

## Curriculum-Vita

**Name** : Susanta Banik  
**Father** : Late Sumesh Banik  
**Date of Birth** : 20-01-1978  
**Current Designation** : Professor  
**Permanent address** : Vill-Chhotoshimulguri, P.O.-Ghoksadanga  
Dist-Cooch Behar, West Bengal-736171



### **Communication details :**

Postal address : Department of Plant Pathology, SAS, Nagaland University, Medziphema  
Campus, Nagaland-797106, India

Email : [susanta.iari@gmail.com](mailto:susanta.iari@gmail.com),  
[susanta@nagalanduniversity.ac.in](mailto:susanta@nagalanduniversity.ac.in)

Mobile : +91-9436606310, +91-8787679958

### **Education:**

Post-doctoral research training : IFAPA, Spain, Sept, 2012 to Feb, 2013  
Ph.D : Indian Agricultural Research Institute (IARI), New  
Delhi, India, ([www.iari.res.in](http://www.iari.res.in))

Period: **2003-2007**

Major subject- **Plant Pathology**

Minor subject- **Molecular Biology and  
Biotechnology; and Biochemistry**

M.Sc (Agriculture) : ANGRAU, Hyderabad, India ([www.angrau.ac.in](http://www.angrau.ac.in))

Period: 2000-2002

Specialization- **Plant Pathology**

B.Sc (Agriculture) : BCKV, Nadia, India ([www.bckv.edu.in](http://www.bckv.edu.in))

Period: 1996-2000

**Job experience** : **Assistant Professor**, 07<sup>th</sup> September, 2007 to 06<sup>th</sup> Sept. 2019  
**Associate Professor**, 07<sup>th</sup> September, 2019 to 06<sup>th</sup> Sept, 2022  
**Professor**, 07<sup>th</sup> September, 2022 to till date ([www.nagalanduniversity.ac.in](http://www.nagalanduniversity.ac.in))

### **Research Interest** :

1. Sustainable/eco-friendly management of plant disease
2. Potential of nanoparticles in plant disease management and their possible risks in the agricultural eco-systems
3. Endophytic and phylloplane fungi in crop plants and their exploration in agriculture for plant protection
4. Plant disease dynamics and management challenges under climate change scenario

### **Awards:**

1. 2008-IARI Merit Medal from IARI, New Delhi, India
2. 2010-K.C.Mehta and Manoranjan Mitra Memorial award from Indian Phytopathological Society, IARI, New Delhi, India
3. 2012-Overseas Associateship for six months in Spain awarded and sponsored by Dept. of Biotechnology (DBT), Ministry of Science & Technology, Govt. of India.

## **A. Publication:**

### **Research Papers**

1. Maheswara Reddy Pasam, Imtinaro Longchar, Jaipal S. Choudhary, Chandan S. Maiti, Hijam Shila Devi, Pankaj Neog and **Susanta Banik**. 2024. Biology, morphometric and integrative taxonomy of litchi fruit borer, *Conopomorpha sinensis* Bradley, 1986: A major pest of litchi (*Litchi chinensis* Sonn.). *Animal Biology*, DOI 10.1163/15707563-bja10148.
2. Sentina Longkumer, N. Tiameren Ao, **Susanta Banik**, Pankaj Neog, Dametre Lytan, Pezangulie Chakruno. 2024. Influence of meteorological variables on severity of anthracnose/pod blight of soybean in Medziphema, Nagaland, *J.Mycopathol.Res.* 62(2) : 417-422, 2024, ISSN : 0971-3719 (Print), 2583-6315 (Online), DOI: 10.57023/JMycR.62.2.2024.417
3. Sentina Longkumer, N. Tiameren Ao, **Susanta Banik**, Pankaj Neog, Dametre Lytan, Pezangulie Chakruno. 2023. Rhizoctonia aerial blight of soybean: its incidence, severity and correlation with meteorological parameters in Nagaland condition. *Soybean Research*, 21(2): 115-123.
4. Ajith N, Waluniba, Pankaj Neog, **Susanta Banik** and Sentirenla Jamir. 2023. Efficacy of biopesticides against sucking insect pests of chilli (*Capsicum annum* L.) and their impact on fruit yield. *Pest Management in Horticultural Ecosystems*. 29 (1): 177-180.
5. Sonia, Y., **Susanta Banik**, and Narola Pongener, Pankaj Neog and Singh A. P. 2023. Effects of biocontrol agents on early blight disease of potato in field. *J. Mycopathol. Res.*61(3)-375-380. doi.10.57023/JMycR.61.3.2023.375
6. Kangjam, V., Pongener, N., Singh, R., **Banik, S.**, Daiho, L. and Ao, N.T. 2023. In vitro screening for potential antagonistic activity of Trichoderma isolates against *Sclerotium rolfsii* causing collar rot of French bean. *Environment and Ecology*, 41(1C): 623-632. ISSN 0970-0420.
7. Kangjam, V., Pongener, N., **Banik, S.**, Daiho, L., Ao, N.T., Singh, R. and Rajesha G. 2023. Efficacy of indigenous liquid compatible microbial consortia on French bean plant growth promoting traits. *Environment and Ecology*, 41(1C): 613-622. ISSN 0970-0420.
8. Humtsoe, L., Sarkar, A. and **Banik, S.** 2023. Effect of seed priming with metallic nanoparticles on germination, growth and biochemical parameters of citron (*Citrus medica* L.). *Agricultural Mechanization in Asia, Africa and Latin America*, 54(4): 12781-12792 (ISSN: 0084-5841)
9. Ajith N, Waluniba, Pankaj Neog, **Susanta Banik** and Sentirenla Jamir. 2023. Effects of different abiotic and biotic factors on abundance of sucking pests of chilli (*Capsicum annum* L.). *Environment and Ecology*, 41(1C): 679-683. ISSN: 0970-0420
10. Mum Eko, H. M. Devi, **Susanta Banik** and Narola Pongener. 2022. Isolation and evaluation of effective fungal antagonists against Northern blight of maize. *Indian Journal of Hill Farming*. 35(Spl.): 150-163. ISSN: 0970-6429
11. Fasnabeegam K. and **Susanta Banik**. 2022. UV-induced mutation in *Trichoderma harzianum* and effect of the putative mutants on plant pathogens. *Adv. Biores.* 13(3): 126-132. ISSN: 0976-4585
12. Rajaram, C.D. and **Susanta Banik**. 2022. Study on isolation, effectiveness and formulation of native *Trichoderma* spp. from Jhum and virgin land of Nagaland. *Journal of Current Crop Science and Technology*. Vol 109 (Issue 10-12): 123-129. <https://doi.org/10.29321/MAJ.10.000703> (ISSN: 0024-9602)
13. Abisag Lalremruatpuii and **Susanta Banik**. 2022. Effect of Different Plant Nutrients on Population Dynamics of *Trichoderma* sp. in Soil. *Journal of Current Crop Science and Technology*. Vol. 109 (Issue 4-6), <https://doi.org/10.29321/MAJ.10.000599>(online first draft)
14. Lalremruatpuii A and **Banik S.** 2022. Effect of pesticides on population dynamics of *Trichoderma* sp. and tomato plant in pot culture study. *Journal of AgriSearch* 9(2):140-144. <https://doi.org/10.21921/jas.v9i02.10119> (NAAS Rating 2022-4.71) ISSN 2348-8808.
15. Lalhruaitluangi, C., Ao, N. T., Daiho, L, **Banik, S.**, Ao, M. A. and Kanaujia, S. P. 2022. In-vitro Evaluation of Antagonistic Activity of Native *Trichoderma* spp. and *Pseudomonas fluorescens*

Isolates against *Alternaria solani* Causing Early Blight of Tomato. *International Journal of Plant & Soil Science*, DOI: [10.9734/ijpss/2022/v34i1330984](https://doi.org/10.9734/ijpss/2022/v34i1330984), Page 120-127. ISSN: 2320-7035 (NAAS RATING 2022-5.07)

16. Lemtor, A., **Susanta Banik**, Daiho, L., Devi, H.S., Shah, P. and Gundurao. 2022. Effect of colchicine-induced mutants of *Trichoderma harzianum* plant pathogens. *J. Mycopathol. Res.* 60(3): 427-434.
17. Gundurao, **Susanta Banik**, H. Meronbala Devi, Waluniba, A. P. Singh and Arentola Lemtor (2022). Study on Copper Tolerance of *Trichoderma*. *Biological Forum – An International Journal*, 14(2): 838-844, ISSN No. (Print): 0975-1130, (NAAS Rating 2022- 5.11)
18. Lalhruitluangi, C., Ao, N. T., Daiho, L, **Banik, S.**, Ao, M. A. and Kanaujia, S. P. 2022. Enhancement of Seed Germination and Seedling Vigour in Tomato (*Solanum lycopersicum* L.) by Native Microbial Consortia. *International Journal of Environment and Climate Change* 12(10): 31-37, Article no.IJECC.85979 ISSN: 2581-8627 (NAAS Rating 2022- 5.13)
19. Imtitula Longchar and **Susanta Banik**. 2022. Culturable fungal endophytes from cherry tomato plant of Nagaland. *J. Mycopathol. Res.* 60(1): 63-69. ISSN 0971-3719 (NAAS Rating 2022: 4.46)
20. Raghuvveer Singh, N. Tiamerao, Valenta Kangjam, G. Rajesha, **Susanta Banik**. 2022. Plant growth promoting microbial consortia against late blight disease of tomato under natural epiphytotic conditions. *Indian Phytopathology*. 75:527-539. <https://doi.org/10.1007/s42360-022-00464-1>
21. Imtitula Longchar and **Susanta Banik**. 2021. Antagonistic efficacy of fungal endophytes of cherry tomato against its soil-borne pathogens. *Plant Disease Research*, 36(2): 117-122. DOI No. 10.5958/2249-8788.2021.00019.6 (NAAS Rating 2022-4.76) Print ISSN: 0970-4914
22. Nunni Tayeng and **Susanta Banik**. 2021. Growth and sporulation studies on some *Trichoderma* isolates of Nagaland. *Plant Disease Research*, 36 (2): 136-142. DOI No. 10.5958/2249-8788.2021.00022.6 (NAAS Rating 2022-4.76) Print ISSN: 0970-4914
23. Anamika Debbarma and **Susanta Banik**. 2021. Seed-borne mycoflora of important oilseeds of Nagaland. *Journal of AgriSearch*, 8(4): 351-355. ISSN 2348-8808.
24. Fasna Beegam K and **Susanta Banik**. 2021. EMS mutation in *Trichoderma harzianum* and effects of putative mutants on plant pathogen in vitro. *J. Mycopathol. Res.* 59(4) : 425-429, ISSN 0971-3719.
25. Marbiangdor Mawlong and **Susanta Banik**. 2021. Native *Trichoderma* isolate suppresses damping off disease of chilli. *J. Mycopathol. Res.* 59(3): 231-239. ISSN 0971-3719
26. Imtinungsang Jamir, Asit Kumar Mandal, Ayam Pushparani Devi, Tridip Bhattacharjee, Praveen Kumar Maurya, Subrata Dutta, Arup Chattopadhyay, Krishnendu Pramanik, **Susanta Banik**. 2020. Screening of genotypes against viral diseases and assessment of yield loss due to yellow vein mosaic virus in okra grown in the eastern part of India. *Indian Phytopathology*. 73:125-133 <https://doi.org/10.1007/s42360-019-00183-0> (Published online January 1, 2020), 0367-973X (Print ISSN)
27. Ambalika Debbarma, **Susanta Banik** and N. Tiamerao. 2019. Seed-borne mycoflora of pulses in Nagaland. *J. Mycopathol Res.* 57(3): 179-184. ISSN: 0971-3719.
28. **Banik, S.**; Pérez-de-Luque, A. (2017). *In vitro* effects of copper nanoparticles on plant pathogens, beneficial microbes and crop plants. *Spanish Journal of Agricultural Research*, Volume 15, Issue 2, e1005. <https://doi.org/10.5424/sjar/2017152-10305>. ISSN 1695-971X,
29. Raghuvveer Singh, N. Tiamerao, L. Daiho, **Susanta Banik**, S. P. Kanaujia, Pankaj Neog. 2017. Role of agro-nanotechnology in plant protection. *Nagaland University Research Journal*, 10: 64-82. (ISSN: 0973-0346).
30. Kavi Sumi, Pezangulie Chakruno, N. Tiamerao, L. Daiho, **Susanta Banik** and Narola Pongener. 2016. A new report of leaf blight on Job's tear (*Coix lacryma-jobi* L.) caused by *Curvularia* sp. In Nagaland. *Nagaland University Research Journal*, 9: 66-68. (ISSN: 0973-0346).
31. Recha Imchen and **Susanta Banik**. 2015. Tissue-specific and growth stage specific colonization of fungal endophytes in three rice (*Oryza sativa* L.) cultivars. *The Ecoscan*. 9(3&4): 969-974. ISSN: 0974-0376.

32. PezangulieChakruno and **Susanta Banik**. 2015. Phylloplane mycoflora of colocasia at different growth stages and their antagonistic effect on colocasia leaf blight pathogen in vitro. *International Journal of Bioresource and Stress Management*. 6(4): 523-527. Print ISSN: 0976-3988, Online ISSN: 0976-4038.
33. PezangulieChakruno and **Susanta Banik**. 2015. Effect of foliar spray of metalaxyl and *Trichoderma viride* on the phylloplane mycoflora of colocasia. *J. Mycopathol. Res.*, 53(1): 143-147. ISSN: 0971-3719.
34. Kalyan K. Mondal, Bharat Raj Meena, Alim Junaid, Geeta Verma, Chandra Mani, Dipali Majumder, Manju Khicher, Shailesh Kumar, **Susanta Banik**. 2014. Pathotyping and genetic screening of type III effectors in Indian strains of *Xanthomonas oryzae* pv. *oryzae* causing bacterial blight of rice. *Physiological and Molecular Plant Pathology*, DOI:10.1016/j.pmpp.2014.03.005,86(2014): 98-106. ISSN: 0885:5765.
35. **Susanta Banik** and Jaydeep Halder. 2013. Acaropathogenic and entomopathogenic fungus *Hirsutella*- a review. *Annals of Entomology* 31(1): 143-155. (ISSN: 0970-3721)
36. Mandal, A. K., Sinha, P. and **Susanta Banik**. 2013. Root anatomical parameters for identification of Fusarium wilt resistant and susceptible line of pigeon pea. *Indian Phytopathology*. 66 (4): 361-365. ISSN: 0367-973X.
37. Lemtur, S. A., Upadhyay, D. N. and **Banik, S.** 2013. Adjustment of date of sowing and resistance screening for managing Cercospora leaf spot of sesame. *J. Mycopathol. Res*, 51(1): 101-106. (ISSN: 0971-3719).
38. **Susanta Banik** and Pratibha Sharma. 2011. Plant Pathology in the era of nanotechnology. *Indian Phytopath.* 64(2): 120-127.
39. **Susanta Banik** and Pratibha Sharma. 2011. A faster technique to produce ascospores of *Sclerotinia sclerotiorum* in laboratory. *J. Mycopathol. Res*, 49(1): 171-173.
40. **Susanta Banik** and Pratibha Sharma. 2011. Evaluation of aqueous extracts of some plants against cauliflower stalk rot pathogen, *Sclerotinia sclerotiorum*. *J. Mycopathol. Res*, 49(1): 21-29.
41. Lemtur, S. A., Upadhyay, D. N. and **Banik, S.** 2010. Evaluation of seed health of Sesame cultivars. *J. Mycopathol. Res*, 48(2): 239-244.
42. **Banik S.** and Pratibha Sharma. 2009. Variability in cauliflower stalk rot pathogen *Sclerotinia sclerotiorum*. *Indian Phytopath.* 62(3): 279-284.
43. **Banik, S.** and Krishnamurthy, K.V.M. 2004. Effect of phylloplane mycoflora of blackgram on growth and conidial germination of *Corynesporacassiicola* (Berk and Curt) Wei. *Journal of Interacademia*. 8(1): 1-6. (ISSN: 0971-9016)
44. **Banik, S.** and Krishnamurthy, K.V.M. 2004. Relative efficacy of different methods of isolation of phylloplane mycoflora of blackgram. *Environment and Ecology*. 22 (Spl-2): 199-202. (ISSN: 0970-0420)
45. **Banik, S.**; Chatterjee, S.C. and Krishnamurthy, K.V.M. 2004. Effect of plant age on dynamics of phylloplane mycoflora of blackgram. *Annals of Plant Protection Sciences*. 12(1): 227-229. (ISSN: 0971-3573 Print)
46. **Banik, S.** and Krishnamurthy, K.V.M. 2003. Effect of fungicides on phylloplane mycoflora of blackgram. *Farm Science Journal*. Vol 12(1): 27-28.

### **Books**

1. **Susanta Banik** and Jaydeep Halder. 2022. Plant Protection: present developments and future strategies. Today and Tomorrow's Printers and Publishers, Ansari Road, Daryaganj, New Delhi-110001, 360pp. ISBN-978-9391-734589.
2. PezangulieChakruno and **Susanta Banik**. 2020. Studies on diseases of Naga King chilli (*Capsicum chinense* Jacq.), LAP Lambert Academic Publishing, **ISBN-10:** 6200113955, **ISBN-13:** 978-6200113955, p.140
3. **Susanta Banik** and Asit Kumar Mandal. 2018. Objective Plant Pathology, **2<sup>nd</sup> Revised Edition**, 280pp, Scientific Publishers, Jodhpur. ISBN- 9789387741737. ([www.scientificpub.com](http://www.scientificpub.com))

4. **Susanta Banik**. 2016. Objective Plant Pathology, 257pp, Scientific Publishers, Jodhpur. ISBN-9788172339883. ([www.scientificpub.com](http://www.scientificpub.com))
5. **Susanta Banik**. 2013. Current Concepts in Crop Protection, 506pp, Studium Press India Pvt. Ltd., New Delhi, India. ISBN-978-93-80012-42-1. ([www.studiumpress.in](http://www.studiumpress.in))
6. Gorakh Singh, Akali Sema, M. Alemla Ao, L. Daiho, **S. Banik** and Meribeni Shitiri. 2012. Insect pests and disease management of important horticultural crops, 64pp, Westville Publishing House, New Delhi, India. ISBN-978-81-85873-83-1.
7. **Susanta Banik**. 2010. Plant Pathological Terms, 244pp, Kalyani Publishers, Ludhiana, India. ISBN-978-81-272-6193-1.
8. Somen Acharya and **Susanta Banik**. 2009. Terminology of Environmental Science. New Vishal Publications, West Patel Nagar, New Delhi-08, India. ISBN-818399031-2.

### **Book Chapters**

1. Devi, H.S., Imtinaro, L., **Banik, S.**, Devi, H.M., Hemanta, L., Singh, W.R. and Kaur, A. 2023 Benefits and challenges of using biopesticides in crop protection (In: Recent Advances in Agricultural Sciences and Technology, Eds. N. Biradar, R.A.Shah, A. Ahmed). Dilpreet Publishing House, New Delhi 110018 pp.403-410 (total page 1741). ISBN: 978-93-91995-07-2
2. Vaghasiya, R., Prajapati, H.N., **Banik, S.**, Adhikary, N.K. and Barad, A. H. 2023. Diseases of papaya and their integrated management. *In: Pest and disease management of horticultural crops*, (Eds. W. Hasan, B. Verma and Md. Minnatullah), Biotech Books, Daryaganj, New Delhi-02, ISBN 978-81-7622-543-4
3. Bendangsenla and **Susanta Banik**. 2021. Progress of nanotechnology in plant disease management. *In: Current Trends in Plant Health Management* (Ed. Pranab Dutta and Ardhendu Chakraborty), **Biotica**, Tripura, India pp.248-268 (ISBN-978-81-947739-5-5)
4. PezangulieChakruno, **Susanta Banik** and Kavi Sumi. 2021. Important Diseases of Tea (*Camellia sinensis* L.) and Its Integrated Management. *In: Diseases of Horticultural Crops-Diagnosis and Management, Volume 4 Important Plantation Crops, Medicinal Crops, and Mushrooms* (Ed. J. N. Srivastava and A. K. Singh), Apple Academic Press, Florida, USA, 314pp (ISBN-978-1-77188-992-6)
5. Bendangsenla, **Susanta Banik**, and J. N. Srivastava. 2021. Diseases of Turmeric (*Curcuma longa* L) and Its Management. *In: Diseases of Horticultural Crops-Diagnosis and Management, Volume 3 Ornamental and Spice Crops* (Ed. J. N. Srivastava and A. K. Singh), Apple Academic Press, Florida, USA, 341pp. ISBN hard: 978-1-77188-991-9.
6. Bendangsenla, **Susanta Banik**, and J. N. Srivastava. 2021. Diseases of Ginger (*Zingiber officinale* Rosc.) and Its Management. *In: Diseases of Horticultural Crops-Diagnosis and Management, Volume 3 Ornamental and Spice Crops* (Ed. J. N. Srivastava and A. K. Singh), Apple Academic Press, Florida, USA, 341pp. ISBN hard: 978-1-77188-991-9.
7. Kavi Sumi, **Susanta Banik** and PezangulieChakruno. 2021. Important Diseases of Gerbera (*Gerbera jamesonii* Bolus Ex. Hook F.) and Its Management. *In: Diseases of Horticultural Crops-Diagnosis and Management, Volume 3 Ornamental and Spice Crops* (Ed. J. N. Srivastava and A. K. Singh), Apple Academic Press, Florida, USA, 341pp. ISBN hard: 978-1-77188-991-9.
8. PezangulieChakruno, **Susanta Banik** and Kavi Sumi. 2021. Status and strategies for managing mango (*Mangifera indica* L) diseases. *In: Diseases of Horticultural Crops-Diagnosis and Management, Volume 1 Fruit Crops* (Ed. J. N. Srivastava and A. K. Singh), Apple Academic Press, Florida, USA, 442pp. ISBN hard: 978-1-77188-989-6.
9. Kavi Sumi, **Susanta Banik** and PezangulieChakruno. 2021. Current status of Banana (*Musa paradisiaca* L.) diseases and its management. *In: Diseases of Horticultural Crops-Diagnosis and Management, Volume 1 Fruit Crops* (Ed. J. N. Srivastava and A. K. Singh), Apple Academic Press, Florida, USA, 442pp. ISBN hard: 978-1-77188-989-6.
10. **Susanta Banik**. 2017. Plant disease management through microbial agents for sustainable agriculture. *In: Microbes and Sustainable Agriculture* (Ed. Ram Prasad and Narendra Kumar)

- IK International Publishing House Pvt. Ltd., New Delhi. Pp-227-259. (ISBN: 978-93-85909-48-1).
11. Ao, N.T and **Susanta Banik**. 2017. Introduction to fungicides. In: Fundamentals of Plant Pathology (Ed M.K.Kalita), Kalyani Publishers, Ludhiana, pp.211-225. ISBN: 978-93-272-7581-0.
  12. **Susanta Banik**. 2016. Major diseases of potato and their management through biological means. In: Organic disease management in solanaceous vegetable crops in Nagaland (Ed Rajesha G. et al.), ICAR Research Complex for NEH Region, Jharnapani, Nagaland. Pp.32-38. ISBN: 978-81-931382-7-4
  13. **Susanta Banik** and Ratikanta Maiti. 2016. Biotic stress: Diseases. In: Bioresource and stress management. (Maiti R, Kumari A, Thakur AK and Sarkar NC Eds). Springer Science, Singapore, pp-87-99, ISBN: 978-981-10-0994-5 (Print) 978-981-10-0995-2 (Online).
  14. **Susanta Banik** and Prashant P. Jambhulkar. **2014**. Biological control of diseases in field crops: status and concerns. In: Advances in Agro-technology-A Text Book. Vol. II (H.N.Rodriguez, N.C.Sarkar, A.V.Ramanjaneyulu and Ratikanta Maiti Eds). Puspa Publishing House, Kolkata. Pp.335-351. (ISBN: 978-93-84553-01-2).
  15. Jaydeep Halder and **Susanta Banik**. **2013**. Botanicals in Crop Protection. In: Current Concepts in Crop Protection (Susanta Banik Ed). Studium Press India Pvt. Ltd., New Delhi. pp. 351-388. ISBN-978-93-80012-42-1
  16. **Susanta Banik** and Jaydeep Halder. **2013**. Protection of crop plants with newer chemical molecules. In: Current Concepts in Crop Protection (Susanta Banik Ed). Studium Press India Pvt. Ltd., New Delhi. pp. 307-350. ISBN-978-93-80012-42-1
  17. **Susanta Banik** and Jaydeep Halder. **2013**. Crop Protection with an emerging approach: Nanotechnology. In: Current Concepts in Crop Protection (Susanta Banik Ed). Studium Press India Pvt. Ltd., New Delhi. pp. 27-46. ISBN-978-93-80012-42-1
  18. Daiho L. and **Susanta Banik**. 2011. Important Plant Diseases and North-East Ecosystem. *In: Plant Pathology: Vision 2030*. Indian Phytopathological Society, IARI, New Delhi, India, pp-96-100. (ISBN: 978-81-8465-959-7).
  19. Upadhyay D. N. and **S. Banik**.**2011**. Nanotechnology: an emerging approach in plant disease management. In: Plant Health Management (P.C. Trivedi Eds) Agrobios(India). Pp-421-427. ISBN (13): 978-81-7754-445-9.
  20. Lemtur, A. S; Upadhyay, D. N. and **Banik, S**.**2011**. Effect of fungicides and bio-agents on Cercospora leaf spot disease and yield of sesame. In: Agricultural Productivity and Resource Use (A. Sharma, R. Nakhro, S. Das and D.B.Tyagi Ed). S.S.Publication, New Delhi.pp.117-123. (ISBN: 978-81-89812-44-7).
  21. Pratibha Sharma, **Susanta Banik**, Mousa Najafinia and Monica Henry. **2010**.Vegetative Compatibility Groups (VCGs) in Fungi. In: Molecular Biology of Plant Pathogens (L.V.Gangawane&V.C.Khilare Eds), Daya Publishing House, Delhi. pp.336-359. ISBN:8170356385. pp.viii+378.
  22. **Banik, S.**, Biswas, S. K., Kadu,L. N. and Sinha, P. **2009**. Vegetable disease management. In: Pest Management in Vegetables Vol. II (2<sup>nd</sup> Ed.) (K.P.Srivastava and D. K. Butani Eds), Studium Press India Pvt. Ltd., New Delhi. pp. 382-477. ISBN: 9788190757737.

### **B. Courses taught**

Sl no.	Course title	Course no.	Credit hours	Academic level
<i>Bachelor of Science (Agriculture)</i>				
1	Agricultural Microbiology	PLP-102	1+1	B.Sc (Ag)
2	Plant Pathogens	PLP-201	2+1	B.Sc (Ag)
3	Fundamentals of Plant Pathology	PLP-201	3+1	B.Sc (Ag)
4	Biopesticides & Biofertilizers	PLP-304	2+!	B.Sc (Ag)

5	RAWE-P	RAWE-PLP	0+2	B.Sc (Ag)
<i>Master of Science (Agriculture) in Plant Pathology</i>				
5	Phytopathological Technique	PLP-503	0+2	M.Sc
6	Mycology	PLP-504	2+1	M.Sc
7	Detection and Diagnosis of Plant diseases	Pl. Path-505	0+2	M.Sc
8	Plant Bacteriology	Pl. Path-503/PLP-505	2+1	M.Sc
9	Plant Virology	Pl. Path-502/PLP-506	2+1	M.Sc
<i>Ph.D in Plant Pathology</i>				
10	Molecular Basis of Host Pathogen Interaction	Pl.Path-604	2+1	Ph.D
11	Advanced Virology	Pl.Path-602	2+1	Ph.D
12	Advanced Mycology	Pl.Path-601	2+1	Ph.D
13	Advanced Bacteriology	Pl.Path-603	2+1	Ph.D
14	Plant Biosecurity and Biosafety	Pl.Path-606	2+0	Ph.D

### **C. Oral presentations**

1. Lemtur, S. A., Upadhyay, D. N. and **Susanta Banik. 2012.** Adjustment of date of sowing and resistance screening for managing Cercospora leaf spot of sesame. In: National Symposium on Frontlines of Microbiological Research: Concepts and Applications. 02-04 February, 2012. pp.16.

2. **Susanta Banik. 2015.** Plant Diseases in Relation to Climate Change. First lecture series in SASRD, Nagaland University. Delivered on April 17<sup>th</sup>, 2015 in School of Agricultural Sciences and Rural Development (SASRD), Nagaland University, India.

### **D. Invited Lecture**

1. **Susanta Banik. 2009.** Disease management of horticultural crops. Lecture presented on 20<sup>th</sup> march, 2009 with invitation from the NGO "Peoples Integrated Development Services", B Block Mission Hills, Post Box-01, Jalukie, Nagaland-797110.

2. **Susanta Banik. 2011.** Disease management of ginger, turmeric and chilli. Lecture presented on 10<sup>th</sup> December, 2011 with invitation from the NGO "Centre for Integrated Agriculture Development" at Urra village, Dimapur, Nagaland.

3. **Susanta Banik. 2015.** "Introduction to Biotechnology and PCR techniques". Lecture presented on 15<sup>th</sup> June, 2015 as resource person with invitation from SASRD Biotech Hub at Nagaland University, Medziphema Campus, Nagaland

4. **Susanta Banik. 2015.** "Biotechnology and its application". Lecture presented on 27<sup>th</sup> August, 2015 as resource person with invitation from SASRD Biotech Hub at Nagaland University, Medziphema Campus, Nagaland.

5. **Susanta Banik. 2015.** "Basic requirements for biotechnology work". Lecture presented on 27<sup>th</sup> August, 2015 as resource person with invitation from SASRD Biotech Hub at Nagaland University, Medziphema Campus, Nagaland.

6. **Susanta Banik**. 2015. “Diseases of nursery plants and their control measures”. Lecture presented on 17<sup>th</sup> September, 2015 as a guest faculty for a Certificate Course on Modern Nursery Management Practices of Horticulture Crops with invitation from Central Institute of Horticulture, Medziphema, Nagaland.

7. **Susanta Banik**. 2015. “Major diseases of potato and their management through biological means”. Lecture presented on 1<sup>st</sup> October, 2015 as a resource person in farmers training programme on ‘Integrated insect pest and disease management in solanaceous vegetables’ at ICAR-RCNEH, Jharnapani, Nagaland.

8. **Susanta Banik**. 2015. “Diseases of nursery plants and their control measures”. Lecture presented on 10<sup>th</sup> November, 2015 as a guest faculty for a B.Voc degree programme on “Plant Propagation and Plant Nursery Management” with invitation from the Director, B.Voc programme, Dept. of Horticulture, SASRD, Nagaland University, Medziphema, Nagaland.

9. **Susanta Banik**. 2016. “Biotechnology in Agriculture”. Lecture presented on 03<sup>rd</sup> June, 2016 as resource person for Hands-on training programme on Biotechnology in Agriculture for faculty members at SASRD, Nagaland University organized by SASRD Biotech Hub, Nagaland University.

10. **Susanta Banik**. 2017. “Biotechnology and its applications”. Lecture presented on 5<sup>th</sup> August, 2017 as resource person for ‘Outreach programme on Biotechnology’ for students at Patkai Christian College, Chumukedima, Nagaland.

11. **Susanta Banik**. 2017. ‘Fruit crops: their diseases and management’. Lecture presented on 30<sup>th</sup> August, 2017 as resource person in a training programme for ATMA functionaries of Nagaland organized at SAMETI, Medziphema, Nagaland.

#### **E. Research guidance at post graduate level (As Major Advisor)**

<b>Sl No.</b>	<b>Name</b>	<b>Area/title of works</b>	<b>Academic level</b>	<b>Year completed</b>
1	Mr. PezangulieChakruno	Studies on Phylloplane mycoflora of Colocasia	M.Sc	<b>2013</b>
2	Mr. Recha Imchen	Studies on endophytic fungi of rice in Nagaland	M.Sc	<b>2014</b>
3	Miss Bendangsenla	Citrus canker management	M.Sc	<b>2015</b>
4	Miss Lalngaihawmi	Fungal Endophytes of rice	M.Sc	<b>2015</b>
5	Mr. Chavan Digvijay Rajaram	<i>Trichoderma</i> spp. from soils of Nagaland, India	M.Sc	<b>2016</b>
6	Ms. Ambalika Debbarma	Seed mycoflora of pulses	M.Sc	<b>2016</b>
7	Ms. Anamika Debbarma	Seed mycoflora of oilseeds	M.Sc	<b>2017</b>
8	Ms. NunniTayeng	Characterization of native <i>Trichoderma</i>	M.Sc	<b>2017</b>
9	Ms. MarbiangdorMawlong	Use of native <i>Trichoderma</i> for management of damping-off disease	M.Sc	<b>2018</b>
10	Ms. AbisagLalremruatpuii	Trichoderma and pesticide compatibility	M.Sc	<b>2018</b>
11	Mr. PezangulieChakruno	Diseases of Naga King Chilli	Ph.D	<b>2018</b>
12	Ms. FasnaBeegam K.	Physical and chemical mutagenesis in <i>Trichoderma</i>	M.Sc	<b>2021</b>
13	Mr. Gundurao	Copper tolerance of <i>Trichoderma</i>	M.Sc.	<b>2021</b>
14	Ms. Arentola Lemtor	Mutation in <i>Trichoderma</i>	M.Sc.	<b>2021</b>
15	Mr. Kheto K. Achumi	Variability in the anthracnose pathogen of King chilli	M.Sc	<b>2022</b>



16	Ms. Y. Sonia Shahni	Management of early blight of potato in field	M.Sc	2022
17	Ms. Tharringwon M N	Comparative study on three <i>Trichoderma asperellum</i> isolates	M.Sc	2023
18	Mr. Jitendra Kumar	Silver and copper nanoparticles on plant pathogens	M.Sc	2023
19	Mr. Surender Kumar	Silver nanoparticles and tomato phylloplane	M.Sc	2024

#### **F. a) Members of Professional bodies**

1. Life Member of Indian Phytopathological Society (IPS), Division of Plant Pathology, IARI, Pusa Campus, New Delhi-12, India
2. Life Member of Indian Mycological Society (IMS), Dept. of Botany, University of Calcutta, 35, Ballygunge Circular Road, Kolkata-19. India
3. Life Member of Indian Society of Mycology and Plant Pathology, MPUA&T, Dept. of Plant Pathology, Udaipur-313001, India
4. Life Member of Indian Society of Plant Pathologists, PAU, Ludhiana, India
5. Life Member of the journal "International Journal of Bio-resource and Stress Management" ([www.pphouse.org](http://www.pphouse.org)).
6. Member of Editorial board of the journal "International Journal of Bio-resource and Stress Management" ([www.pphouse.org](http://www.pphouse.org)).
7. Zonal Councillor (North East Zone), Indian Phytopathological Society (IPS), Division of Plant Pathology, IARI, Pusa Campus, New Delhi-12 for the year 2020.

#### **F. b) Member of academic and administrative bodies of Nagaland University**

1. Member-School Board w.e.f 21<sup>st</sup> July, 2008 for two years
2. Member- Board of Post Graduate Studies (BPGS) in the Department of Horticulture w.e.f 29<sup>th</sup> April, 2011 for three years
3. Member- BPGS in the Department of Agricultural Economics w.e.f. 27-05-14 for three years
4. Member-Core committee for Monitoring and Evaluation of ATMA (Agricultural Technology and Management Agency) activities in Nagaland, India since 22-02-11.
5. Member-School Board w.e.f. 23<sup>rd</sup> January, 2013 for two years
6. Member-School Board w.e.f 10<sup>th</sup> October, 2019 for two years
7. Member-BPGS in the Department of Plant Pathology w.e.f 25<sup>th</sup> may, 2009 for three years.
8. Member-BPGS in the Department of Genetics and Plant Breeding w.e.f.23.02.2015
9. Member-Committee for Instrumentation Centre of SASRD w.e.f 19.11.2009 for two years
10. In-charge-Instrumentation Centre w.e.f 19.03.2008
11. Member-Coordinating committee for Institutional Biotech Hub Project w.e.f 18.11.2013
12. Member- Departmental Academic Integrity Panel for the period 2019-2021
13. Member Secretary- Core committee for preparation of SSR of SAS for the purpose of accreditation by ICAR
14. Member- Board of Studies, Dept. of Biotechnology, SET, Nagaland University, Dimapur w.e.f. 03-08-23
15. Member- Board of Studies, Dept. of Agronomy, SAS, w.e.f. 11-08-23
16. Member- Board of Studies, Dept. of Horticulture, SAS, w.e.f. 11-08-23
17. Member-School Board, SAS, w.e.f. 04-10-23

\*BPGS-Board of Post Graduate Studies, w.e.f.-with effect from

#### **G. Resource Mobilization**

1. DBT project entitled “Characterization of *Xanthomonas oryzae*pv. *oryzae* strains from North West and Eastern regions for screening of xop like type III effectors to investigate its role as virulence determinants to induce blight in rice”. Rs. 7,55,000/. (Sanction Order No. BT/PR14870/AGR/02/767/2010 Dated 15.12.2011)
2. State government sponsored project entitled “Crop disease and pest survey in Dimapur and Peren districts of Nagaland”. Sponsored by Directorate of Agriculture, Govt. of Nagaland. Rs.1.33 lakhs (2011-14)
3. DBT Project ‘Establishment of Institutional Biotech Hub’ Rs. 38.00 lakhs.
4. DBT project entitled “Exploration of banana diversity and its biotechnological research in Nagaland” (DBT File No. DBT-NER/Agri/33/2016) as PI worth Rs. 25.80 lakhs (Date of sanction-22-03-2018).

#### **H. Organizing national/international symposium/seminars/conferences/workshops/ colloquium**

**Organizing Secretary**, National Seminar on ‘Crop protection: current trend and future perspective’ held during November 16-18, 2017 at School of Agricultural Sciences and Rural Development, Nagaland University, Medziphema campus, Nagaland.

**Co-organizing Secretary**, National Symposium (Virtual) of Indian Phytopathological Society on ‘Plant disease management: experiences and aspirations’ held during December 07-08, 2020 at School of Agricultural Sciences and Rural Development, Nagaland University, Medziphema campus, Nagaland.

#### **I. Participation in national/international symposium/seminars/conferences/workshops/colloquium**

1. **2017**. National Symposium on ‘Diagnosis and management of plant diseases: integrated approaches and recent trends’ held during January 09-11, 2017 at ICAR Research Complex for NEH region, Umiam, Meghalaya and presented a lead lecture.
2. **2015**. National Workshop cum Training programme on “Statistical Tools for Research Data Analysis” held during 16-22 March, 2015 at Department of Agricultural Statistics, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, West Bengal-741252 organized by ‘Society for Application of Statistics in Agriculture and Allied Sciences’, BCKV, Mohanpur, Nadia, West Bengal-741252
3. **2015**. National Seminar on ‘Sustainable Horticulture vis-a-vis Changing Environment’ held during 26-28 Feb, 2015 at SASRD, Medziphema Campus, Nagaland University, Medziphema.
4. **2014**. Workshop on “Capacity Enhancement on Communication and Team Building” held during 27<sup>th</sup> and 28<sup>th</sup> March, 2014 at SASRD, Medziphema Campus, Nagaland University, Medziphema, Nagaland, India
5. **2014**. Review Workshop on CSS and Training Planning for EEI and SAMETI’s of NE states during 6-7 March, 2014 at Hotel Theja Fort, Dimapur, Nagaland, India organized by Extension Education Institute, Jorhat.
6. **2014**. International Symposium on ‘Role of fungi and microbes in 21<sup>st</sup> Century- a global scenario’ during 20-22 Feb, 2014 at Science City, Kolkata organized by Indian Mycological Society, University of Calcutta, Kolkata, India
7. **2013**. Colloquium for DBT Overseas Associates on 9 Dec, 2013 at NEHU, Shillong, Meghalaya, India.
8. **2013**. National Workshop on ‘Bioinformatics tools and its applications’ during 19-20 June, 2013 at BIF Centre, Nagaland University, Lumami, Nagaland, India
9. **2012**. National Symposium on “Frontlines of Microbiological Research: Concepts and Applications organized by Indian Mycological Society, University of Calcutta, Kolkata, India during February 02-04, 2012.

10. **2009.** 5<sup>th</sup> International Conference on “Plant Pathology in the Globalized Era” held during November 10-13, 2009 at Indian Agricultural Research Institute (IARI), New Delhi, India, organized by Indian Phytopathological Society, IARI, New Delhi, India

**J. Popular article:**

1. Sinha, P. and **Susanta Banik**. 2009. Plant Disease Forecasting and monitoring: an imperative in precision agriculture. *Indian Farming*. Vol. 59 (8): 46-50.
2. **Susanta Banik**. 2010. Mushrooms: the magic store of health benefits. *Everyman’s Science*. Vol. XLIV(6): 360-365.
3. **Susanta Banik** and Jaydeep Halder 2010. Global warming: When seen with positive outlook. *Vumiputra* (8th Annual Issue): 8:88-90.
4. Jaydeep Halder and **Susanta Banik** 2011. Lichen: The bizarre form of life. *Vumiputra* (9th Annual Issue), 9: 71-73.
5. Jambhulkar PP, Susanta Banik and Murlidhar Sadawarti. 2012. Nanotechnology in plant protection. *Agrobios Newsletter*, Vol No. X (Issue no. 10): 16-17.
6. **Susanta Banik** and Jaydeep Halder. **2015**. Floriculture in Vertical Farming: A way out for land stressed farming. *Floriculture Today*, March issue, 2015, pp- 38-39.
7. Jaydeep Halder, Pradip Karmakar and **Susanta Banik**. **2015**. Marigold: a lot more than a flower. *Floriculture today*, August issue, 2015, pp-40-42.
8. Nayan Kishor Adhikary, MoakalaChangkiri, Aastik Jha, Susanta Banik and Satya Prakash Kanaujia. 2023. Symptomatology, transmission and management of chilli anthracnose (*Colletotrichum capsici*). *Agri-India Today*, Vol 3(3): 25-28. (ISSN : 2583-0910), Article ID : 03/V/07/0523

**K. NET QUALIFICATIONS**

**K. (a) ICAR-NET –**

- i) June, 2004
- ii) May, 2008

**K.(b)CSIR-UGC NET-**

- i) June 2003
- ii) December 2003 (JRF & NET, called for SPM Fellowship Award Examination)
- iii) June 2004

**K. (c) Fellowships/Scholarships Received**

- i) BCKV Merit scholarship in 1996 for pursuing undergraduate programme
- ii) Junior Research Fellowship (JRF) from Indian Council of Agricultural Research (ICAR) in the year 2000 for pursuing Masters programme.
- iii) IARI Merit Scholarship in 2003 for pursuing Ph.D programme
- iv) CSIR- JRF in 2003 for pursuing Ph.D programme

**L. Trainings attended**

Year	Item	Topic	Duration	Organization/sponsoring	Venue
2009	Winter	Agricultural	21 days,	Division of Microbiology,	New Delhi,

	School	Microbiology	05-25 Jan, 2009	Indian Agricultural Research Institute, New Delhi	India
2011	Orientation programme	General Orientation	27 days, 03-31 Jan, 2011	Academic Staff College, Jadavpur University	Jadavpur, Kolkata, India
2014	Advanced Faculty Training	Innovative approaches and advances for diagnosis and detection of plant diseases in relation to their management	21 days, 02-22 Sept. 2014	Centre for Advanced Faculty Training in Plant Pathology, GBPUAT, Pantnagar, Uttarakhand, India	Uttarakhand, India
2015	Workshop cum training	Statistical Tools for Research Data Analysis	7 days, 16-22 March, 2015	Society for Application of Statistics in Agriculture and Allied Sciences', BCKV, Mohanpur, Nadia	West Bengal, India
2019	Advanced Faculty Training	Exploitation of beneficial microbes in organic agriculture	04-24 September, 2019	CAFT in Organic Farming (ICAR)	Dept. of Soil Science, AAU, Jorhat, Assam

**Declaration:** I hereby declare that all the information presented above is true to the best of my knowledge and belief.

Susanta Banik  
Dated: 09-10-24