Name	Design	ation	Date of Birth	Gender		
Punabati Heisnam Assistant I		Professor	rofessor 17 <sup>th</sup> March, 1988 Female			
Name	Dr. Punabati Heisnam					
Designation		Department				
Assistant Professor		Natural Resource Management, College of Horticulture and				
		Forestry, Central Agricultural University, Pasighat, Arunachal				
	Pradesh, India					
Institute/University		Central Agricultural University, Imphal,				
State		District				
Arunachal Pradesh		East Siang				
City		Pasighat				
Address College of Horticulture a Pin: 791102	and Forestry, Central	Agricultural U	University, Pasighat	, Arunachal Pradesh, India.		
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Category		OBC				
Degree awarded	Institution/Place	Year	F	ield of Study		
B.Sc. Agriculture	Garhwal University Uttarakhand	2010	A	All subjects of Agriculture		
M.Sc. Agronomy Central Agricultura University, Imphal		1 2012 All subjects of Major Agro		ll subjects of Major Agronomy		
PhD Agronomy Uttar Banga Krishi		2018 All subjects of Major Agror		ll subjects of Major Agronomy		
	Viswasvidyalaya,					
	Cooch Behar, W.B.					
Employment details						

# **Employment details**

Institute	Designation	From	То	
College of Horticulture and	Teaching Associate	24th August, 2016	13 <sup>th</sup> September, 2018	
Forestry, Central Agricultural	Assistant Professor	14 <sup>th</sup> September, 2018	Till date	
University, Pasighat, Arunachal		_		
Pradesh				

# Awards or honour

1 <sup>st</sup> position in poster presentation	4 <sup>th</sup> International Symposium on Minor Fruits, Medicinal & Aromatic Plants (ISMFM & AP) of "Irrigation water saving technology for minor fruits" under the sub theme "Crop Production Protection Environment and Climate Change" held on 5-6 December 2017 at College of Horticulture and Forestry, CAU, Pasighat, Arunachal Pradesh".
Best Paper Award	National conference of "Growth and Development of vegetables cowpea ( <i>Vigna unguiculata</i> L. Wasp) as influenced by mulching" presented in the 26 <sup>th</sup> National Cenference NRMCSSA-2017, organized by Soil Conservation Society of India, New Delhi in collaboration with Central Agricultural University, Imphal at college of PG Studies, CAU, Barapani, Meghalaya from 11 <sup>th</sup> – 13 <sup>th</sup> September, 2017.
Young Scientist Award	For Excellent contribution in the field of Agriculture and Allied on 5 <sup>th</sup> June, 2020 organised by Samagra Vikas Welfare Society
Young Agronomist Award	International Web Conference on 4 <sup>th</sup> – 6 <sup>th</sup> October, 2020 organized by Agricultural and Environmental Technology Development Society.
Young Women Scientist Award	4 <sup>th</sup> International Conference "Global Approaches in Natural Resource Management for Climate Smart Agriculture during Pandemic Era of COVID-19, 26 <sup>th</sup> – 28 <sup>th</sup> February, 2021.
Best Poster Presentation Award	National Seminar on "Conservation and Commercialisation of Citrus Biodiversity in NEH Region" organized by CAU, Imphal (18 <sup>th</sup> – 19 <sup>th</sup> Feb'21)
Best Poster Presentation Award	National Conference "Priorities in Crop Protection for Sustainable Agriculture" organized by DEE, CAU, Imphal and ICAR, Bengaluru, 16 <sup>th</sup> – 18 <sup>th</sup> March, 2021

#### **Publication**

Punabati, H. and L. Rusima Devi (2014). Effects on microflora population of soil with respect to paddy cultivation in Manipur by the residual weedicides. The Ecoscan. 6: 519-522

Punabati, H., Abhinash Moirangthem, Anju Keisham, N. Indrakumar Singh, A. Herojit Singh and L Nabachandra Singh (2015). Efficacy of some promising weedicides of shallow land transplanted rice (Oryza sativa L.) under rainfed conditions. The Bioscan. 10(1):459-463

AnjuKeisham, Punabati, H., AbhinashMoirangthem, Tapas Das, N. Indrakumar Singh and L. Nabachandra Singh (2015). Effect of growth and yield of potato (SolanumtuberosumL.) varKufriJyoti by nitrogen integration with different organic sources and its after effect on soil. The Bioscan. 10(3): 1335-1138

Punabati, H., AbhinashMoirangthem, N. Indrakumar Singh and L. Nabachandra Singh (2017). Study on economic feasibility of some promising weedicides on shallowland transplanted rice (Oryzasativa L.) Under rainfed conditions. Journal of Crop and Weed. 13(1): 170-174

Punabati, H., Dinesh Sah, AbhinashMoirangthem, M. Chandrakumar Singh, P.K. Pandey, N.K. Mahato, Reema L. and P. Debnath and A.K. Pandey (2017). Effects of Rhizobium, PSB inoculation and Phosphorus management on soil nutrient status and performance of Cowpea in Acid soil of Arunachal Pradesh, India. International Journal of Current Microbiology and applied Sciences. 6(8).

Dinesh sah, Punabati, H., N.K. Mahato and A.K. Pandey (2017). Weed management in Ginger (Zingiberofficinale Roscoe) through integrated approaches. International Journal of Current Microbiology and applied Science. 6(10)

N. MonisaDevi, Abhinash Moirangthem, Punabati, H., N. Devachandra, K. Duhlian, R.K Singh and W.I. Meitei. Response of local banana cultivars of Manipur on application of organic manures towards uptake of micronutrients and total soluble solid. International Journal of Current Microbiology and applied Science. 6(8): 1356-1360

Punabati, H., Dinesh Sah, N. Bidapati, P. Thoithoi, AbhinashMoirangthem and L. Nabachandra Singh (2017). Performance of rice varieties and spatial arrangement in system of rice intensification under Manipur Valley. Contemporary research in India. 7(2): 106-110

ArunkumarPhurailatpam, R. Senjam, K. Kartek, P. Ngangbam, T.M. Chanu and Punabati, H. (2017). Underutilized vegetables with medicinal properties used by the Adi tribes of Arunachal Pradesh. Medicinal Plants. 9(3): 143-146

N. Bidyapati, Punabati, H., A. Das and A.K. Singha Roy (2017). Sustainable production with in-situ moisture conservation under maize based cropping system in North-East Hill region. Journal of Crop and Weed. 13: 8-10

N. Monisa Devi, AbhinashMoirangthem, Punabati, H., H.R. Singh, Dilip Singh and Joykumar Singh (2017). Effect of organic manures and varieties on growth, yield and its economics of Banana cultivation. The Bioscan. 10: 285-292

K. Duhlian, Punabati, H., D. Sah, AbhinashMoirangthem, N. Bidyapati and M. Somorjit Singh (2018). Mulching implication on soil moisture, growth and yield response of potato Solanumtuberosum – local cultivar (ThangalAlu). 14(1): 15-17. Journal of Crop and Weed. 14(1): 15-17

D. Sah, Punabati, H. and A.K. Pandey (2018). Weed management in Okra under foot hill conditions of North Eastern Himalaya. Journal of Crop and Weed. 14(1): 201-204

Watham, L., Athokpam, H.S., Chongtham, N., Nandini, K.D., Singh, N.B., Singh, N.G., Sharma, P.T. and Punabati, H. (2018). Phosphorus status in the soils ofImphal West District, Manipur (India). International Journal of Current Microbiology and applied Science. 7(7): 3871-3877

Athokpam, H.S., Vikramjeet, K., Chongtham, N., Nandini, K.D., Singh, N.B., Singh, N.G., Sharma, P.T. and Punabati, H. (2018). Micronutrients cations Distribution in the soil profile of orange (Citrus reticulate) orchard of Tamenglong District, Manipur (India). Journal of Experimental Biology and Agricultural Sciences. 6(1): 108-115

LongjamSidarth, Punabati, H., MoirangthemAbhinash, Sah Dinesh and Irungbam Priyanka (2019). Response of integrated nutrient management on dry matter, yield and nutrient uptake at different growth stages of tomato (Solanum lycopersicum L.). Current Advances in Agricultural Sciences. 11(1): 71-74

Priyanka Irungbam, L. Nabachandra Singh, Edwin Luikham, N. Okendro Singh, Punabati, H. and Y. BebilaChanu. Effect of Different Weed and Nutrient Management Practices on the Growth and Yield of Kharif Rice in Manipur Valley. International Journal of Current Microbiology and applied Science. 8(4): 128-137

**Punabati Heisnam**, Abhinash Moirangthem, Bidyapati Ngangom, Priyanka Irungbam, Bapshilla Loithongbam, Khwairakpam Lily Devi, Arunkumar Phurailatpam, Biplap Mitra and Asish Singha Roy (2021) Response of Integrated Nutrient Management on Nutrient Uptake of Aromatic Rice and its residual effect on Lentil yieldbcropping system under Terai Region of West Bengal. International Journal of Current Microbiology and applied Science.

Abhinash Moirangthem, Soumen Maitra, **Punabati Heisnam** and Priyanka Irungbam (2021). Comparative performances of tuberose genotypes in the Sub-Himalayan Terai Region of West Bengal. International Journal

of Current Microbiology and applied Science.

Pranab Dutta, Arti Kumari, Madhusmita Mahanta, Gunadhya Kr Upamanya, **Punabati Heisnam**, Sarodee Borua, Pranjal K Kaman, AK Mishra, Meenakshi Mallik, Gomathy Muthukrishnan, Kuttalingam G Sabarinathan, Krishti Rekha Puzari, Dumpapenchala Vijayreddy (2023). Nanotechnological approaches for management of soil-borne plant pathogens. Frontiers in Plant Science. Vol-14, Pp-1136233

Pranab Dutta, Madhusmita Mahanta, Soibam Basanta Singh, Dwipendra Thakuria, Lipa Deb, Arti Kumari, Gunadhya K Upamanya, Sarodee Boruah, Utpal Dey, AK Mishra, Lydia Vanlaltani, Dumpapenchala VijayReddy, **Punabati Heisnam**, Abhay K Pandey (2023). Molecular interaction between plants and Trichoderma species against soil-borne plant pathogens. Frontiers in Plant Science. Vol-14

Pranab Dutta, Gomathy Muthukrishnan, Sabarinathan Kutalingam Gopalasubramaiam, Rajakumar Dharmaraj, Ananthi Karuppaiah, Karthiba Loganathan, Kalaiselvi Periyasamy, M Arumugam Pillai, GK Upamanya, Sarodee Boruah, Lipa Deb, Arti Kumari, Madhusmita Mahanta, **Punabati Heisnam**, AK Mishra (2022). Plant growth-promoting rhizobacteria (PGPR) and its mechanisms against plant diseases for sustainable agriculture and better productivity. BIOCELL. 46(8): 1843-1859

### **Book Chapter**

Pandey, P.K., Singh, S., Singh, M.C., Singh, A.K., Yadav, S.K., Pandey, A.K. and Punabati Heisnam. 2018. Diversity, Ecology and Conservation of fungal and bacterial endophytes. Microbial Resource Conservation, Soil biology 54, Springer International Publishing AG

Punabati Heisnam, AbhinashMoirangthem, S. K. Pattaniaak, Yengkhom Disco Singh& B.N. Hazarika. 2019. Ecofriendly Indigenous storage practices of Food grains ans seeds. Post Harvest Technologies and Value Addition, Book, ISBN-978-93-5396-087-2 Vol-I Issue. College of Horticulture and Forestry, Central Agricultural University, Pasighat. Arunachal Pradesh

Yengkhom Disco Singh, Helen Soibam, Punabati Heisnam, B.N.Hazarika.2019. Intervention of Post Harvest Technology for horticultural crops. Post Harvest Technologies and Value Addition, Book, ISBN-978-93-5396-087-2 Vol-I Issue College of Horticulture and Forestry, Central Agricultural University, Pasighat. Arunachal Pradesh

Ng. TaibangnganbiChanu, M.C. Singh, S. K.Sharma, Y. Herojit Singh, Punabati Heisnam, L.Shantikumar, Y.Disco Singh& A.K. Singh. 2019. Beneficial Microbes in fermented Soybeans. Post Harvest Technologies and Value Addition, Book, ISBN-978-93-5396-087-2 Vol-I Issue. College of Horticulture and Forestry, Central Agricultural University, Pasighat. Arunachal Pradesh.

Punabati Heisnam, AbhinashMoirangthem, Y. D. Singh, B.N. Hazarika and PranabDutta. 2021. Exploitation of Silver nanoparticles for bioremediation. Biotechnological Advancement for Environmental Issues: Implications and Management. CRC press. In Press.

RinaNingthoujam, Barsarani Jena,SabitaPattanayak, PratigyanPriyadarsini, M. K. Panda, Punabati Heisnam, M.C. Singh, P.J.Babu and Y. D. Singh. 2020. Nanotechnology in Biodiesel Production. Biotechnological Advancement for Environmental Issues: Implications and Management. Springer Publications.

Punabati Heisnam, AbhinashMoirangthem, Y. Disco Singh, M. Chandrakumar

Singh,Ng.TaibangganbiChanu,Priyanka Irungbam and PranabDutta. 2020. Future prospect and scope ofnanotechnology in health care system. Nanotechnology Applications in Healthcare. Bentham Science Publications. In Press.

Pranjal Kr. Kaman, Amar Bahadur, PranabDutta and Punabati Heisnam. 2020. Diseases of Avocado (Perciaamaricana) and their Integrated Management Approaches. Diseases of fruits crops of India and their Management Approaches. New India Pubhishing Agency, New Delhi. 2-9.

Punabati Heisnam, Pranab Dutta, Y. Disco Singh, Priyanka Irungbam, Abhinash Moirangthem and Pavankumar Gaudar. 2021. Impact of Climate change on agricultural ecosystem and human livelihood in Hilly region of North-East India. Climate Change Dimensions and Mitigation Strategies for Agricultural Sustainability. New Delhi Publishers.

Stina Khumukcham, Punabati Heisnam, Abhinash Moirangthem and M. Bishwapati Devi. 2021. Developing Business Plan (Project Report): Contents and Sequencing. Agri-Horti Entrepreneurship for Socio-Economic Development. Sponsored by DBT, Govt. of India. ISBN 978-81-947589-7-6

Dr. Abujam Anuradha Devi and Punabati Heisnam. 2021. Breakeven analysis. Agri-Horti Entrepreneurship for Socio-Economic Development. Sponsored by DBT, Govt. of India. ISBN 978-81-947589-7-6

Priyanka Irungbam, Suraj kumar Irungbam, Bapsila Loitongbam, Pavan Kumar Goudar, Ng. Taibangnganbi, Punabati Heisnam and S.K. Bandyopadhyay 2021. Paddy-cum-Fish Farming: A way towards Organic Rice Production and Nutritional Security. Fish rearing and Management. ISBN 978-81-947589-0-7. Pp: 64-70

Pavankumar Goudar, S.M. Hussain, Navya Vishweshwar Bhat, S.K. Bandopadhyay, Punabati Heisnam, A.S. Mailappa and Priyanka Irungbam.Concept of Integrated Farming System and their importance in Hill agriculture. Fish rearing and Management. ISBN 978-81-947589-0-7. Pp: 71-80

### **Books**

B.N. Hazarika, L. Geetarani Devi, Y. Disco Singh, A.S. Mailappa, Punabati Heisnam. 2020. Advances in

producton technology of Khasi Mandarin, Pasighat, Arunachal Pradesh, Dean College of Horticulture and Forestry, Central Agricultural University, Pasighat, Arunachal Pradesh. ISBN 978-81-94758-92-1

Y. Disco Singh, Punabati Heisnam, B.N. Hazarika, A.S. Malaippa. 2021. Agripreneurship Development and Practices, Pasighat, Arunachal Pradesh, Dean College of Horticulture and Forestry, Central Agricultural University, Pasighat, Arunachal Pradesh, ISBN 978-81-947589-8-3

Punabati Heisnam, Y. Disco Singh, B.N. Hazarika, A.S. Malaippa. 2021. Agri-Horti Entrepreneurship for socio Economic Development, Pasighat, Arunachal Pradesh, Dean College of Horticulture and Forestry, Central Agricultural University, Pasighat, Arunachal Pradesh, ISBN 978-81-947589-7-6

Yengkhom Disco Singh, Helen Soibam, Punabati Heisnam, B.N.Hazarika (2019) Intervention of Post-Harvest Technology for horticultural crops

Punabati Heisnam, B.N. Hazarika, Priyanka Irungbam, Yengkhom Disco Singh, Ng. Taibangnganbi Chanu. 2021. Practical Manual on Introduction to Major Field Crops. ISBN 978-81-955225-4-5

Project details	<b>Funding Agency</b>	From	То	Role	Current status
Bio-efficacy and phytotoxicity evaluation of Fosetyl Al 80% WP (Aliette 80% WP) in cardamom	Bayer Crop Science Limited, C/O Allied Agro chemical and implements, Guwahati, Assam	June, 2020	Till date	Co-PI	Ongoing
Bio-efficacy and phytotoxicity evaluation trial of our new fungicide Fluopyram 250 G/L + Trifloxystrobin 250 G/L (Luna Sensation) against three different diseases in Apple	Bayer Crop Science Limited, C/O Allied Agro chemical and implements, Guwahati, Assam	July, 2020	Till date	Co-PI	Ongoing
Locally available low cost mulching technique and physio- chemical characterization of Okra (Abelmoschusesculentus (L.) Moench)	IRP Project funded by CAU	September 2020	Till date	PI	Ongoing
Support for conducting entrepreneurship training program through online platform for faculty development program and women entrepreneurship development program	DST. Govt of India	Nov. 2020	Four weeks	PI	Completed
Use of non-toxic nanoformulations for prolong shelf life and reduction of post- harvest loss of mandarin orange (Citrus reticulata) of North East India	DBT, Govt. of India	February, 2021	Till date	Co-PI	Ongoing
Comparative Bio efficacy of a New Fungicide With Marketed Products, Against Diseases of Apple Crop	Heranba Industries Limited	May, 2023	Till date	PI	Ongoing
Installation and Investigation of meteorological data for scientific cultivation of Millet in Arunachal Pradesh	RCAD, Cultivation and Habitation under NEH component	May, 2023	Till date	PI	Ongoing
Investigation of plant growth and yield efficacy using a novel product ambition as bio stimulant in Apple	Bayer Crop Science Limited, C/O Allied Agro chemical and implements, Guwahati, Assam	January, 2022	January 2023	PI	Completed

More than 7 years of experience working as Assistant Professor in Department of Natural Resource Management Technology, where I have been engaged in organic compost management studies of many agricultural and horticultural crops by using different biowaste materials.