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Director



सत्यमेव जयते

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 /1068

Date: 05.05.2025

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 April, 2025.

Department: Botanical Survey of India

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

Scientists of BSI described two (02) taxa as new to Science from India viz. *Begonia himalaica* D.Borah, Chowlu, A.Shenoy and Taram (Begoniaceae) from the Indian Eastern Himalayas and *Hymenidium pinnatum* P. Bhandari & Bhaumik (Apiaceae) from Sikkim. They have also reported three (03) taxa as new additions to India and states viz. *Euphorbia bifida* (Euphorbiaceae) –an addition to the Indian flora from Andaman and Nicobar Islands; *Zeuxine clandestina* Blume and *Zeuxine parvifolia* (Ridl.) K.Schum. & Fedde (Orchidaceae), as new additions to the Orchid Flora of Sikkim (Annexure 1).

Scientists of BSI conducted 11 field / local tours and collected and identified 1441 field nos. of specimens. BSI prepared metadata of 2792 herbarium specimens. During this month, 13,62,840 visitors referred the official websites of BSI (10,79,241 visitors referred official website, 1,66,458 visitors referred archives, and 1,17,141 visitors visited Indian Virtual Herbarium). Besides, 618 students / visitors visited the gardens and herbaria of BSI and generated the revenue of about Rs. 69,701.00 during this month.

Important events / programs organized / attended:

1. The 14th Research Advisory & Monitoring Committee (RAMC) meeting of Botanical Survey of India was held on 18th and 19th April, 2025 at Kasauli, Himachal Pradesh, under the Chairmanship of Prof. C. R. Babu, Professor Emeritus, University of Delhi.
2. BSI conducted the Heads of Office meeting, 2025 and 88th Regional Council Meeting on 24th and 25th April, 2025 respectively at BSI, Southern Regional Centre, Coimbatore.
3. Botanical Survey of India and EIACP, Howrah, in collaboration with Netaji Subhash Chandra Bose Cancer Hospital (NCRI) organized a collaborative Health Camp on 7 Apr, 2025, on the occasion of World Health Day 2025, to promote health awareness and provide valuable health services to all its employees.
4. Botanical Survey of India, SHRC, Gangtok organized a one day "Hands on Training on Field Based plant taxonomy, herbarium techniques and plant identification" on April 11, 2025 to promote plant taxonomy. Twenty Four (24) participants from Regional Ayurvedic Research Institute (CCRA-RARI), Indian Cardamom Research Institute, Spices Board, Namgyal Institute of Tibetology (NIT), Sikkim University, Nar Bahadur Bhandari Government College (NBBGC), University Gour Banga (UGB), and GB Pant National Institute of Himalayan Environment (GBNIHE) participated in the event.
5. Botanical Survey of India and all its regional centres / units observed the Earth Day 2025 on 22nd April 2025, with the theme on "Our Power, Our Planet," to emphasize the need for renewable energy transition and encourage sustainability.
6. Botanical Survey of India, ISIM, Kolkata has conducted a two-day internship training program for 12 post-graduate final semester students from the University of Calcutta, Dept. of Museology from 24.04.2025 to 25.04.2025.
7. A Review meeting of NIRANTAR Institutes was held online under the Chairmanship of Addl. DGF (FC/WL), MoEF&CC, New Delhi. Dr. A. A. Mao, Director, BSI and Dr. S.S. Dash, Scientist-F & Incharge, Tech Section, BSI attended the meeting and represented BSI as the lead institute for the Ecosystem Survey & Analysis Vertical I on 30.04.2025.
8. Dr. A. A. Mao, Director, attended a meeting of the Research and Advisory Committee (RAC) meeting of National Innovation Foundation (NIF), DST at Gandhinagar Gujarat from 1-3 April, 2025. He also attended a meeting of the WII, held under the Chairmanship of the Hon'ble Minister, MoEF&CC at New Delhi on 22 April, 2025. He also attended a meeting of Parliamentary Committee on Official Language, held at BSI, ERC, Shillong on 25th and 26th April, 2025.
9. Dr. A. A. Mao, Director, Dr. S. S. Dash, Scientist-F & Incharge, Tech. Sect., Dr. D.K. Agrawala, Scientist-E & Incharge, Publ. Sect., and Dr. S.L. Meena, Scientist E & HoO, AZRC, Jodhpur attended an event on the occasion of Gujarat State Foundation Day, at Gadhra, Gujarat, wherein BSI publication on Flora of Gujarat (in three volumes) was released by the Hon'ble Governor and the Hon'ble Chief Minister of Gujarat.

During this month 28 publications including 2 books and 26 research papers were published by BSI scientists in 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 05/05/2025

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

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Publications for the Month of April 2025

Research Publications: 28

RESEARCH PAPERS:

1. BHANDARI, P. AND M. BHAUMIK 2025. *Hymenidium pinnatum* (Apiaceae), A New Species from Sikkim, India. *J. Jap. Bot.* 100(2): 124–131. 2025. doi: <https://doi.org/10.51033/jjapbot.ID0252>
2. BORAH, D., CHOWLU, K., TARAM, M., KABEER, K.A.A., HUGHES, M & A. SHENOY. 2025. *Begonia himalaica*, a new species from the Indian Eastern Himalayas. *Nordic J. Botany*, e04745. doi: 10.1002/njb.04745
3. BORAH, O., DAS, A.K. AND VIJAYAN, D. 2025. Chemical composition, antioxidant potential and GC–MS analysis of methanolic extracts of leaves and stems of *Dendrobium jenkinsii* Wall. ex Lindl. – a lesser known medicinal orchid from Northeast India. *Vegetos.* <https://doi.org/10.1007/s42535-025-01260-8>
4. BOSE, A., A. PARIHAR, A. VIZZINI AND K. DAS. 2025. A New Record of *Thaxterogaster* Subgenus *Scauri* (Agaricales) from India. *International Journal of Plant & Soil Science* 37 (4):118-28. <https://doi.org/10.9734/ijpss/2025/v37i45393>.
5. DALAVI, J.V., M.Y. KAMBLE, J. SWAMY, D. CHAKRABORTY AND D. SINGH. 2025. Occurrence of *Hibiscus glanduliferus* (Malvaceae) in India with Notes on Its Nomenclature. *Feddes Repertorium* 136(1):1-6. DOI:10.1002/fedr.70011
6. DOGRA, K.S., R.K. SINGH, K. AMBRISH, B. MEENA and YODHVEER, 2024. Some useful medicinal plants of Leh district in Ladakh. *BSI, ENVIS Newsletter*. 29(3): 8-10.
7. GHOSH, J. AND M. BHAUMIK 2025. Typification of Nine Names of the Genus *Bupleurum*(Apiaceae). *Feddes Repertorium*, 2025; 0:1–14. <https://doi.org/10.1002/fedr.70010>
8. JAGDISH DALAVI, MAYUR KAMBLE, JETTI SWAMY, DEEP CHAKRABORTY AND DEVENDRA SINGH. 2025. Occurrence of *Hibiscus glanduliferus* (Malvaceae) in India with Notes on Its Nomenclature. *Feddes Repertorium* 136 (1): <https://doi.org/10.1002/fedr.70011>
9. KHANAL, M., S. SARKAR, P. ACHARYA, R. PARIYAR AND A. BHATTACHARJEE 2025. *Zeuxine clandestina*, Blume and *Zeuxine parvifolia* (Ridl.) K.Schum. & Fedde (Orchidaceae): New additions to the Orchid Flora of Sikkim, India. *J. Orch. Soc. India* 38: 39–43.
10. KHARIA, S. K. CHOWLU, A. PARIHAR, N. S. KHONAMAI, A. RAY, B. J. GOGOI & D. V. KAMBOJ. 2024. Wild Edible Plants Used by Indigenous People of Lohit and Namsai Districts of Arunachal Pradesh, India. *Indian j. For.* 47 (3): 184-191.
11. MEENA, S. L. AND HARIKRISHNA, P. 2025. Orchid diversity in Shoolpaneshwer Wildlife Sanctuary, Gujarat, India. *International J. Botany Studies* 10(3): 27-31.
12. MIDIGESI, A. K., DHOLE, P. A., NAIDU, S. D., S. MAHADEVAKUMAR, EKKA G. A. AND SINGH, L. J. 2024. *Euphorbia bifida* (Euphorbiaceae): An addition to the Indian flora from Andaman and Nicobar Islands. *Indian J. Forestry* 47(3): 159-164
13. MISHRA, M., SINGH, H., KABEER, K.A.A., DHOLE, P.A. AND SARAVANAN, R. 2024. Traditional herbal medicines used for the treatment of various skin ailments in Bihar, India. *J. Non-Timber Forest Products*. 31(3). 184-189. <https://doi.org/10.54207/bsmps2000-2024-17E724>
14. MONIKA MISHRA, H. SINGH, K.A.A. KABEER, P.A. DHOLE AND R. SARAVANAN. 2024. Traditional herbal medicines used for the treatment of various skin ailments in Bihar, India. *J. Non-Timber Forest Products*. 31(3): 184–189.
15. MURUGESAN, M. AND B. KARTHIK 2025. Endemic Asclepiads in Nilgiri Biosphere Reserve, India. *Kongunadu Research Journal* 11(2): 79–87.
16. PULIYAKODE SOUMYA, SAMRAT GOSWAMI, PURAYIDATHKANDY SUNOJKUMAR AND SUDHANSU SEKHAR DASH. 2025. *Justicia perlisensis*, a new name for *Justicia rupestris* Ridl. (Acanthaceae). *Phytotaxa* 698 (1): 058–060
17. RASINGAM, L., P. HARIKRISHNA AND V. CHANDRA SEKARA RAO. 2025. *Apocopsis vaginatus* (Poaceae: Panicoideae) an addition to the flora of Telangana, India. *J. Econ. Taxon. Botany* 49(1): 4-6.

18. SANKARA RAO M. AND HARIKRISHNA, P. 2025. Floristic Diversity of Sri SriDharaPaidithalliGangammaAmmavaru Sacred Grove, Vizianagaram District, Andhra Pradesh, India. *International J. Botany Studies* 10(3): 32-35.
19. SAVITHRA NAGABHUSHANA, ARON S.K. YOHANNAN, SOMASHEKAR G. MALAMMANAVAR, PALANISAMY MOOKKAN, KANIVALAN IWAR. 2025. Phytochemistry, bioactive potential and chemical characterization of culturable freshwater microalgae *Chlorococcum infusionum* (Schrunk) Meneghini. *Notulae Scientia Biologicae*. 17(1):12276, DOI:10.15835/nsb17112276
20. SINGH R.K. AND KUMAR S. 2025. Nomenclatural novelties in Acanthaceae and a new species of *Justicia* from Madagascar. *Journal of Biodiversity and Conservation* 9(1): 147–158. <https://doi.org/10.5281/zenodo.15087187>. 2025
21. SINGH R.K. 2025. New combinations in *Ruellia* (Acanthaceae). *Journal of Biodiversity and Conservation* 9(1): 127–146. <https://doi.org/10.5281/zenodo.15087168>. 2025
22. SINGH, L. J., PRAKASH R. O., S. MAHADEVAKUMAR, MIDIGESI, A. K., NAIK , M.C. DHOLE, P, A. AND EKKA G. A. 2025. History and emended description of an endemic *Musa* L. of Andaman and Nicobar Islands, India: *M. indandamanensis* L.J. Singh (Musaceae). *Botany Letters*. <https://doi.org/10.1080/23818107.2024.2440900>
23. SRIVASTAVA. A., SINGH H., PUNEET KUMAR AND PANWAR G.S. 2025. Analysis of seed germination potential of *Indopiptadenia oudhensis* (Brandis) Brenan and introduction of saplings into wild under species recovery program. *Indian Forester*, 151 (3): 280-284, 2025 DOI: 10.36808/if/2025/v151i3/170515
24. STALIN NITHANIYAL 2025. Endemism and In-situ diversification; the place for species recovery and conservation. In: *Life on Land Sustainable Strategies and Indian Perspectives*. Published by office of Research & Development, Madras Christian College, Chennai (ISBN: 978-81-986594-8-4)
25. TSERING J AND K. CHOWLU. 2024. Rediscovery and first photographic evidence of *Agrostophyllum flavidum* (Orchidaceae), an Endangered orchid. *Indian J. Forestry*. 47 (3): 159-162.
26. VINAYAKA K.S, NIBEDITA JENA AND STALIN NITHANIYAL (2025) Medicinal uses of *Evolvulus nummularius* (L.) L. (Convolvulaceae): a review. *J. Biodiversity Conservation* 9(1): 166-170

BOOKS:

1. DAS, K. D. CHAKRABORTY AND S. DATTA. 2025. 400 wild mushrooms of India: an illustrated field guide. Botanical Survey of India, Kolkata. 457 pp.
2. MANIKANDAN, R., B. BALODI AND D. K. AGRAWALA (Assistance Nithya, S.P.) 2025. Flora of Govind Pashu Vihar Wildlife Sanctuary, Uttarakhand, Botanical Survey of India, Kolkata.