Md. Najmus Sayadat Pitol

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RESEARCH INTEREST

I am a new enthusiastic Research Officer of the Mangrove Silviculture Division, Bangladesh Forest Research Institute, willing to contribute to team achievement through hard work and outstanding organizational skills. I have a clear understanding of research in forest biomass, carbon stock, silviculture, ecology, community ecology, and anthropogenic pressures on ecosystems, biodiversity, climate change impacts on forest health and productivity. Presently, in my Research Institute, I am also working on mangrove ecology, their growth in three salinity zones, their response to various salinity levels, waterlogging and inundation effect on tree physiology, the problems and possible solutions of the local community adjacent to Sundarbans, and the invention of a new nursery technique for endangered and near-extinct mangrove species on Sundarbans. I have also worked on allometric model development for evaluating biomass and carbon stock in my B.Sc and M.Sc theses. I am independently motivated, yet I appreciate team effort and collaborative productivity within groups. Additionally, I am informed about applying drones, ArcGIS, LIDAR, and remote sensing in the forest sector. I am particularly interested in areas such as biodiversity, silviculture, the impact of climate change, biomass assessment, and vegetation effect on soil organic carbon in the mangrove and terrestrial ecosystems.

EDUCATION

Master of Science in Forestry **2017**
Khulna University, Bangladesh.
CGPA: 3.26 out of 4.00

Thesis: Assessment of total carbon stock in *Swietenia macrophylla* woodlot in Jhenaidah District, Bangladesh.

Bachelor of Science in Forestry **2014**
Khulna University, Bangladesh.
CGPA: 3.33 out of 4.00

Thesis: Allometric relationship for estimating above ground biomass and nutrient stock in *Heritiera fomes* of the Sundarbans, Bangladesh.

Higher Secondary School Certificates **2008**
Science
K.M.H Degree College, Kotchandpur
CGPA: 5.00 out of 5.00

Secondary School Certificates **2006**
Science
Kotchandpur High School
CGPA: 5.00 out of 5.00

SKILLS

- Data analyses in R-studio, ArcGIS, SPSS and MS-Excel.

TRAININGS

- Biostatistics: Theory & Applications using R (Online) training program
- Mixed Methods Research and Decision Making with "ArcGIS" for Spatial Data Analysis and "R" and "NVivo" for Non-Spatial Data Analysis.
- Training on Application of Google Earth Engine (GEE) in Forestry
- Forestry Research and Management in Bangladesh
- Scientific Report Writing
- Excel Based Data Analysis for Early Career Scientists
- I Virtual Conference on Improving Protected Area Tourism in a Post-Covid World
- Wildlife Conservation and Management

ONGOING RESEARCH ACTIVITIES

- Ecological monitoring through establishment of Permanent Sample Plots (PSPs) in the Sundarbans of Bangladesh.
- Impact of climate change on floral biodiversity in the Sundarbans.
- Ex-situ conservation of major mangrove species at the adjacent char land areas of the Sundarbans.
- Phenological observation of major mangrove species in the Sundarbans of Bangladesh in the context of climate change.
- Conservation of mangrove species in the three arboretum areas of three salinity zones in the Sundarban (Third phase).
- Nursery and plantation techniques of Moth goran (*Ceriops tagal*) in the Sundarbans.
- Enrichment and maintenance of mangrove museum.

FUTURE RESEARCH

- Field Observation of deer grazing: grazing pressure on seedlings, feeding preference etc.
- Experimental plantation in three salinity zones of Sundarbans and newly accreted char lands: Mangrove restoration and rehabilitation.
- Exploring the Impact of Sundarbans Buffer Zone Changes on Tiger-Human Conflict.

PUBLICATIONS

Theses

- **Pitol, M. N. S.** (2016). Assessment of total carbon stock in *Swietenia macrophylla* woodlot in Jhenaidah District, Bangladesh. Forestry and Wood Technology Discipline, Khulna University. Master of Science in Forestry. pp. 1-44. DOI: 10.13140/RG.2.2.16404.01929
- **Pitol, M. N. S.** (2014). Allometric Relationship for Estimating Above Ground Biomass and Nutrient Stock in *Heritiera Fomes* of the Sundarban, Bangladesh. Forestry and Wood Technology Discipline, Khulna University. Bachelor of Science in Forestry. pp: 1-46. https://www.researchgate.net/publication/350235244_Allometric_Relationship_for_Estimating_Above_Ground_Biomass_and_Nutrient_Stock_in_Heritiera_Fomes_of_the_Sundarban_Bangladesh

Accepted

- Islam, M.F.A, **Pitol, M.N.S,** Khan, M.N.I. (2023). Comparison of light intensity under the canopy between Sal (*Shorea robusta*) and Akashmoni (*Acacia auriculiformis*) in agroforestry stands: effect of tree size and distance from individual trees. ***Journal of Tropical Biodiversity and Biotechnology*****.** (Accepted)
- **Pitol, M.N.S.,** & Sapir, A.S.M. (2023). Covid-19 Confinement Period: Teach Us to Think a New about Face Mask. ***Acta Pharmaceutica Hungarica*****.** (Accepted).

Submitted

- **Pitol, M.N.S,** Patwary, M.M, Aurnob, S. et al. Exploring media consumption and mental health among young adults during the second wave of COVID-19 in Bangladesh. ***Heliyon*****.**
- Siddique, A.S.M., Islam, A.I., **Pitol, M.N.S.,** SK Hasan, M.M. Biomass and Carbon Stock of Mangrove Arboretum in the Sundarbans, Bangladesh. ***Bangladesh Journal of Forest Science*****.**

Published

1. Nurunnahar., Pitol, M. N. S., & Sharmin, A. (2023). An assessment of private woodlot at Kaligonj upazilla of Jhenaidah district, Bangladesh: Socio-economic benefits of private woodlot. *Bangladesh Journal of Agriculture*, 48(1), 67–80. https://doi.org/10.3329/bjagri.v48i1.61982
2. Pitol, M.S., Sapir, A.S.M. (2023). COVID-19: introduction of a new lifestyle and diet among the Malaysians. *Bull Natl Res Cent* 47 (3). pp. 1-12. https://doi.org/10.1186/s42269-023-00979-1
3. Pitol, N. S., & Mian, M. B. (2022). High carbon storage and oxygen (O_2) release potential of Mahagony (*Swietenia macrophylla*) woodlot plantation in Bangladesh. *Saudi Journal of Biological Sciences*, 30 (1), pp.1-9, doi: https://doi.org/10.1016/j.sjbs.2022.103498
4. Pitol, M.N.S. (2022). Trends of Sundarbans Mangroves Biodiversity Declination in Bangladesh. *Academia Letters*, Article 5195. DOI: https://doi.org/10.20935/AL5195
5. Pitol, M. N. S., Ahmed, S., Kumar, H., Islam, M. A., Dey, T., Kumar Bachar, B., & Kumar Ghosh, R. (2022). The Effects of the COVID-19 on Our Daily Lives in Bangladesh. *Qubahan Academic Journal*, *2*(1), pp-8-13. https://doi.org/10.48161/qaj.v2n1a90
6. Najmus Sayadat Pitol. 2022. The Sundarbans: A Reliable Livelihood Hub. *Biomed J Sci & Tech Res* 41(3), 32669-32671. BJSTR. MS.ID.006600. DOI: 10.26717/BJSTR.2022.41.006600
7. Hossain TM, Pitol MNS, Mannan MA, Khan SAKU. 2021. Impact of corm size and phosphorous on growth and floral characteristics of gladiolus (Gladiolus grandiflorus). *Asian J Agric* 5: 90-97. DOI: https://doi.org/10.13057/asianjagric/g050206
8. Bichitra Kumar Bachar, Tanmoy Dey, Md. Akramul Islam, Md. Najmus Sayadat Pitol. (2022). Management of Nurseries to Produce Quality Planting Stocks: A Case Study at Phultala Upazila of Khulna District, Bangladesh. *Food and Agri Economics Review, 2(1): 01-06.* DOI: 10.26480/faer.01.2022.01.06
9. Siddiqui A.S.M.H, Rahman M.M, Pitol M.N.S, Islam M.A, Hasan S.M.M., (2021). Seedling Diversity Considerably Changes Near Localities in Three Salinity Zones of Sundarbans Mangrove Forest, Bangladesh. *Journal of Tropical Biodiversity and Biotechnology*, 06 (03). DOI: 10.22146/jtbb.65241
10. Uddin MS, Pitol MNS, Feroz SM. 2021. Floristic composition and woody species diversity in national park of Madhupur tract under Tangail north forest division, Bangladesh. *Journal of Forests* 8 (1): pp.99-108. DOI: 10.18488/journal.101.2021.81.99.108
11. A. K. M. Azad, A. K., Pitol, M. N. S., & Hara, Y. (2021). Status of Small-scale Rubber and Shifting Cultivators at Bandarbans District, Bangladesh. *European Journal of Agriculture and Food Sciences*, *3*(3), 91-96. https://doi.org/10.24018/ejfood.2021.3.3.303
12. A.K.M. Azad, A.K., Pitol, M.N.S., & Hara, Y. (2021). Profitability Assessment with the application of

BRASS model of Small-scale Rubber Plantation at Chittagong Hill Tract, Bangladesh. *International Journal of Environment Agriculture and Biotechnology*. 6(3), pp. 85-94. Doi:10.22161/ijeab.63.9

13. A.K.M. Azad, A.K., Pitol, M.N.S., & Hara, Y. (2021). The role of Rubber (*Hevea brasiliensis*) plantation in carbon storage at Bandarbans Hill Tract, Bangladesh. *International Journal of Current Research*, 13, (05), 17373-17377.
DOI: https://doi.org/10.24941/ijcr.41365.05.2021

14. Siddiqui, A.S.M., Pitol, M.N.S., Islam, M.A., Hasan, S.M.M.H. (2020). Feasibility Analysis of *Heritiera Fomes* (Sundri) Plantation to Minimize Top Dying Effects in the Sundarbans of Bangladesh. *The Pakistan Journal of Forestry*, 70 (1), pp.1-9.

15. Azad AK, Pitol MNS, Rakkibu MG. (2020). Livelihood status of local communities around Sundarbans mangrove ecosystem in Shymnagar Upazila, Satkhira, Bangladesh. *Asian J For*, 5, 28–35. https://doi.org/10.13057/asianjfor/r050104

16. Rahaman, M. T., Gurung, D. B., & Pitol, M. N. S. (2020). Comparative Study of Understory between Exotic Monoculture Plantation (*Acacia Sp*.) and Adjacent Natural Sal (*Shorea Robusta*) Forest. *European Journal of Agriculture and Food Sciences*, *2*(6). DOI: https://doi.org/10.24018/ejfood.2020.2.6.204

17. Nurunnahar., Pitol, M. N. S., & Sharmin, A. (2020). Status and Prospects of Agroforestry at Kaligonj Upazila in Satkhira District. *European Journal of Agriculture and Food Sciences*, *2*(6). https://doi.org/10.24018/ejfood.2020.2.6.186

18. S. A. Hasan, Md. Najmus Sayadat Pitol, M. I. Shams, M. O. Hannan. (2020). "Scope of Medium density fiberboard (MDF) from water hyacinth (Eichhornia crassipes)" *International Journal of Research and Innovation in Applied Science -IJRIAS* vol.5 issue 10 October 2020, pp.123-127 URL: https://www.rsisinternational.org/journals/ijrias/DigitalLibrary/Vol.5&Issue10/123-127.pdf

19. Dey, T., Kamruzzaman, M., Islam, M. A., Bachar, B. K. and Pitol, M. N. S. (2020). Attitudes of local people towards community based eco-tourism in the Sundarbans. *International Journal of Business, Management and Social Research*, 09(02), 528-535. **Crossref:** https://doi.org/10.18801/ijbmsr.090220.55

20. Islam A, Sharmin A, Biswas R, Dey T, Bachar BK et al. (2020) Utilization of Minor Forest Products of the Sundarbans in Bangladesh. Adv in Agri, Horti and Ento: AAHE-126. https://kosmospublishers.com/utilization-of-minor-forest-products-of-the-sundarbans-in-bangladesh/

21. Pitol, M. N., Khan, M. Z., & Khatun, R. (2019). Assessment of Total Carbon Stock in Swietenia macrophylla Woodlot at Jhenaidah District in Bangladesh. *Asian Journal of Research in Agriculture and Forestry*, 2(3), 1-10. https://doi.org/10.9734/AJRAF/2018/46922

22. Khatun, R., Khan, M., Amin, M., & Sayadat, M. (2018). Influence of Field Deep Fertilisers on Nitrogen, Phosphorous, Potassium and Sulfur Uptake and Yield Performance of Green Super Rice. *Journal of Applied Life Sciences International*, 19(1), 1-12.
https://doi.org/10.9734/JALSI/2018/44877

Book

1. Pitol, M.N.S., & Hossain, M. 2023. Allometric Relationship for Estimating Above Ground Biomass and Nutrient Stock in Heritiera Fomes of the Sundarban, Bangladesh. Eliva Press SRL. ISBN: 978-9994987108. https://www.elivapress.com/en/book/book-4866562029/