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Director



भारत सरकार
पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय
भारतीय वनस्पति सर्वेक्षण
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST
& CLIMATE CHANGE
BOTANICAL SURVEY OF INDIA

DO. No.: BSI – 8/1/PA/2019 / 627

Date: 06.03.2025

Madam,
In reply to OM no. 24011/08/2019–GC dated. 25.03.2019 regarding monthly DO letter from Secretary (MoEF&CC) to the Cabinet Secretary, I am furnishing herewith the following major achievements of Botanical Survey of India for the Month of February, 2025.

Department: Botanical Survey of India

1. Important policy decisions taken, Major achievements during the month:

Scientists of BSI described **three (03) taxa as new to Science from India viz. *Strobilanthes gigantea* (Acanthaceae), *Penzigomyces indicus* (Pezizomycotina: Ascomycota) and *Paramyrothecium kamalii* (Stachybotryaceae) - as a novel foliar fungal pathogen. They also reported *Strophanthus wallichii* A.DC. (Apocynaceae), as a new record for the state of Arunachal Pradesh and Odisha.**

Scientists of BSI conducted **two** field / local tours and collected **89** field nos. of specimens. BSI prepared metadata of **4529** herbarium specimens. During this month, **18,56,193** visitors visited the official websites of BSI (14,98,976 visitors referred official website, 2,26,763 visitors referred archives, and 1,30,454 visitors visited Indian Virtual Herbarium). Besides, 1217 students / visitors visited the AJCB IBG, Howrah during this month.

Important events / programs organized / attended:


1. Botanical Survey of India and all its regional centres observed **World Wetland Day** on 02.02.2025. On this occasion, BSI-CRC, Prayagraj participated the event and arranged an exhibition stalls at Parvati Arga Ramsar site, Gonda dist. Uttar Pradesh and displayed Posters, Publications, Herbarium specimens and live aquatic medicinal plants. Besides, BSI-CRC also participated in the 'Regional Workshop for Northern States for Conservation and wise use of Wetlands on 01.02.2025. The program was attended by the Hon'ble Chief Minister of UP and Hon'ble Union State Minister MoEF&CC, New Delhi along with JS, MoEF&CC; PCCF, UP and other officials of Central and State governments.
2. Botanical Survey of India, SHRC, Gangtok organized a workshop on the **Botanical Nomenclature Course** from 3rd to 7th February, 2025 under the guidance and mentorship of Dr. K. N. Gandhi, Senior Nomenclatural Registrar, The Harvard University, USA as invited speaker. This workshop was inaugurated by Dr. A. A. Mao, Director, and attended by 73 participants.
3. Dr. A. A. Mao, Director, BSI delivered an inaugural address in the **Symposium on celebrating life of Dr. Janaki Ammal** at the Department of Botany, SPPU & Sharada Shakti, Pune on 8th February, 2025. Also, he received **Hershberger Award** for his outstanding contribution in Ethnobotany.
4. Botanical Survey of India celebrated its **136th Foundation Day** on 13th February, 2025 at the Dhano Dhanyo Auditorium, Alipore, Kolkata. On this occasion, BSI organized the **3rd International Symposium on Plant Taxonomy, Ethnobotany, Botanic Gardens and Biodiversity Conservation (ISPTEBG&BC 2025)** from 13th-15th February 2025. The symposium provided a forum for researchers, policy makers, and industry practitioners to share their original research results & practical experiences on Plant taxonomy and floristic research, ethnobotanical study and conservation techniques. The symposium was attended by about 520 participants including 45 invited delegates, 6 foreign delegates and 470 researchers from all over the country.
5. Dr. S. S. Dsash, Scientist-F, BSI visited the Department of Botany, Ravenshaw University, Cuttack, Odisha on 20th February, 2025 as a member of selection committee for the promotion of Teaching Faculty under the Career Advancement Scheme in the Department of Botany.

During this month **30** research papers and **18** book were published by BSI scientists in various International and National publications apart from participating in scientific lectures and publishing seminar abstracts. (**Annexure 1**).

2. **Important policy matter held up on account of prolonged inter-ministerial consultations:** NIL
3. **No. of cases of 'Sanction for prosecution' pending for more than 3 months:** NIL
4. **Particulars of cases in which there has been a departure from the Transaction of Business Rules or established policy of the government:** NIL
5. **Status of Rationalization of Autonomous Bodies:-**NA-
6. **Information on the specific steps taken for utilization of the space technology based tools and applications in governance and development:** NIL
7. **Vacancy position of senior level appointments in the Ministry/ Department, including Autonomous Bodies/ PSUs:** Communicated to the Ministry separately.
8. **List of cases in which ACC directions have not been complied with:** NIL

With regards,

Sincerely yours,


A. A. Mao 06/03/2025

To
Ms. Nameeta Prasad, JS, (CS-II), MoEF&CC, New Delhi – 3



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Publications for the Month of February 2025

1. ARIGELA, R.K., R.K. SINGH, C.S. REDDY AND S. KUMAR. 2025. Morphological variability of *Indigofera cordifolia* (Fabaceae) from different habitats in India and its two new synonyms. *J. Biodivers. Conservation* 9(1): 50–61.
2. BENNIAMIN, A., SAKSHI PANDEY AND RAJAT MONDAL. 2025. Assessing the conservation status of *Elaphoglossum stigmatolepis* (Fee) T.Moore (Dryopteridaceae), an endemic fern in the Western Ghats of India. *J. Threatened Taxa (JoTT)* | 17(1): 26394–26400. doi.org/10.11609/jott.9253.17.1.26394-26400.
3. CHERIAN, P., S. NITHANIYAL AND P. SRINIVASAN (2025) Molecular identification and phylogenetics analysis of southern Indian *Amaranthus* L. using chloroplast barcodes. *Ecological Genetics and Genomics*, 34: 100329.
4. CHOWLU K., ROHAN MAITY, A. RAY, KADHER ALTHAF AHMED KABEER AND SUDHANSU SHEKHAR DASH. 2025. A new species, *Strobilanthes gigantean* (Acanthaceae) from India. *Nor. J. Bot.* doi: 10.1111/njb.04621.
5. CHOWLU KRISHNA, JAMBEY TSERING, ASKHAH SHENOY, A.N. RAO, SAM CHANKINJA, AJIT RAY AND KABEER KABIR. 2025. Addition to two Holomycotypic orchids to the flora of Arunachal Pradesh, India. *J. Tax. Econ. Bot.* 188-191.
6. DATTA, S., KANAD DAS, BASUNDHARA PILLAI AND TAPAN SEAL. 2025. Nutritional and bioactive potential of *Amanita ochracea*: Unlocking the health benefits of a wild edible mushroom. *International J. Food Science and Nutrition*, 10 (1), 53-58.
7. DUBEY, R. AND NEELIMA A. M. 2025. Evaluation of phylloplane fungal flora on host plant families in the Maharashtra state of India. *Plant Pathology & Quarantine* 15(1): 1–48.
8. DUBEY, R. AND S. JASH. 2025. A Comprehensive Overview of the Genus *Penzigomyces* Subram. (Pezizomycotina: Ascomycota) Accompanied by the Introduction of a Novel Species from India. *J. Bombay Natural History Society* 122(1). DOI: 10.17087/jbnhs/2025/v122/171002
9. GARARTI G, SURABHI SINGH AND S.K. SINGH. 2025. Endemic Species of Hemiparasitic genus *Pedicularis* L. in India *ibid.* p. 212
10. GOPAL KRISHNA AND SAMPATH KUMAR, V. 2025. Symphoremataceae. In: Flora of India Volume 21: 150–156.
11. KUMAR, P., S.K. SINGH, POULAMI GHOSH AND PK. DEROLIYA. 2025. Invasive Alien Flora of Rajaji National Park, Uttarakhand. *ibid.* p. 278.
12. KUMAR, S., K.B. FARSANA, K.T. MUFEEDA, R. SINGH AND S. MAHADEVAKUMAR. 2025. Unveiling *Paramyrothecium kamalii* (Stachybotryaceae) as a novel foliar fungal pathogen on *Matourea azurea* in Kerala, India, based on morpho-cultural, pathological and molecular phylogenetic evidences. *Archives of Microbiology*, 207: 42. <https://doi.org/10.1007/s00203-025-04243-0>
13. PARTHIBAN, A. and L. RASINGAM. 2025. Typification of two names in Indian *Lagerstroemia* L. (Lythraceae). *Kew Bull.* <https://doi.org/10.1007/s12225-024-10229-w>
14. PUROHIT, C.S., B.C. DEY, G.A. EKKA, AND L.J. SINGH. A Note on Occurrence of *Alpinia zerumbet* (Zingiberaceae) from Campbell Bay, Andaman and Nicobar Islands, India. 2025. *International Journal on Emerging Technologies*, 16(1): 54–56.
15. RAJENDRAN, A., P. DANIEL, GOPAL KRISHNA AND V. SAMPATH KUMAR. 2025. *Verbenaceae* s.lat. In: Flora of India Volume 21: 3–149.
16. RESMI, S., K. KARTHIKEYAN, NICO CELLINESE AND SANTHOSH NAMPY (2025). Underground bulbils in *Sonerila* (Melastomataceae): Innovative reproductive strategies in three paleotropical species. *Nordic J. Botany* (Early view). <https://doi.org/10.1111/njb.04558>
17. ROY, D.K., Y. MAHESH., RIKERTRE LYTAN AND NRIPEMO ODYUO. 2024. Lectotypification of the name *Acranthera tomentosa* R.Br. ex Hook.f. (Rubiaceae). *Phytotaxonomy* 3 (2): 68-72
18. SAGARWAL, L., BRIJESH KUMAR, S.K.SINGH. 2025. SEM studies of genus *Botrychium* sw. In north-western Himalayas. *ibid.* p. 125.
19. SAMPATH KUMAR, V. 2025. Phrymaceae s. str. In: Flora of India Volume 21: 1–2.
20. SAMPATH KUMAR, V. AND GOPAL KRISHNA. 2025. Avicenniaceae. In: Flora of India Volume 21: 156–161.
21. SANTHOSH, C. R., S. MAHADEVAKUMAR, S. CHANDRANAYAKA AND S. SATISH. 2025. Biocontrol of *Fusarium* spp. and plant growth promoting efficacy of *Bacillus velezensis* strain SS_BR06 isolated from eggplant (*Solanum melongena* L.). *Physiological and Molecular Plant Pathology*, 136:102595 <https://doi.org/10.1016/j.pmp.2025.102595>

22. SARAVANAN, R., DATTA, S AND SEAL, T. 2025. Nutritional Analysis and Antioxidant Activity of *Victoria amazonica* Seeds: Evaluating Its Potential As A Future Food Source. *South African J. Botany*, 178, 61-72.
23. SHRUTHI, B., S. RAKESH, S. DIVYASHREE, G. ADITHI, K. AJITHKUMAR, S. MAHADEVAKUMAR AND M.Y. SREENIVASA. Probiotic Characterization and Antifungal Potentials of *Pichia kudriavzevii* MYSSBYP10 Isolated from Traditionally Fermented Green Gram Dosa Batter. *Food Biotechnology*, 39(1):1-27. <https://doi.org/10.1080/08905436.2025.2457678>
24. SINGH R.K. AND S. KUMAR 2025. Nomenclatural novelties in Myrtaceae. *J. Biodivers. Conservation* 9(1): 33–41. <https://doi.org/10.5281/zenodo.14713121>
25. SINGH R.K., R.K. ARIGELA AND SUJANA K.A. 2025. *Strophanthus wallichii* A.DC. (Apocynaceae), a new record for the state of Arunachal Pradesh and Odisha. *Species* 26(e4s1759): 1–5.
26. SINGH R.K., V.K. RAWAT AND S. KUMAR. 2025. A new combination in *nothogenus* × *Dryostichum* (Dryopteridaceae). *J. Biodivers. Conservation* 9(1): 62–63. <https://doi.org/10.5281/zenodo.14865023>.
27. SINGH, H., PUNEET KUMAR, SUBHASHMIT BHATTACHARYYA AND S. K. SINGH. 2025. *Lindenbergia muraria* (Roxb. ex D. Don) Brühl (Orobanchaceae): Reconfirming chromosome count and comments on its identification. *ibid.* p. 123.
28. SINGH, R. K., KULDIP S. DOGRA, KUMAR AMBRISH AND BRAJESH MEENA. (2024). Distributional note on *Alternanthera pungens* (Amaranthaceae). *J. Non-Timber Forest Products*. Vol. 31 (2): pp. 150-151.
29. SINGH, R.K. 2025. A new combination in *Caulokaempferia* (Zingiberaceae). *J. Biodivers. Conservation* 9(1): 30–32. <https://doi.org/10.5281/zenodo.14713070>
30. SINGH, R.K. 2025. A new combination in *Sphaeropteris* (Cyatheaceae) and neotypification of *Cyathea jacobsii*. *J. Biodivers. Conservation* 9(1): 64–68. <https://doi.org/10.5281/zenodo.14865050>.

Books: 16

1. Flora of India Vol. 8. Botanical Survey of India, Kolkata.
2. Flora of India Vol. 11. Botanical Survey of India, Kolkata.
3. Flora of India Vol. 14. Botanical Survey of India, Kolkata.
4. Flora of India Vol. 16. Botanical Survey of India, Kolkata.
5. Flora of India Vol. 19. Botanical Survey of India, Kolkata.
6. Flora of India Vol. 21. Botanical Survey of India, Kolkata.
7. Flora of India Vol. 27. Botanical Survey of India, Kolkata.
8. Flora of India Vol. 28. Botanical Survey of India, Kolkata.
9. Flora of India Vol. 30. Botanical Survey of India, Kolkata.
10. Flora of India Vol. 31. Botanical Survey of India, Kolkata.
11. Flora of India Vol. 32. Botanical Survey of India, Kolkata.
12. Trees of India Vol. 1. Botanical Survey of India, Kolkata.
13. Trees of India Vol. 2. Botanical Survey of India, Kolkata.
14. Trees of India Vol. 3. Botanical Survey of India, Kolkata.
15. 400 Wild Mushrooms. Botanical Survey of India, Kolkata.
16. Flora of India Checklist in Hindi – Vol. 1. Botanical Survey of India, Kolkata.
17. Flora of India Checklist in Hindi – Vol. 2. Botanical Survey of India, Kolkata.
18. SARAVANAN, R. AND SUJANA, K.A. 2025. Floristic and Ethnobotanical Studies of Kuldiha Wildlife Sanctuary, Odisha. Botanical Survey of India, Kolkata.