha, A. (2013). Genetic minutiae of some threatened medicinal herbs of Indian Thar desert. In: Advances in Medicinal Plant Research (A. Bohra, A. Bohra & S. Bissa eds.). Agrobios, India. Pp. 29-34.

Abstracts

1. Rao, S.R. and **Lamo, J.M.** (2017). Phylogenetic relationships of the genus *Curcuma* L. based on cytogenetical and molecular inferences. Proceedings at the 2nd World Biotechnology Congress. Sao Paulo, Brazil.
2. Rao, S.R., Anju, S., Devi, K.M. and **Lamo, J.M.** (2016). Heterochromatin banding pattern and its evolutionary implications in horticultural plants of North-East India. Proceedings at the International Conference “The Green Planet- Past, Present and Future”. University of Calcutta.
3. **Lamo J.M.** and Rao, S.R. (2016). Genetic diversity analysis and molecular phylogeny of the genus *Curcuma*. Proceeding at National Conference on “Basic and Applied Researches in plants and Microbes”. Punjabi University, Patiala.
4. Rao, S.R., **Lamo, J.M.** and Lamare, A. (2016). New frontiers of chromosome research and their significance in understanding the diversity of plant genetic resources. Proceedings at the National seminar on “Inventory, sustainable utilization and conservation of bioresources”. Nagaland University, Lumami, Nagaland.
5. **Lamo, J.M.** and Rao, S.R. (2016). Cellular and molecular genetic approaches to understanding species diversity in *Curcuma*. Proceedings at International Conference on “Emerging Biotechnologies”. Kakatiya University, Warangal.
6. **Lamo, J.M.** and Rao, S.R. (2015). Genetic diversity of *Curcuma longa* collections from Meghalaya. Proceedings at the 7th International Symposium on the Family Zingiberaceae “Gingers for Life” organised by The Botanical Garden Organization and Ministry of Natural Resources and Environment held at The Empress Convention Centre, Changmai, Thailand. 17-20 August, 2015.
7. Rao, S.R., **Lamo, J.M.**, Hynniewta, M. and Khedasana, R. (2014). Role of molecular markers in characterisation of horticultural genetic resources of North-east India. Proceedings at the National seminar on “Recent Advances in Biotechnological Research in North East India: Challenges and Prospects”. Tezpur University, Assam.
8. Rao, S.R., Anju, A., Hynniewta, M., Devi, K.M., **Lamo, J.M.** and Lamare, A. (2014). Genetic diversity and molecular phylogenetic analysis of certain horticultural and leguminous species from India with emphasis on North-Eastern region. Proceedings at National conference on “Exploring Basic and Applied Sciences for Next Generation Frontiers”. Lovely Professional University, Punjab.
9. **Lamo, J.M.** and Rao S.R. (2014). Interspecific variations in chromosome numbers of the genus *Curcuma*. Proceedings at National Conference on “Recent Innovation and Future Trends in Biology”: National College, Tiruchirapalli.

10. Rao, S.R., Sharma, S.K. and Lamo, J.M. (2012). Differential climate conditions influences plant genome diversity: Implications and Future challenges. Proceedings in National Seminar on “Climate Change and Sustainable Management of Water Resources”. Gitam University, Visakhapatnam.

Invited Lectures

1. Short term course on “Plant Tissue Culture and Micropopagation: Methods and Applications” organized by Department of Applied Biology, University of Science and Technology, Meghalaya in collaboration with Department of Biotechnology, Gauhati University, Gauhati from March 28th –April 10th 2022. “*Plant tissue culture and the production of industrially important bioactive compounds*”.

Conferences/Seminars/ Webinar Attended

1. Assam Botany Congress (ABC-02) and International Conference on Plant Sciences. Oral Presentation on “Genetic diversity in *Bulbophyllum leopardinum* (Wall.) Lindl.ex Wall. as revealed by DAMD and ISSR markers.” Organized by Botanical Society of Assam, Guwahati and Department of Botany, Cachar College, Silchar Assam held on November 3-5, 2021.
2. Webinar and Workshop on “Protein Purification, Crystallization & Structure Determination” held on August 06, 2021 organised by Tata Memorial Centre-ACTREC, Mumbai and Department of Botany, University of Kashmir, Srinagar.
3. Webinar on “From Biology to Omics” from 10-12 March, 2021 organised by Tata Memorial Centre-ACTREC, Mumbai.
4. National Level Webinar on Gender Equity in College Campuses, held on the 29 June 2021, organized by Women’s Anti Harassment Cell in Collaboration with IQAC, St. Anthony’s College, Shillong.
5. International Webinar on “COVID-19: A big challenge for the scientific community in the 21st century” on 11 September, 2020 organised by the Department of Biochemistry, Lady Keane College, Shillong.
6. International Webinar on ‘Approaches to COVID-19: A big challenge for the scientific community in the 21st century’ organised by Department of Biochemistry, Lady Keane College, Shillong on September 11, 2020.
7. Virtual Conference on ‘Innovation and Recent Trends in Genomic Research’ organized by Department of Biotechnology, Bannari Amman Institute of Technology on July 30-31, 2020.

8. International Webinar on ‘Approaches to COVID-19: Prevention, Therapeutic Strategies & Management’ organised by Department of Biotechnology, Assam University, Silchar on July 30, 2020.
9. Online webinar on ‘Can India Solve its Farmer’s Plight & become Food Bowl of the World?’, organized by Biotechnika Info Labs Pvt Ltd on July 22, 2020.
10. Live Webinar on ‘Grassroots Governance and Contributions of Traditional Institutions in the Management of Covid-19 in Meghalaya’ organized by Department of Political Science under the aegis of Internal Quality Assurance Cell St. Anthony’s College, Shillong, Meghalaya on July 18, 2020.
11. Online webinar on ‘Microbiome - Perceptions And Perspectives’, organized by Biotechnika Info Labs Pvt Ltd on June 27, 2020.
12. National Seminar on “Advances in Structure and Functions of Plants”: Department of Botany, North-Eastern Hill University, Shillong; 30 May, 2018.
13. XXVII Annual Conference of Indian Association for Angiosperm Taxonomy & International Symposium on “Plant Systematics: Priorities and Challenges”: Poster Presentation on “Studies of species relationships of the genus *Curcuma L.*: A cytogenetical and molecular treatise”. University of Delhi, Delhi; 10-12 November, 2017.
14. National Seminar on “Inventory, Sustainable Utilization and Conservation of Bioresources”: Poster Presentation on “Heterochromatin banding and its distribution pattern in the genus *Curcuma*”. Nagaland University, Lumami, Nagaland; 26-27 February, 2016.
15. International Symposium on “The family Zingiberaceae on Gingers for Life”: Poster Presentation on “Genetic diversity of *Curcuma longa* collections from Meghalaya”. Chiang Mai, Thailand; 17-20 August, 2015.

Workshop /Training/Autumn School

1. Training program for North-East region on ‘Gene Cloning, Protein Biochemistry, Structure Biology & Bioinformatics’ organised by Tata Memorial Centre, Advanced Centre for Treatment, Research and Education in Cancer, Kharghar, Navi Mumbai from 13-24 January, 2020.
2. North-East Autumn School on ‘Genetic Analysis of Complex Traits’ organised by Indian Statistical Institute, Kolkata and St. Anthony’s College, Shillong from 5-6 September, 2017.
3. Workshop on “Capacity Building in Effective Management of Intellectual Property Rights (IPRs) in Biotechnology by Universities and Research Institutes in Meghalaya” held at St. Anthony’s College, Shillong. 22-23 September, 2014.

4. Workshop on “Technological empowerment of women through the SoRF scheme of DST in collaboration with NASI” held at North-Eastern Hill University, Shillong. 30 June, 2014.
5. Workshop on “Recent Trends in Genomics and Databases” held at Bioinformatics Centre, North-Eastern Hill University, Shillong. 24-27 September, 2012.
6. Basic C-CAMP Course on Flow Cytometry organized by Centre for Cellular and Molecular Platforms held at National Centre for Biological Sciences, Bangalore, India. 13-16 December, 2011.
7. Job Training in Nazareth Hospital, Shillong as part of B.Sc. Biotechnology Course. 4-10 December, 2003.

Orientation Programme/ Refresher Course/FDP

1. Two – Week Refresher Course in “Life Sciences” organized by Teaching Learning Centre, Ramanujan College, University of Delhi in collaboration with Miranda House, University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from 01 – 15 September, 2021.
2. Two – Week Refresher Course in “Biotechnology & Bioinformatics” organized by UGC-HRDC, North-Eastern Hill University from 23 August – 6 September, 2021.
3. Inter-Disciplinary Online Two-Week Refresher Course/Faculty Development Programme on “Managing Online Classes & Co- creating MOOCS 7.0” organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry Of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching in collaboration with CMS College (Autonomous) Kottayam, Kerala from 05 - 19 August, 2021.
4. Four-Week Induction/Orientation Programme for “Faculty in Universities/Colleges/Institutes of Higher Education” organized by Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from February 11 - March 13, 2021.
5. Orientation Programme on Student Engagement and Neural Mechanisms of Learning held at St. Anthony’s College, Shillong on 7th March, 2020.
6. Orientation Programme organised by St. Anthony’s College, Shillong under the aegis of IQAC, SAC Unit on 20th April, 2018.

Research Interest

Characterization and biodiversity assessment, cellular and molecular cytogenetics and molecular phylogeny.