

Profile of Dr. Talijungla



About Dr. Talijungla

Dr. Talijungla is working as a Professor and Head in the Department of Botany, Nagaland University, Lumami. She joined this University in April 1999. A graduate of Kohima Science College, Jotsoma, Kohima (Nagaland), Postgraduate of North Eastern Hill University, Shillong, she obtained her Ph. D degree from North Eastern Hill University, Shillong (Meghalaya) in 1999 on a topic entitled “Effect of heavy metals on the Structure and functioning of Ectomycorrhizae of pine (*Pinus kesiya* Royle ex Gordon)” under the able guidance of Prof. G. D. Sharma, (Rtd. Prof. & V.C. of G.G.V Chattisgarh) and presently Vice Chancellor, USTM, Meghalaya. Dr. Talijungla is actively associated with Academic activities of Nagaland University as a member. Her current research includes Microbial Ecology, role of mycorrhizae in regeneration of degraded ecosystem, documentation of microbes from unique ecological niches, analysis of various chemicals from tea leaves of Nagaland, documentation of wild mushrooms and production of spawns of rare edible mushroom and She has more than 23 years of teaching experience in the field of Microbiology, Plant Pathology and Mycology. 11 students have been awarded Ph. D. degree and currently six scholars are working under her supervision. She has published **54** research papers in journals of national and international repute, and **14** book chapters and published **1** book. She has completed few research projects sponsored by DBT, DST and GBPI/IERP as **P.I.**, and **Coordinator** of DST-FIST Level-1 Program 2016-2021 and **Co-Coordinator** on a DBT sponsored Programme ‘Establishment of Institutional Biotech Hubs (IBTHubs)’ and **Dy. Coordinator** of the UGC – SAP DRS – III (1-4-2015 to 31- 3-2020), in the Thrust area, Inventory of plant genetics resources of Nagaland , Sustainable utilization and their Conservation (*In Situ & Ex Situ*) and **Co-Principal Investigator** of DBT (NE-BPMC) sponsored project.

Brief Profile

1. Name : Dr. Talijungla
2. Husband's name : Mr. Mongsen Aier
3. Date of Birth : 03-11-73
4. Present Position : Professor
5. Date of joining : 20th April, 1999
5. Present Address : Department of Botany, Nagaland University, Lumami 798 627, India. E-mail: kr.talijungla@gmail.com; 9436605542 (M)
6. Whether belong to SC/ST : Scheduled Tribe
7. Nationality : Indian

8. Community : Ao-Naga

9. Religion : Christianity
10. Permanent Address : P.O. Yimyu Ward, Mokokchung 798601, Nagaland.
11. Courses Presently Teaching: Mycology & Plant Pathology, Microbial Ecology.
12. Area of Research : Applied microbiology

13. Educational qualifications:

Exam passed	Year	Name of the board/University
B.Sc. (Hons)	1993	NEHU
M.Sc.(Botany)	1995	NEHU
Ph. D.	1999	NEHU
GATE	1996	MHRD
NET	2002	UGC-CSIR

14. Number of Publications : 85

List of Publications:

1. Ajungla, T., Sharma G.D., Dkhar, M.S and Laloo, R. C. 2001. Effect of heavy metal pollution on nutrient contents in ectomycorrhizal seedlings (*Pinus kesiya* Royle ex Gordon). Vasundhara. 6.91-93. ISSN No. 0971 782X.
2. Ajungla, T., Sharma, G.D and Dkhar, M.S. 2001. Heavy metals toxicity on the colonization of ectomycorrhizae of *Pinus kesiya* (Royle ex Gord). Journal of Assam University. 6(1):36-39.ISSN No. 0972 0987.

3. Ajungla, T., Sharma, G.D and Dkhar, M.S. 2001. Zn and Cd accumulation in ectomycorrhizae of pine (*Pinus kesiya* Royle ex Gord). ECOBIOS. **1(1):41-44. ISSN No. 0972 6446.**
4. Ajungla, T., Sharma, G.D and Dkhar, M.S. 2002. Effect of heavy metals on the urease activities of mycorrhizospheric soil of pine seedlings (*Pinus kesiya*). Asian J. of Microbiol. Biotech. & Environ. Sciences. No.1 **ISSN No. 972 3005.**
5. Ajungla, T., Sharma, G.D and Dkhar, M.S. 2002. Heavy metals toxicity on phosphatase activity of mycorrhizospheric soil of *Pinus kesiya* seedlings. Poll. Res. **21(4):421-424. ISSN No. 0257 8050.**
6. Ajungla, T., Sharma, G.D and Dkhar, M.S. 2003. Heavy metals toxicity on dehydrogenase activity on rhizospheric soil of ectomycorrhizal pine seedlings in field condition. Journal of Environmental Biology. **24(4):461-463. ISSN No. 0254 8704. (Web of Science)**
7. Ajungla, T., Sharma, G.D and Dkhar, M.S. 2002. Heavy metals accumulation in ectomycorrhizae of pine (*Pinus kesiya* Royle ex Gordon). Poll. Res. No.3. **ISSN No. 0257 8050.**

(Scopus)

8. Ajungla, T. Sharma, G.D. 2003. Accumulation of Cu and Ni in ectomycorrhizae of *Pinus kesiya* (Royle Gordon) . Nagaland University Research Journal. **1: 14-17. ISSN No. 0976 0346.**
9. Bendangmenla, Ajungla, T and Jamir, N.S. 2005. Efficiency of ectomycorrhizae on the growth of establishments of pine seedlings in the degraded forest. Nagaland University Research Journal.**(3):80-83. ISSN No. 0976 0346.**
10. Bendangmenla, Ajungla, T and Jamir, N.S. 2006. Effect of *Boletus edulis* and *Suillus bovinus* in the growth performance of *Schima wallichii* seedlings in degraded land sites. Bionature. **26(2):81-85.**
11. Ajungla, T., Sharma, G.D and Dkhar, M.S. 2006. Uptake of phosphorus by ectomycorrhizal pine seedlings in the metal polluted soil. Environmental Biology and Conservation. **11:15-18. ISSN No. 0971 982X**
12. Ajungla, T., Sharma, G.D and Dkhar, M.S. 2008. Improvement of growth by mycorrhizal fungi under metal polluted environment. Environmental Biology and Conservation. **13: 61-67. ISSN No. 0971 782X.**
13. Ajungla, T and Imliyanger Tzudir. 2010. Effects of ectomycorrhizal fungi on the growth performance of *Pinus patula* Schiede ex Schlecht & Cham. **15. 29-31. ISSN No. 0971 782X.**
14. Imliyanger Tzudir and T. Ajungla. 2012. Studies on growth response of *Pinus patula* infected with ectomycorrhizae. Assam Univ. J. of Science & Technology. **9(1) 62-66. ISSN No. 095 2773.**
15. Ajungla, T and Sharma, G.D. 2012. Accumulation of Pb and Aluminium in ectomycorrhizal roots of pine (*Pinus kesiya* Royle ex Gordon) Assam University J. of Science & Technology. Biol. & Environ. Sciences. 2012. Vol. **10(1). 16-19. ISSN No. 0975-2773.**
16. Bendangmenla and T. Ajungla. 2012. Uptake of nutrients (NPK) by ectomycorrhizal Oak seedlings in degraded land sites. Assam J. of Sc. & Techno. **10:20-23. ISSN No. 0975 2773.**
17. Ajungla, T and Sharma, G.D. 2013. Neutralization of heavy metals toxicity by *Cenococcum graniforme* in the establishment and survival of *Pinus kesiya* (Royle ex Gordon) seedlings. Int. J. Life Sc. Bt & Pharm. Res. Vol. 2. No. 4. **279-283. ISSN No. 2250 3137.**
18. Bendangmenla and Ajungla, T. 2014. Uptake of Phosphorus by ectomycorrhizal seedlings in degraded jhum lands. Int. J. Life Sc. Bt & Pharm. Res. Vol.3. No.1. **299-303. ISSN 2250-3137.**

19. Arenla and Ajungla, T. 2014. Effect of soil moisture and soil pH of ectomycorrhizal colonization on *Dipterocarpus retusus* blume seedlings. Int. J. Life Sc. Bt & Pharm. Res. Vol. 3, No. 2. 102-107. **ISSN 2250-3137**
20. Arenla. S and Ajungla, T. 2014. Influence of soil organic carbon on ectomycorrhizal colonization of *Cryptomeria japonica* (Thumb. ex L.f.) D. Don. Int. J. of Recent Biotechnology. Vol. 2. No. 2. 40-45. **ISBN No: 2322 0392.**
21. Bendangmenla and T. Ajungla. 2014. Field performance of *Schima wallichii* (DC.) Korth. seedlings inoculated ectomycorrhizal fungi. Int. J of Recent Scientific Research. Vol. 5(4). 970-973. ISSN No. 0976-3031.
22. Imliyanger Tzudir and T. Ajungla. 2015. Effect of soil organic carbon on the growth of *Pinus patula* Schiede ex Schlecht & Cham. inoculated with *Boletus edulis* and *Rassula* sp. Nagaland University Research Journal. Vol. 7. 313-319. **ISSN No. 0976 0346.**
23. Arenla, S and Ajungla, T. 2015. Role of soil moisture in ectomycorrhizae formation and growth of Eucalyptus [*Corymbia citriodora* (Hook.) K. D. Hill and L. A. S. Johnson] seedlings. The Fazl Ali College Journal. Vol. 5. 65-71. **ISSN No. 2319-6769.** (UGC Care)
24. Wapang. T & Ajungla, T. 2016. Edible, medicinal and red listed monkey head mushroom *Hericium erinaceus* (Bull.) Pers. from Japhu mountain of Kohima needs immediate protection. Current Botany. 7:33-35. (UGC Care)
25. Wapang, T & Ajungla, T. 2016. A potential nutraceutical mushroom *Pleurotus citrinopileatus* R. Heim from Puliebadze hill of Kohima (India) needs conservation. A report. International J. of Scientific Research. 5(11):831-832. **ISSN No. 2277.**
26. Ao, T., Seb, J., Ajungla, T & Deb, C. R. 2016. Diversity of wild mushrooms in Nagaland, India. Open J. of Forestry. Scientific Research Publishing. 6:404-419. **ISSN (online): 2163 0437. ISSN (print): 2163 0429.**
27. Nongalleima, K., Ajungla, T and Singh, C. B. 2017. Phytochemical, total flavonoid and total flavonoid content estimation in *Citrus macroptera* Montruz. Journal of Medicinal Plants Studies. 5(3):114-118. **ISSN (E): 2320 3862. ISSN (P): 2394 0530. Impact factor 0.35**
28. Nongalleima, K., Ajungla, T and Singh, C. B. 2017. "Determination of antioxidant activity and simultaneous RP-HPLC analysis of kaempferol, quercetin, rutin and kaempferol in *Citrus macroptera* Montruz." Journal of Pharmacognosy and Phytochemistry. 6(3): 274-278. E- ISSN 2349 8234, P-ISSN 2278 4136 29.
29. Nongalleima, K., Ajungla, T and Singh, C. B. 2017. Metabolic profiling of essential oil of *Citrus macroptera* Montruz. leaves and peel, assessment of in vitro antioxidant and anti inflammatory activity. International Journal of Pharmacy and Pharmaceutical Sciences. 9(9): 107-114 **ISSN-0975- 1491. Impact factor 0.23. (Scopus)**
30. Nongalleima, K., Ajungla, T and Singh, C. B. 2017. Anti-oxidant, anti-inflammatory and cytotoxic activity of *Citrus macroptera* Montruz. extracts. International Journal of Pharma Tech Research. 10 (3): 200-210. **ISSN-0974-4304, ISSN (online) 2455-9563. Impact factor 1.07.** (Web of Science)
31. Temsurenla and Ajungla, T. 2017. Soil physico-chemical analysis in tea growing areas of Mokokchung district, Nagaland. International Journal for Science and Advance research in Technology. 3(12):1016-1021. **ISSN (online)-2395- 1052 printed ISSN 2395 1052.** <http://ijsart.com/Home/IssueDetail?id=19423>

32. Temsurenla and Ajungla, T. 2017. *Camellia sinensis* (L.) Kuntze and its beneficial soil microflora. *Innovare Journal of Life Science*. 5(1): 1-4. **ISSN-2321-550X**.
<https://innovareacademics.in/journals/index.php/ijls/article/view/16152>
33. Nongalleima, K., Ajungla, T and Singh, C.B. (2017). GCMS based metabolic profiling of essential oil of *Citrus macroptera* Montruz. Leaves and peel, assessment of in vitro antioxidant and antiinflammatory activity. *International Journal of Pharmacy and Pharmaceutical Sciences*. 9:9. ISSN 0975 4491 DOI:<http://dx.doi.org/10.22159/ijpps.2017v9i9.19593>
34. Temsurenla and Ajungla, T. 2018. Morphological characterization of fungi in tea garden. *International Journal of Basic and Applied Research*. 8(2): **ISSN (p)- 2249-3352, ISSN (online)- 2278-80505**.
35. Temsurenla and Ajungla, T. 2018. Phosphate solubilizing potentiality of fungi in rhizophore of *Camellia sinensis* (L.) O. Kuntze. *The Fazl Ali College Journal*. 7: 84-91. **ISSN- 2319 6769 (UGC Care)**
36. Kichu, A., Ajungla, T., Nyenthung, G and Yeptho, L. 2019. Colonial and morphological characteristics of soil fungi from Jhum land. *Indian Journal of Agricultural Research*.1-9. **ISSN 0367 8245 online ISSN 0976 058X. URL Link:**<https://arccjournals.com/journal/Indian-journal-of-agricultural-research/A-525> (Web of Science)
37. Gloria N., Ajungla, T, Kichu A and Yeptho L. 2019. *Fistula hepatica* (Schaeff.) belonging to the family *Fistulaceae* in Nagaland India. *Current Science*. Vol. 117 (9). 1433-1434. **ISSN 0011 3891**. (Web of Science) **Impact factor 1.169**
38. Seb, J and Ajungla, T. 2018. Role of ectomycorrhiza in forest ecosystems: A Review. *Int. J. Adv. Res*. 6(8), 866-873. **ISSN: 2320-5407**
39. Seb, J and Ajungla, T. 2019 . Influence of soil moisture on ectomycorrhizal formation of *Prunus cerasoides* Buch. - Ham. Ex D. Don. *Research Journal of Life Sciences, Bioinformatics, Pharmaceutical and Chemical Sciences*. 5(1).75-79. **ISSN 2454 6348**
40. Temsurenla and Ajungla, T. 2020. Seasonal variations in antioxidant capacities and phenolic contents of tea leaf extracts.. *Asian Journal of Pharmaceutical and Clinical Research*. 13(4).108-112. **ISSN 2455-3891 (online): ISSN: 0974-2441 (print)** <https://doi.org/10.22159/ajpcr.2020.v13i4.36866>
Impact factor: 0.2
41. Lydia Yeptho, Ajungla, T., Asangla Kichu and Sigh, M.R. 2020. Ethnic food habits of the Sumi Tribe, Nagaland, India. *Current Science*. 119(4):708-712. **ISSN : 0011-3891** URL Link: [doi:10.18520/cs/v119/i4/708-712](https://doi.org/10.18520/cs/v119/i4/708-712) (Web of Science) **Impact factor 1.169**
42. Lydia Yeptho*., Ajungla, T and Keviphruonuo Kuotsu . 2021. Ethnic study on bastenga, a fermented bamboo shoot product of Nagaland. *CURRENT SCIENCE*, VOL. 120(4): 715-718.
URL Link: [doi:10.18520/cs/v120/i4/715-718](https://doi.org/10.18520/cs/v120/i4/715-718) (Web of Science)). **ISSN: 0011-3891**
Impact factor 1.169
43. Temjen, W., Singh, M.R., Ajungla, T., Chopy, K. Z and Semy, K. 2021. Fungal diversity and physico-chemical parameters of rhizospheric soil from banana plantation sites of Nagaland, India. *Journal of*

Agricultural Science Digest. (accepted, in press 1130, Sardar, Karnal-132001 Haryana) URL Link: <https://arccjournals.com/journal/agricultural-science-digest/D-5274> (Web of Science) ISSN 0976-0547

NAAS Rating 4.75

44. Imlimenla., Ajungla, T and Temjen, W. (2021). Phosphate solubilizing fungal population from soil rhizosphere at Lumami, Zunheboto, India. Recent Trends in Engineering & Technology. (ICERT). 213-218. URL Link: <https://www.acerc.org>> ISBN...PDF International Conference on Recent Trends in Engineering.

45. Temjen, W., Singh. M. R and Ajungla, T. (2021). Impact of fallow on soil health in Mokokchung distric, Nagaland, India. Journal of Environmental Engineering and Landscape Management. VILNIUS TECH. 29(4) 410-417. URL Link: <http://dx.doi.org/10.3846/jeelm.2021.15831> (Web of Science) **ISSN: 1648-6897**

Impact factor 1.302

46. Temjen, W., Singh. M. R and Ajungla, T. (2022). Effect of shifting cultivation and fallow on soil quality index in Mokokchung district, Nagaland India. Ecological Processes. Springer Open. <https://doi.org/10.1186/s13717-022-00386-w> (Web of Science) **ISSN: 2192-1709 Impact factor 4.8**

47. Kikoleho, R., Temsurenla., Aola, S., Ajungla, T and Upasana, B.S. (2022). Mechanistic insight into the antibacterial activity of isothiocyanates via cell membrane permeability alteration. Pharmaceutical Chemistry Journal. Springer Nature. 56(3):300-308. URL: DOI 10.1007/s11094-022-02634-x (Web of Science) ISSN 0091-150X **Impact factor 1.063**

48. Wati, T, Singh, M.R and Ajungla, T. 2022. Effect of shifting cultivation and fallow on soil quality index in Mokokchung district, Nagaland, India. Ecological Processes. Springer Nature. <https://doi.org/10.1186/s13717-022-00386-w> (Web of Science) **Impact factor 1.063**

49. Richa, K., Temsurenla., Supong, A., Ajungla, Tand Sinha, U.P. 2022. Mechanistic insight into the antibacterial activity of isothiocyanates via cell membrane permeability alteration. Pharmaceutical Chemistry Journal. Springer Nature. 56(3). DOI.10.1007/s11094-022-02634-x (Web of Science) ISSN 0091-150X **Impact factor 1.063**

50. Temsurenla., Ajungla, T and Kichu, A. 2022. Tea leaves potentiate antimicrobial effect against pathogens depending on harvesting season and altitude-mediated change in their biochemical concentrations. Journal of Crop Science and Biotechnology. Springer. <https://doi.org/10.1007/s12892-022-00163-3> (UGC Care) ISSN 1975-9479

51. Temjen, W., Singh , M.R and Ajungla, T. (2022). Carbon sequestration potential of two Musa cultivars from Mokokchung, Nagaland, North East India along an altitudinal gradient. Current Science. 123(7). doi:10.18520/cs/v123/i7/925-927 (Web of Science). **ISSN: 0011-3891 Impact factor 1.169**

52 Arenla, S., Seb, J and T. Ajungla. (2022). Ectomycorrhizal and plant interaction on bioremediation of degraded land. Current Science. 123(12). (Web of Science) **ISSN: 0011-3891**

Impact factor 1.169

53. Konyak, P.M., Moaakum., Heise, Z., Prabu, L., Ruckmani, K., Heise, V and Ajungla, T. (2022). Persuasive and strategic approaches for preliminary phytochemical screening, quantitative analysis and antioxidant activity of crude plant extract from *Clematis napaulensis* DC indigenous to Nagaland India. Jour. Pl. Sci. Res. 38(2): 739-751. (UGC Care) Online ISSN: 2349-2805

54. Lydia Yeptho and Ajungla, T. (2023). Proximate analysis and nutritional values of some fermented food products of Nagaland, India. J. Mycopathol. Res. 109-114. ISSN No. 0971-3719 (UGC care listed)

55. Naomi and Ajungla, T. 2023. Domestication of wild edible strain of *Pleurotus pulmonarius* (Fr.) Quel. (Oyster mushroom) from Mokokchung district in Nagaland state, India: A prospect for sustainable livelihood. F.A.C Journal. A multidisciplinary Journal. 11: 83-92. ISSN 2319 6769.

56. Konyak, M.P., Moaakum., Heise, Z., Prabhu.S.L., Ajungla, T and Rahtore, H.S. (2024). Efficient extraction of triterpenoid saponins from leaves of *Clematis napaulensis* DC. An indigenous medicinal plant used in treatment of Rheumatoid Arthritis. International Research Journal of Pharmacy. 15:1:6-15. ISSN 2230-8407. www.irjponline.com Doi:10.56802/2230-8407.1304102 **(Scif 6.08)**.

57. Wati, T., Ajungla, T., Sentibenla, A., Yashiyala, T.I and Shanglow, L.N.K.(2024). Codeless classification of jhum soil rhizospheric fungal population from microscopic images using Google's teachable machine. J. Mycopathol. Res. 63(1) 67-71. 2024. ISSN- 0971-3719 (Print), 2583-6315 (online). IMS, Kolkata.

58. Naomi and Ajungla, T. (2025) Report on *in vitro* domestication and proximate analysis of wild strain of *Schizophyllum commune* (Fr.) from Mokokchung Nagaland. J. Mycopathol. Res. 63(1): 197-203. ISSN 0971-3719. IMS, Kolkata.

59. Tajensangls, J., Lizavi, Y and Ajungla, T. (2025). Isolation and identification of fungal community in the rhizosphere of *Cucumis sativus* L. J. Mycopathol. Res. 63(1): 59-65. ISSN 0971-3719. IMS, Kolkata.

60. Naomi and Ajungla, T. 2025. Report on *in vitro* domestication and proximate analysis of wild strain of *Schizophyllum commune* (Fr.) from Mokokchung, Nagaland. J. Mycopathol. Res. 63(1): 197-203. ISSN: 0971 3719.

61 Hanako, K.J., Ajungla, Tand Tsurho, K. 2025. Elemental profiling of *Xanthoxylum oxyphyllum* Edgew, (Rutaceae) leaves by ICP-OES. Pleone. 19(3): 436-439. ISSN-0973-9467

62. Hanako, K, J., Ajungla, T and Tsurho, K. 2026. Elemental profiling of *Zanthoxylum rhetsa* (Roxb.) DC. Fruit pericarp and its nutraceutical significance using ICP-OES. International Journal of plant sciences. ISSN-0973-1547. 21(1&2), 18-24.

Research Papers appeared as Book Chapters:

63. Ajungla, T., Sharma, G.D and Dkhar,M.S. and Kayang, H. 2006. Effect of heavy metals on mycorrhizal formation and growth of *Pinus kesiya* seedlings. **Mycorrhizae**. Scientific Publishers (India). Eds. Anil Prakash and V.S. Mehrotra. 152 -156. **ISBN No. 81 7233410 9**

64. Sharma, G.D and Ajungla, T. 2008. Structure and functioning of ectomycorrhiza of pine (*Pinus kesiya*) in heavy metal polluted soil. **Compendium of mycorrhizal research**. Vol. 2. Role of Mycorrhizae in Biotechnology. Ed. K. G. Mukerjee and B.P.Chamola. APH Publication Corporation. New Delhi. 307-321. **ISBN No. 817648 5020**.
65. Ajungla, T., Sharma, G.D and Dkhar, M.S. 2008. Effect of heavy metal on the role of mycorrhizae in forestry. **Ecology and Biotechnology of mycorrhizae**. (in press. Ed. D. K. Jha & G. D. Sharma).
66. Bendangmenla, T. Ajungla, N.S, Jamir and G.D Sharma. 2012. Use of ectomycorrhizal technology in reclamation and reforestation of degraded land. **Microbial Diversity and Functions**. Eds: D.J Bagyaraj, K.V.B.R Tilak and H.K Kehri. Publishers: New India Publishing Agency, New Delhi. 669-688. **ISBN No. 978-93-81450-10-9**
67. Sharma, G.D. and Ajungla, T. 2012. Response of ectomycorrhizal pine seedlings to heavy metal pollution in soil. **Bioremediation of pollutants**. Eds. D.K. Maheshwari and R.C Dubey. Publisher: I.K International Ltd. New Delhi. 128-149. **ISBN No. 978-93-81141-05-4**
68. Ajungla, T. 2012. Role of mycorrhizae in forestry. **Glimpses**. Presenting the women research Scholars of Ongpangkong. Ed. Dimapur Ongpangkong Watsu Telongjem. Publishers: Heritage Publishing House, Dimapur, Nagaland. **ISBN No. 978 93 80500 40 9**.
69. Ajungla, T & Sharma, G. D. 2017. Improvement of growth of tree seedlings in heavy metal polluted soil by ectomycorrhizal fungi. Microbes in restoration of degraded ecosystems. (Eds. D.J. Bagyaraj & Jamaluddin) Publishers: New India Publishing Agency, New Delhi-110 034. 19-36. **ISBN No. 978 93 85516 66 5**.
- 70. Ajungla, T. 2018.** Diversity of mushroom in Nagaland with a note on mycorrhizal application in nursery seedlings. Biodiversity Appraisal and Monitoring and Utilization. Editor: Dr.Asha Gupta. Publisher: Aavishkar Publishers, Distributers, Jaipur. 43-52. **ISBN: 978-81-7910-568-9**
- 71. Ajungla, T., Yeptho, L. Gloria, N and Kichu A. 2019.** Some ethnic fermented foods and beverages of Nagaland. Ethnic fermented food and beverages of India. **Ethnic Fermented Foods and Beverages of India: Science History and Culture**. (Ed.). Dr. Jyoti Prakash Tamang. **Springer Nature Singapore, 459-478. ISBN No. 978-981-15-1485-2, ISBN 978-981-15-1486-9 (e-book). URL Link: <https://link.springer.com>**
72. Temjen, W., Singh. M. R and Ajungla T. (2021). Fungal population of rhizospheric soil from banana plantation site at Mokokchung district, Nagaland, India. Sustainable livelihood of rural India. Eds. C. R. Deb & A. Paul. Mittal Publication, New Delhi, India. **ISBN: 798-93-90692-57-6**
73. Asangla, K., Ajungla, T and Thsangla. (2021). Morphological identification of fungi in tea soil at zunheboto district, Nagaland. India. Sustainable livelihood of rural India. Eds. C. R. Deb & A. Paul. Mittal Publication, New Delhi, India. ISBN: 798-93-90692-57-6. URL Link: <https://www.amazon.in/Bioresources-Sustainable-Livelihood-Rural-India/dp/9390692571>
74. Lydia, Y and Ajungla, T. (2021). Ethnobiology of the traditional alcoholic rice beers of Nagaland, India. Sustainable livelihood of rural India. Eds. C. R. Deb & A. Paul. Mittal Publication, New Delhi, India. ISBN: 798-93-90692-57-6
75. Tensurenla and T. Ajungla. (2022). Seasonal evaluation of soil physicochemical properties and correlation among these properties under tea cultivation. Current Research and Soil Science. (Chief editor Dr. Neeraj Kumar) Anik Publications. Vol. 13. ISBN 978 93-5570 351 4 (Peer reviewed and Refereed) <https://doi.org/10.22271/ed.book.1882>

76. Lydia, Y and Ajungla, T. (2023). Understanding phytomedicinal gastronomic culture of the Nagas in Nagaland. In Arunachalam, K., Yang, X., Puthanpura Sasidharan, S (eds). Bioprospecting of Tropical Medicinal plants. Springer, Cham. ISBN (print) 978-3-031-28779-4 ISBN (Online) 978-3-031-28780-0 https://doi.org/10.1007/978-3-2878-0_8

DOI https://doi.org/10.1007/978-3-031-28780-0_8

77. Bendangmenla and Ajungla, T. 2024. Ectomycorrhiza; inoculation: growth and nutrient uptake by out planted tree seedlings. Bioresources Conservation and Sustainability. Eds. C.R. Deb, Talijungla & N. Puro. Mittal Publication. 145-154. ISBN: 978-93-5999-112-2

78. Gloria, N and Ajungla, T. 2024. Exploration on the nutritional composition of two wild edible mushrooms from Nagaland. Eds. C.R. Deb, Talijungla & N. Puro. Mittal Publication. 169-176. ISBN: 978-93-5999-112-2

79. Arenls, S and Ajungla, T. 2024. Impact of carbohydrate in ectomycorrhizal colonization and establishment of *Dipterocarpus retuses* Blume seedlings. Eds. C.R. Deb, Talijungla & N. Puro. Mittal Publication. 321-330. ISBN: 978-93-5999-112-2

80. Lydia, Y and Ajungla, T. 2024. Traditional food systems of Nagaland. Eds. C.R. Deb, Talijungla & N. Puro. Mittal Publication. 351-364. ISBN: 978-93-5999-112-2.

81. Hanako, K. Jamir and Ajungla, T. 2025. Zanthoxylum species: Promising medicinal plants for tribal communities. Enduring Legacies, Emerging Vision: A multidisciplinary approach to sustainability. Selfypage Developers Pvt. Ltd., Karnataka. ISBN: 9789370 204089

82. Naomi and Ajungla, T. 2025. Report on *in vitro* domestication and proximate analysis of wild strain of *Schizophyllum commune* (Fr.) from Mokokchung, Nagaland. J. Mycopatho. Res. 63(1): 197-203. ISSN: 0971 3719.

83. Naomi and Ajungla, T. 2025. Assessment of bioconversion efficiency of *Pleurotus florida* on three agricultural residues in Mokokchung, Nagaland.. Enduring Legacies, Emerging Vision: A multidisciplinary approach to sustainability. Selfypage Developers Pvt. Ltd., Karnataka. ISBN: 9789370 204089

84. Hanako, K.J and Ajungla, T. 2025. Zanthoxylum oxyphyllum Edgew and Xanthoxylum rhetsa (Roxb.) D.C. Promising medicinal plants for tribal communities. Enduing legacies emerging visions. A multi-disciplinary approach to sustainability. ISBN 978-93-7020-408-9

Book:

85. Heavy Metal Pollution and Mycorrhiza. 2010. G.D. Sharma & T. Ajungla. Today & Tomorrow's Printers and Publishers. **ISBN No. 81 7019454 7.**

15. Book edited: 2024. Bioresources Conservation and Sustainability. A Mittal Publication. ISBN: 978 93 5999 112 2

16. Seminar/Workshop/Training/Conference paper presented/attended :

- (i) Regional workshop on trace element analysis. RSIC, NEHU, Shillong. 23rd. – 28th October 1997.
- (ii) National Workshop on Agriculture, Biodiversity and Climatic Change, NEHU, Shillong. 9th – 10th March 1998.
- (iii) National workshop on Role of microbes in environmental protection and rural development. NEHU. Shillong. 23rd – 25th October , 1998.

- (iv) 5th Agricultural Science Congress . Assam University, Khanaphara, Guwahati. 4th – 7th April, 2001.
- (v) Workshop on Economic development in Nagaland – Prospects & Constraints. Nagaland University. 3rd – 4th December, 2005.
- (vi) Workshop on traditional healers. At Longkumer Kilem, Mokokchung, Nagaland. 12th Nov. 2008.
- (vii) Basic training programme on Bee Keeping. Krishi Vigyan Kendra, Nagaland University, Lumami. 18th April, 2012.
- (viii) National conference on Recent Trends in Plant Diversity Study and Conservation Strategies. September 29-30, 2012. Nagaland University, Lumami
- (ix) National Workshop on Bioinformatics Tools and its Application. BIF Centre, Nagaland University, Lumami. 19th to 20th June, 2013.
- (x) National workshop on 'Technological Empowerment of Women Through the SoRF Scheme of DST in collaboration with NASI' NER local chapter at NEHU, Shillong. June 30, 2014.
- (xi) National Seminar on Globalization, Development and Environment with special reference to North-East Region. Organized by Nagaland University Teachers Association (L), Nagaland. 19th March to 20th March, 2015.

17. Seminar/Workshop organized.

(i) **Joint Secretary of the Organizing Committee** on Hands on Training for Higher Secondary School Teachers on 'Plant Biochemistry, Molecular Biology & Basic Biotechnology'. 19-22 September, 2016. Jointly organised by Institutional Biotech Hub Department of Botany, Nagaland University and Bioinformatics Infrastructure Facility Centre, Nagaland University.

(i) **Convener of the organizing committee of the National Seminar** on Inventory, Sustainable Utilization & Conservation of Bioresources. February 26 -27, 2016.. Jointly organized by the Department of Botany, Nagaland University & Institutional Biotech Hub, NU..

(ii) **Convener of the organizing committee of National Seminar** on Advances in Biological Science Research. February 28-1st March, 2017. Department of Botany, Nagaland University.

18. Participated as Resource person/Invited Lecture

- (i) **Resource person** on the Short Term Training on Mushroom Culture. Organised by Nagaland University, Lumami. 5th to 7th Dec' 2012.
- (ii) **Resource Person** on the **National workshop** on Writing, Research Communication and IPR Issues. Organized by Institutional Biotech Hub, Nagaland University, Lumami. 28th to 29th August, 2014.
- (iii) **National Workshop** on Applications of Biotechnology Tools and Bioinformatics. Organised by Institutional Biotech Hub and Bio informatics, Nagaland University. 30th March to 3rd April, 2015
- (iv) **National Seminar** on Inventory, Sustainable Utilization & Conservation of Bioresources. **Invited Lecture.** Jointly organised by Department of Botany, NU and Institutional Biotech Hub, NU, Lumami. February 26-27, 2016.
- (v) IQAC Great Researcher Seminar Series. **Resource Person.** Role and application of mycorrhizae in forestry. September 2, 2016. Nagaland University.
- (vi) Hands on Training on 'Functional Genomics' November 14-21, 2017. **Resource person.** Organized by DBT, Ministry of Science & Technology, Govt. Of India , New Delhi and Sponsored by Institutional Biotech Hub & Department of Botany, Nagaland University
- (vii) **International conference** on natural resources management and technology trends (ICNRM-17). **Invited Lecture.** Organised by Centre for Advanced Study, Department of Life Sciences, Manipur University. 27th to 29th March, 2017.

19. Orientation Programme/ Refresher Course/Training Participated.

- (i) Participated 66th Orientation Programme from 30th Jan. to 26th Feb. 2006 at UGC Academic Staff College, Gauhati University, Guwahati.
- (i) Participated in the Refresher Course 13th Oct – 4th Nov. 2008 at UGC Academic Staff College, NEHU, Shillong.
- (ii) Participated in the Refresher Course from 8th to 28th February, 20 at academic Staff College, Mizoram University, Aizawl.
- (iii) State level training of field investigators on documentation, assessment & of local health traditions & survey of flora used in local health traditions of Nagaland. Mokokchung, Nagaland. 10th –17th April, 2012.
- (iv) Training on Basic course on Remote Sensing, Geographical Information System and Global Positioning System. Organised by IIRS, ISRO, Department of Space, Govt. Of India. From 06-08-2012 to 22-10-2012.
- (v) Training course in Landslide and Debris Flow Systems: Prediction, Control and Reclamation. Jointly organized by Global Initiative of Academic Networks (GIANS) and Department of Geography, Nagaland University. **7th March to 11th March, 2017.**

Academic Activities

20. Ph. D Degree awarded : **14**

21. Ph. D. thesis submitted : **01**

22. Ph. D. students currently working : **06**

23. Life Membership of Academic Societies:

- (i) Fellow International Society for Conservation of Natural Resources (BHU). (**FNRS**)
- (ii) **Indian Mycological Society (University of Calcutta)**

24. Research Projects undertaken/On-going:

Completed:

- (i) Project title “Biology and Application of Mycorrhizae in Wasteland of Nagaland” sponsored by G.B.Pant Institute of Himalayan Environment & Development, Kosi-Katarmal, Almorah. **Principal Investigator**. From 10.06.2003 to 09.06.2006. 9 Lacs
- (i) Project title “Sustainable Land and Ecosystem Management in Shifting Cultivation areas of Nagaland for Ecological and Livelihood Security” in Collaboration with Department of Soil & Water Conservation, Nagaland Sponsored by UNDP. **Principal Investigator**. From 24.11.2009 to 23.11 2010. 1 Lac
- (ii) Project title- “Isolation, identification and characterization of ectomycorrhizal and their application in forestry”. Sponsored by UGC. **Principal Investigator**. From 01.07.2012-30.06.2015. 8 Lacs
- (iii) DBT sponsored North East Co-ordinated Project. Project title- “Exploration of Microbial Resources from unique Ecological Niches of North East India” **Principal Investigator. Rs. 28 Lakhs. 2017-2020**
- (iv) GBPI/IERP sponsored research project. Title: Diversity, database development and nutrient analysis of wild mushrooms of Nagaland. **Principal Investigator. Rs. 10,40,600/- . 2017-2020**
- (v) DBT sponsored Programme ‘Establishment of Institutional Biotech Hubs (IBThubs)’. **Co-Coordinator. Rs. 48 lakhs. 2012- till date**
- (vi) UGC – SAP DRS – III (1-4-2015 to 31- 3-2020), Inventory of plant genetics resources of Nagaland, Sustainable utilization and their Conservation (*In Situ & Ex Situ*) **Dy. Coordinator. Rs. 90.25 lakhs. 2015-18.**
- (vii) DST-FIST Programme Level 1, 2016. **Rs. 1.03 crore. Co-ordinator. 2016-2021**
- (viii) DBT (NE-BPMC) sponsored project Title: Survey on earthworm resource in organic wastes, forests, agro-ecosystems and their role in waste management and nutrient

dynamics in North East India (Tripura, Nagaland), Uttarakhand. **Co- Principal Investigator. Rs. 46,36,996.00. 2018-2021.**

- (ix) GBPI/IERP sponsored research project. Title: Biochemical analysis Coffee beans and molecular characterization of plant growth promoting fungi associated with rhizospheric soil of Coffee spp. **Principal Investigator. Rs. 13,6000/- Ongoing 26.02.2024-01.04.2027**
- (x) DBT (R&D) project. Title: Bioprospecting of Anishi for the exploration of commercializing prospects with enhanced quality and therapeutic potential. Co-PI. Ongoing. 22.05.2025-

25. Patents : Granted 03, Submitted 01

1. Aola Supong,, Temsurenla Jamir,, Ajungla, T., Branjal Bharali., Upasana Bora Sinha and Dipak Sinha. Activated carbon –amended biofilters for sustainable removal of total heterotrophic coliform and *Escherichia coli* bacteria from water. Application No. 203331084823 A. Date of filing application: 12.12.2023 Publication date: **19.01.24**
2. Lydia Yeptho., Ajungla T and Watitemjen. Composition, system and method for synthesizing and analyzing metagenomic profile of Katsing. Application No. 2024/05979. Date of application: 02.08.2024. <https://iponline.cipc.co.za/Patents/Search/FreePTSearch.aspx>. Date of Publication: **26.02.25**
3. Talijungla, Lydia Yeptho and Watitemjen. A method for metagenomic analysis of fungal repertoire in fermented Zusem. Application No:2025/04811, Date of application:05.06.2025. Publication date: **25.02.26**
4. Naomi, Talijungla and Watitemjen. A method for formulating semi-synthetic culture media using local tubers in mushroom culture. Application No: 2026/00258. Application date: 07.01.2026

26. Assignment from the University authority:

- (i) **Investigator** for DBT project on “Mission quality planting materials production and utilization for North East India”. **Co-Investigator. Rs. 67 lakhs**
- (ii) **Editorial Board Member** for Nagaland University Research Journal. 17.10.2016
- (iii) **Head of the Department w.e.f November 2015 to November 2018**
- (iv) **Head of the Department w.e.f 26 July 2023 to July 25, 2026.**
- (v)

27. CO-AUTHORS IN SEMINAR/SYMPOSIUM/CONFERENCE PAPER PRESENTATION

1. **Jichule Seb & T. Ajungla. “Role of Ectomycorrhizal Mycelial Network for Seedling Survival”** at the National seminar on ‘**Inventory, Sustainable Utilization and Conservation of Bioresources**’ organized by Department of Botany and Institutional Biotech Hub, Nagaland University, Lumami on February 26-27, 2016.
2. **Khumukcham Nongalleima., T. Ajungla & C. B. Singh. “Exploration of Naringin, Naringenin and coumarin content in juice of *Citrus macroptera* Montruz”.** at the International conference on “Global Biodiversity, climate change and Sustainable Development- 2016, 15th-18th October, 2016 (ICBCS) at Rajiv Gandhi University, Rono Hills, Doimukh, Arunachal Pradesh.
3. **Jichule Seb & T. Ajungla. “*Cantharellus cibarius* Fr. and *Tricholoma imbricatum* (Fr.) P. Kumm.in uptake of phosphorus and potassium in *Prunus cerasoides* Buch.Ham. Ex D.Don. ”** 57th Annual Conference of Association of Microbiologist of India & International

symposium on Microbes and Biosphere: What's New What's Next. Gauhati University, Guwahati, assam, India. November 24-27, 2016.

4. **T. Wabang & T. Ajungla. "An alien invasive fungus *Favolaschia calocera* R. Heim is now in India"** 57th Annual Conference of Association of Microbiologist of India & International symposium on Microbes and Biosphere: What's New What's Next. Gauhati University, Guwahati, Assam, India. November 24-27, 2016.
5. **Temsurenla & T. Ajungla. "Phosphate solubilising fungi of tea garden soil under Mokokchung district, Nagaland"** 57th Annual Conference of Association of Microbiologist of India & International symposium on Microbes and Biosphere: What's New What's Next. Gauhati University, Guwahati, Assam, India. November 24-27, 2016.
6. **Khumukcham Nongalleim, T. Ajungla & C. B. Singh. "GCMS based metabolic profiling of essential oil of *Citrus macroptera* Montruz. leaves and peel, assessment of antioxidant and anti-inflammatory activity"**. International symposium on Plant Biotechnology for crop improvement (ISPBCI 2017) at IIT Guwahati, from 20– 22nd Jan, 2017.
7. **Jichule Seb & T. Ajungla. "Insights into soil organic carbon and ectomycorrhizal colonization"** National Seminar on Advances in Biological Science Research Department of Botany, Nagaland University, Lumami, February 28- March 1, 2017.
8. **Temsurenla & T. Ajungla. "Variations in tea soil mycofloral populations under different altitudes"** National Seminar on Advances in Biological Science Research Department of Botany, Nagaland University, Lumami, February 28- March 1, 2017.
9. **Temsurenla & T. Ajungla. "Microbial Influence on carbon content in tea soil"** National Seminar on 'Chemistry in Interdisciplinary Research' at Department of Chemistry, Nagaland University, Lumami on March 16-17, 2017
10. **Jichule Seb & T. Ajungla. "Influence of ectomycorrhizal fungal inoculation on the growth and nutrient content of *Prunus cerasoides* Buch. -Ham. Ex D.Don. seedlings"**. International conference on, Natural Resources Management and Technology Trends (ICNRM-17) from 27th-29th March, 2017.
11. **Khumukcham Nongalleim, T. Ajungla & C. B. Singh.** Measurement of pro-inflammatory mediators (TNF-, IL β , IL-10) in serum of mice treated with *Citrus macroptera* Montruz. extracts. 105th Indian Science Congress at Manipur University from March 16-20, 2018.
12. **Nyenthung, G and Ajungla, T. 2019.** Poster Presentation during the National Conference of Stakeholders on Conservation, Cultivation, Resource Development and Sustainable Utilization of Medicinal Plants of North-Eastern India on the topic, "Some wild edible mushroom of Nagaland." Jointly organized by Department of Botany, Nagaland University,

- Lumami, 798627, DST-FIST & Society for Conservation and Resource Development of Medicinal Plants (SMP), New Delhi. March 6-7, 2019.
13. **Nyenthung , G., Chaturvedi, S. K and Ajungla, T. 2019.** Paper presentation during the 9th conference on Taxonomy and Systematics in Thailand (TST9), Chiang Mai, Thailand on the topic, “Ethnomycological documentation of wild edible mushrooms from Nagaland, India.” October 2-4, 2019.
 14. **Asangla, K and Ajungla, T. 2018.** The National Seminar on Bio-resource “Exploration and utilization: Application in Modern Biology” on the topic “Influence on Carbon Content by Soil Fungi in Jhum Land, Mokokchung District, Nagaland, India” organized by Bioinformatics Infrastructure Facility (BIF) Centre, Nagaland University, Lumami, sponsored by Department of Biotechnology, Ministry of Science and Technology, Government of India, New Delhi, on 9th and 10th October 2018.
 15. **Yeptho, L and Ajungla, T. 2019.** National conference of Stakeholders on conservation, cultivation, resource development and sustainable utilization of Medicinal plants of North-Eastern India held on March 6-7, 2019 at Nagaland University, Lumami jointly organised by Dept. of Botany (UGC- SAP DRS-III, FIST), Nagaland University Lumami and Society for Conservation and Resource Development of Medicinal plants (SMP) New Delhi.
 16. **Yeptho, L and Ajungla, T. 2019.** Poster presentation on “Traditional knowledge on health benefits and preparation of ethnic fermented rice and food beverages of Nagaland, India” was presented on National conference of Stakeholders on conservation, cultivation, resource development and sustainable utilization of Medicinal plants of North- Eastern India held on March 6-7, 2019 at Nagaland University, Lumami.
 17. **Yeptho, L., Chaturvedi, S. K and Ajungla, T. 2019.** Paper presentation during the 9th conference on Taxonomy and Systematics in Thailand (TST9), Chiang Mai, Thailand on the topic, “Ethnic food diversity of some common fermented foods and beverages of the indigenous tribes of Nagaland, India.” October 2-4, 2019.

