

FACULTY PROFILE FORMAT

1. Full Name: Dr. Thangaswamy Rajesh
2. Designation: Professor (Plant Pathology)
3. Department/School: School of Crop Protection
4. Official Email ID: agripathrajesh@rediffmail.com
trajesh@cau.ac.in
5. Profile Photo:
6. Area of Specialization: Mycology, Bacteriology, Mushroom
7. Research Interests: Exploitation of native fungal and bacterial antagonists against plant diseases, Cultivation of Shiitake mushroom, Machine learning for disease diagnosis
8. Highest Educational Qualifications:

Degree	Subject	University/Institute
Ph. D	Plant Pathology	Tamil Nadu Agricultural University (TNAU), Coimbatore

9. Professional Experience:

Position	Organization	Duration
Professor (Plant Pathology)	College of Post Graduate Studies in Agricultural Sciences (Central Agricultural University, Imphal), Umiam, Meghalaya	20.07.2022 to till date
Associate Professor (Plant Pathology)	-do-	20.07.2019 to 19.07.2022
Assistant Professor (Plant Pathology)	-do-	09.09.2008 to 19.07.2019
Research Associate	NRC for Banana (ICAR), Tiruchirapalli, Tamil Nadu	28.11.2005 to 05.09.2008
Senior Research Fellow	TNAU, Coimbatore	27.07.2005 to 27.11.2005

10. Research Projects:

Title	Funding Agency	Budget (In Lakh's)	Duration	Status
Establishment of Crop Based Model IPM Villages for Promotion of Integrated Pest Management Technologies in	NRIIPM, New Delhi (ICAR)	60.0	3 years	Ongoing

NEH Region of India. (Co-PI)				
Evaluation of bacterial and fungal antagonists against major fungal diseases of rice in Meghalaya (PI)	CAU, Imphal	1.24	2012-2014	Completed
Development of Expert System to Diagnose Rice diseases in Meghalaya (Co-PI)	NABARD, Shillong	2.5	2012-14	Completed
Development and Deployment of Mobile based Agro-Advisory System in North East India (M4AgriNEI) (Co-PI)	Media Lab Asia, New Delhi (Ministry of Electronics & Information Technology)	111	2012-15	Completed

11. Selected Publications:

Kalpana, K., Maruthasalam, S., **Rajesh, T.**, Poovannan, K., Kumar, K.K., Kohiladevi, E., Raja, J.A.J., Sudhakar, D., Velazhahan, R., Samiyappan, R. and Balasubramanian, P. (2006) Engineering sheath blight resistance in elite indica rice cultivars using genes encoding defense proteins. *Plant Science*, 170: 203-215

Rajesh, T., Maruthasalam, S., Kalpana, K., Poovannan, K., Kumar, K.K., Kohiladevi, E., Sudhakar, D., Samiyappan, R. and Balasubramanian, P. (2016) Stability of sheath blight resistance in transgenic ASD16 rice lines expressing a rice chi11 gene encoding chitinase. *Biologia Plantarum*, 60(4): 749-756

Mahendra, K., Baiswar, P., Chandra, S., Choudhury, B.U., Majumder, D., **Rajesh, T.** and Firake, D.M. (2016) Molecular characterization and influence of soil factors on isolates of *Rhizoctonia solani* in Meghalaya. *Indian Phytopathology*, 69(3): 271-277

Saveinai, R., Baiswar, P., Kumar, R., **Rajesh, T.** and Behere, G.T. (2017) Pathogenicity of *Rhizoctonia solani* AG 1-IA on major weeds prevalent in rice and maize ecosystem in Meghalaya. *Indian Phytopathology*, 70(1): 91-97

Rajesh, T., Maruthasalam, S., Kalpana, K., Poovannan, K., Kumar, K.K., Kohiladevi, E., Sudhakar, D., Velazhahan, R. and Balasubramanian, P. (2020) Pyramiding insect and disease resistance in an elite indica rice cultivar asd16. *Biologia Plantarum*, 64: 77-86

Nandeesh, S.V., **Rajesh, T.**, Devi, R.K.T. and Thakur, N.S.A. (2020) Standardization of Shiitake Mushroom (*Lentinula edodes* (Berk.) Pegler) Spawn Production Technology in Meghalaya. *Indian Journal of Hill Farming*, 34(1): 183-192.

Debbarma, M., **Rajesh, T.** and Tombisana Devi, R.K. (2021) *In-vitro* efficacy of

fungicides against *Rhizoctonia solani* Causing Banded Leaf and Sheath Blight of Maize. *International Journal of Plant and Soil Science*, 33(16): 232-236.

Rani, P.M.N., **Rajesh, T.** and Hemochandra, L. (2021) Agricultural Crop Diseases Detection Using Deep Learning Technique: An Overview. *Multilogic in Science*, 11(17):1637-1640.

Mahanta M., Dutta P., **Rajesh T.**, Gogoi J. and Deb L. (2022) Biointensive Management of Leaf Spot Disease of Turmeric, *Curcuma longa* L. caused by *Colletotrichum* spp. *J Mycol Pl Pathol*, 52(2): 184-192.

Pongen A., Behere G.T., Firake D.M., Sharma B and **Rajesh T.** (2022) DNA barcoding of major insect pests and their natural enemies from Cucurbitaceous crops in northeast india. *Ind J Entomol*, DoI: 10.55446/IJE.2022.440.

Nandeesh, S.V., **Rajesh, T.**, Priya P.S., Ankit, A., Vijayreddy, D., Challam, R., Kumar, A.S. and P. and Rani, P.M.N. (2024) Isolation, Identification and Molecular Characterization of Fungal Leaf Spot Pathogens of Strawberry (*Fragaria x ananassa* Duch.) in Meghalaya (India). *AMA: Agricultural Mechanization in Asia, Africa and Latin America*, 55 (10): 19239-19260.

Kumar, R. **Rajesh, T.**, Ramachandra, S.K., Kaushik, S. and Hans Austin. K.H. (2024) Bioprospecting of wild botanicals against *Alternaria* leaf blight of radish and their phytochemical profiling by GC–MS. *European Journal of Plant Pathology*, 170: 913–927.

Ampolu, S.K., **Rajesh, T.**, Nandeesh, S.V., Vijayreddy, D. and Alok, A. (2024) Isolation and characterization of pathogen causing northern corn leaf blight of maize in Ri-bhoi, Meghalaya, India. *Journal of Advances in Biology and Biotechnology*, 27 (9): 326-1338.

Reginah, P., Noren Singh, K., **Rajesh, T.**, Mayurakshee, M., Samuthirapandi, S., Lyngdoh, A.A. and Chamroy, T. (2024) Genetic variability and association study of SSR markers for yield and powdery mildew disease in pea (*Pisum sativum*). *Indian Journal of Agricultural Sciences*, 94 (3): 258–262.

Singh, A.K., Singh, N.B., Azadthakur, N.S., Singh, N.J., **Rajesh, T.**, Sharma, J.P., Mallikarjuna, P.K., Sharma, G., Kumawat, R. and Singh, K.N. (2024) Genotype x Environment interaction for grain yield and its component traits in wheat (*Triticum aestivum*, L.) for varietal recommendations in Meghalaya State of India. *International Journal of Plant and Soil Science*, 36 (9): 625-640.

Priya, P.S., Angidi, S., Thera, U.K., Nandeesh, S.V. and **Rajesh, T.** (2024) Management of Strawberry Grey Mold Disease Using Biocontrol Agents and Plant Extracts. *American Journal of Plant Sciences*, 15: 538-551.

Alok, A., **Rajesh, T.**, Das, M.G., Nandeesh, S.V., Gogoi, J., Prakash, O., Sinha, S., Raj, A. and Rani, P.M.N. (2025) In vitro screening of different essential oils against *Alternaria solani* causing early blight of potato. *AMA: Agricultural Mechanization*

in Asia, Africa and Latin America, 56 (9): 21169-21176.

Kalita, B., Singh, L.S., Meetei, Ng.T., **Rajesh, T.**, Devi, M.P. and Ningthoujam, K. (2025) *In vivo* efficacy of antiviral compounds, botanicals and biocontrol agents against mungbean yellow mosaic virus in mid-hills of meghalaya, india. *Plant Archives*, 25(1): 2648-2652.

Roy, T., Sorahia, D., Chatterjee, S., Pathak, M., **Rajesh, T.**, Ningthoujam, K. and Patidar, R.K. (2025) Importance of Hymenopteran pollinators in agriculture ecosystem : a review. *Plant Archives*, 25(2): 167-175.

Reddy, C.A., Pathak, M., Ningthoujam, K., **Rajesh, T.**, Waseem, M.A., Sahoo, B.K., Chandra, P.K., Jeevana, K., Moirangthem, K., Talukdar, M. and Sorahia, D. (2026) Influence of climatic factors on pest–predator dynamics in tomato (*Solanum lycopersicum* L.) agroecosystem of Meghalaya, India. *Trop. Agric. (Trinidad)*, 103 (1): 96-109.

12. Courses Taught:

Course Code & Title	Credit Hours
Ph. D Courses	
PL PATH-601 Advanced Mycology	2+1
PL PATH-519 Post Harvest Diseases	2+1
PLPATH-512 Ecology of Soil-Borne Plant Pathogens	2+1
PLPATH-515 Biological Control of Plant Diseases	2+1
PLPATH-603 Advanced Bacteriology	2+1
PLPATH-603 Advances in Plant Pathogenic Prokaryotes	2+1
PL PATH-604 Molecular basis of host pathogen interaction	2+1
PLPATH-691 Doctoral Seminar-I	1+0
PLPATH-692 Doctoral Seminar-II	1+0
M. Sc. (Agri) Courses	
PLPT-501 Introductory Mycology	2+1

PLPT-504 Principles of Plant Pathology	3+0
PLPT-510 Fungal diseases of field crops	2+1
PLPT-511 Fungal diseases of fruits and ornamentals	2+1
PLPATH-501 Mycology	2+1
PL PATH-502 Plant Virology	2+1
PL PATH-504 Principles of Plant Pathology	3+0
PL PATH-507 Diseases of Field and Medicinal Crops	2+1
PL PATH-509 Diseases of vegetables and spices crops	2+1
PL PATH-505 Detection and diagnosis of plant diseases	1+2
PL PATH-511 Chemicals in plant disease management	2+1
PL PATH-503 Plant Bacteriology	2+1
PL PATH-503 Plant Pathogenic Prokaryotes	2+1
PL PATH-506 Techniques in Detection and Diagnosis of Plant Diseases	0+2
PLPATH-507 Principles of Plant Disease Management	2+1
PL PATH-515 Diseases of Field and Medicinal Crops	2+1
PL PATH-591 Master's Seminar	1+0
ENT-591 Master's Seminar	1+0
NEMA-591 Master's Seminar	1+0
B. Sc. (Agri.) Courses	
PP-114 Plant Pathogens and Principles of Plant Pathology	3+1
PP-124 Fundamentals of Plant Pathology	3+1
PP-122 Agricultural Microbiology	1+1
PP-213 Diseases of Field Crops	2+1
PP-353 Diseases of Horticultural Crops and their Management-I	2+1

PP-363 Diseases of Field and Horticultural Crops and their Management-II	2+1
PP (PD)-353 Principles of Integrated Pest and Disease Management	1+1

13. **Student Guidance:** Major guide M. Sc.: 27 completed, 02 ongoing

Major guide Ph.D.: 05 completed, 03 ongoing

14. Workshops/Training/Conferences Organized:

One week model training programme on “Integrated Pest Management” at Umroimadan Village, Ri-Bhoi district from 26th March to 31st March, 2016 sponsored by ICAR, New Delhi under Unnat Bharat Abhiyan

National Symposium on “Holistic Plant Health Management in Organic Agriculture” at ICAR RC for NEH Region, Umiam during February, 10-11, 2015 organized by Indian Phytopathological Society, New Delhi

Symposium on “Plant Health Management in North East India” at ICAR RC for NEH Region, Umiam during January, 15-16, 2016 organized by Indian Phytopathological Society, New Delhi

Workshop on “Biocontrol of crop pests & invasive and utilization of insects as food in North East Region of India”. In collaboration with ICAR-NBAIR, Bengaluru, 6-7th March, 2020.

15. Google Scholar/ ORCID/ ResearchGate/ Scopus ID:

<https://orcid.org/0000-0001-6704-7135>

<https://www.scopus.com/authid/detail.uri?authorId=56435940400>

<https://www.webofscience.com/wos/author/record/PBW-3013-2025>

<https://www.researchgate.net/profile/Thangaswamy-Rajesh>