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निदेशक
A. A. Mao
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 / 1663

Date: 01.12.2023

Madam,

In reply to OM no. 24011/08/2019 – GC dtd. 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 **November, 2023**

Department: Botanical Survey of India

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

Scientists of BSI reported four (4) species *Xylaria sridharii* (Xylariaceae), *Lysiontus namchoonii* (Gesneriaceae), *Rungia longistachya* (Acanthaceae) and *Mussaenda conferta* (Rubiaceae) as new to science, three new addition to the Flora of India viz. *Phylloporus gajari* Iqbal Hosen & T.H. Li, (Boletaceae) *Veloporphyrellus latisporus* Junaid Khan (Boletaceae) and *Daphne ludlowii* D.G. Long & Rae (Thymelaeaceae) and **three new distributional records** viz. *Bonnaya tenuifolia* (Colsm.) Spreng. (Linderniaceae) to the flora of Andhra Pradesh, *Arisaema caudatum* (Araceae) for the Southern Eastern Ghats and *Cyclosporum leptophyllum* (Pers.) Sprague ex Britton & P. Wilson (Apiaceae) for southern India.

In addition, BSI scientists conducted **18** field/ local tours, **1** Herbarium Consultation Tour and collected **1031** field nos. of specimens. Besides BSI completed metadata of **3943** herbarium specimens. During the month, **413750** visitors visited the official website of BSI (**157472** visitors referred to BSI official website, **148372** visitors referred BSI archives and **107906** visitors visited the Indian Virtual Herbarium).

Important events / programmes organized / attended:

1. Humanitarian Heidi Kuhn, the World food Prize winner (2023), paid a visit to the AJC Bose Indian Botanic Garden Howrah on 29th November 2023. She while planting a Baobab tree (*Adansonia digitata* L.) in the garden, prayed for peace across the globe.
2. Botanical Survey of India in collaboration with University of Calcutta conducted 33rd IAAT Conference where Scientists and Researchers from BSI actively participated from 25-27th November 2023.
3. Botanical Survey of India in collaboration with the Indian Fern Society conducted International Symposium in the Department of Botany, University of Kalyani from 22-24th November, 2023.
4. Renowned Academician Dr Shekhar C Mande, Prof Bioinformatics Centre, Savitribai Phule Pune University (formerly the University of Pune), and Former Director General CSIR, visited AJCB Indian Botanic Garden, Howrah.
5. Botanical Survey of India signed MoUs with Atlanta Botanic Garden, USA on 10th November, 2023 and with University of Delhi on 23rd November, 2023 for the executing and sharing of scientific research in the field of Plant Science.
6. Botanical Survey of India celebrated 8th National Ayurveda Day (NAD)-2023 with a theme "Ayurveda for One Health" with tag line "Ayurveda for everyone on every day"
7. Botanical Survey of India celebrated World Science Day for Peace and Development with the theme Building Trust in Science. Since its proclamation by UNESCO in 2001, World Science Day for Peace and Development World Science Day has emphasized the vital role of science in society and engaged the general population in discussions on arising scientific issues.
8. Under the aegis of the Chief Vigilance Commission of India, all offices, units, and regional centres of the Botanical Survey of India celebrated Vigilance Awareness Week 2023 from 30th October to 5th November 2023 with the theme - "Say no to corruption; commit to the Nation". On the same occasion an workshop was organized in hybrid mode at Central National Herbarium, Howrah on 1.11.2023 where Dr. Priti Mahato, Chief Vigilance Officer and Sh. Subrata Sarkar, IRSME, Chief Workshop engineer, from Eastern Railways headquarters, Kolkata delivered interactive talk on the said theme.
9. Process of filling-up of vacant posts, the offer of appointment was issued to the post of 12 LDC, 2 Stenographer Gr.II, 123 Multitasking staffs, 2 Botanical Assistants in the month of November, 2023.

During this month **32** research publications and **1** book have been published by BSI scientists in various International and National research journals (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: NIL
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:
8. List of cases in which ACC directions have not been complied with: NIL

With regards,

Sincerely yours,

01/12/2023
A. A. MAO

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



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Annexure-1

LIST OF PUBLICATIONS FOR NOVEMBER 2023

PUBLISHED PAPERS:

1. RAMANA, P.V., J. SWAMY, V. JALANDER, P.S. NAIDU AND S. B. PADAL. 2023. Note on morphological variations and new distributional record of *Bonnaya tenuifolia* (Linderniaceae) from Andhra Pradesh, India. *Nelumbo* 65(1): 119–121. DOI: 10.20324/nelumbo/v65/2023/172900
2. ANUSUBA, V., M. MURUGESAN, S. NAGARAJU, J. SWAMY, R. THARANI AND B. KARTHIK. 2023. Analysis of grass diversity of Nilgiri Biosphere Reserve, India, with special emphasis to the endemic species. *Nelumbo* 65(1): 229–238. DOI: 10.20324/Nelumbo/v65/2023/172942
3. NAGARAJU, V. J. SWAMY AND G. SUDARSANAM. 2023. Extended distribution of endemic species, *Drimia coromandeliana* (Asparagaceae) from eastern Ghats of Andhra Pradesh, India. *BIOINFOLET* 20 (3b): 584–586.
4. GHOSH A, HEMBROM ME, CHAKRABORTY D, GANGWAR R & DAS K (2023). First reports of *Phylloporus gajari* from India. *Mycotaxon* 137(4): 963–975.
5. DHOLE, P. A., BISIINU CHARAN DEY, GAUTAM ANUJ EKKA, M. ANIL KUMAR., S. MUTIUKUMAR, VIVEK C. P., C. S.PUROHIT, AND LAL JI SINGHI. 2023. Critically Endangered and narrowly endemic species of *Ceropegia* L. (Apocynaceae: Ceropegieae): Conservation Measures in Andaman & Nicobar Islands, India. *Journal of the Andaman Science Association*. 28(1): 62–66.
6. CROUS, P.W.,MAHADEVAKUMAR, S. et al. Fungal Planet description sheets. 1478–1549. 2023 *Persoonia*, 50:158–310.
7. SHARATH CHANDRA, K., S. MAHADEVAKUMAR, B. R. NUTHAN AND S. SATISH, *Xylaria sridharii* sp. nov. – a new species of *Xylariaceae* from India. *Phytotaxa* 625(2): 180–190
8. KRISHNA CHOWLU, KHYANJEET GOGOI, B. V. TRUONG, L.V. AVERYANOV, D.A. IUDOVA & C.H. NGUYEN. 2023. *Lysiontus namchomii* (Gesneriaceae), a new species from Arunachal Pradesh, India. *Turczaninowia* 26, 3: 160–165.
9. HARIKRISHNA P., RAMESH KUMAR, RAVI KIRAN ARIGELA AND NAGARJU SIDDABATHULA. 2023. Inventorisation and Mapping of the Grasslands of the Bassi Wildlife Sanctuary, Rajasthan, India. *Nelumbo* 65(1): 92 – 103.
10. PALANISAMY, M., AND ARON SANTHOSH KUMAR, Y.2023. Account on Rhodophyceae and their significance from the coastline of Andhra Pradesh, India. *Nelumbo* 65(1):206–217. DOI: 10.20324/nelumbo/v65/2023/173056.
11. GHOSH, A., M.E. HEMBROM, D. CHAKRABORTY, R. GANGWAR AND K. DAS. 2023. First reports of *Phylloporus gajari* from India. *Mycotaxon* 137(4): 963–975.
12. MUSHTAQ, F., W.S. MALIK, D. CHAKRABORTY, M.H. BHAT, A. VYAS AND K. DAS. 2023. *Veloporphyrellus latisporus*, a new generic record for India. *Mycotaxon* 137(4): 953–962.
13. ARON SANTHOSH KUMAR Y., PALANISAMY M. AND SAVITHRA N. 2023. Phytochemistry, bioactive potential, and chemical characterization of free-floating algae *Ulva profunda* W.R.Taylor — a lesser known species from Andhra Pradesh, India. *Biomass Conversion and Bio refinery* (Published by Springer Nature) DOI: 10.1007/s13399-023-05001-2
14. YADAV, S.K., ARON SANTHOSH KUMAR, Y. AND PALANISAMY, M. 2023. Seaweeds as Natural Resource for agar –agar Extraction in India—A Review. *Agro Economist - An International Journal*, 10(02): 201–208.
15. YADAV, S.K., ARON SANTHOSH KUMAR, Y. AND PALANISAMY, M. 2023. Taxonomic Account of Two Brown Seaweed Genera *Chnoospora* And *Pseudochnoospora* (Phaeophyta) In India. *Journal of Plant Development Sciences* Vol. 15(8): 415–423.
16. M. SANKARA RAO , P. IIARI KRISHNA, N.S.S.N. KEDARESWARI, V. GNANOJWALA, B. SURESH KUMAR, T. ARAVINDA AND K. KALYANI BAI (2023) 'Phytodiversity and its significance of the Pamuleru Sacred grove in Alluri Sitharamaraju District of Andhra Pradesh, India'. *Nelumbo* 65(1), 239–244.
17. PAUL, MEGHNA, SAMRAT GOSWAMI, BRAHMARSHI MONDAL, AJAY MONDAL, VEERESH H. ARI, POOJA SHIVAJI BHAGURE, SAKSHI PANDEY, PRADHYUMNAN M.R., PRIYA SINGH KUSHWAHA, PARTHIBAN A., NAVYA S., SUKDEB BERA, PIANI BHUSAN SAHOO, SAYANTAN JASH, DARSHAN SHUKLA, HRUDYA A., AISHWARYYA MITRA, APPU SIGA, ARUNIMA BOSE, ATHIRA P. P., E. ANGELIN FELICIA, MADHUMITA PAL, MANCHIJANDIAL, PRIYANKA BHANDARI, RAJAT MONDAL, REETIKA SRIVASTAVA, RITESHI KUMAR SINGH, SAGARIKA KUMARI, SEEMARJIT KAUR, SK NASIM ALI, YASASWINEE ROUT AND KUNDAN BHATTACHARJI*. 2023. *Lectotypification* of two names in *Calanthe* R.Br. (Orchidaceae). *Nelumbo* Vol. 65(1): (189–192). Published in *Nelumbo*.
18. MANGAR, S., B.CHETTRI, G.CHIETRI, N. SHERPA AND J.H.FRANKLIN BENJAMIN. 2023. *Daphne ludlowii* D.G.Long & Rac (Thymelaeaceae), new addition to the flora of India. *Nelumbo* 65(1): 124–127. <https://doi.org/10.20324/nelumbo/v65/2023/172996>.
19. SARAVANAN, T. S. AND S. KALIAMOORTHY (2023). *Arisaema caudatum* (Araceae): A new distributional record for the Southern Eastern Ghats, India. *Nelumbo*. 65(1): 150–152.
20. PAUL, BASIL AND C. MURUGAN (2023). *Rungia longistachya* (Acanthaceae), a new species from the Southern Western Ghats, India. *Nelumbo*, 65(1): 6 – 12

21. MURUGESAN, M., S.S. HAMEED, M. PREMKUMAR, B. KARTHIK, R. MANIKANDAN, W. ARISDASON AND M.U. SHARIEF. 2023. Additions to the angiospermic flora of Tamil Nadu from Anamalai Hills of Southern Western Ghats. Published in *Nelumbo* 65(1): 132–137.
22. PREMKUMAR, M., M. MURUGESAN, B. KARTHIK AND R. MANIKANDAN. 2023. Notes on the identity and taxonomic status of steno endemic *Senecio lawsonii* Gamble and *Senecio lessingianus* C.B. Clarke (Asteraceae) from the Nilgiri Biosphere Reserve, India. Published in *Nelumbo* 65(1): 144–149. 2023.
23. MURUGESAN, M., B. KARTHIK, V. ANUSUBA AND R. THARANI. Addition of three lesser known endemic species to the state flora of Tamil Nadu. Published in *Nelumbo* 65(1): 218–223. 2023.
24. ANUSUBA, V., M. MURUGESAN, S. NAGARAJU, J. SWAMY, R. THARANI AND B. KARTHIK. 2023. Analysis of grass diversity of Nilgiri Biosphere Reserve, India, with special emphasis to the endemic species. Published in *Nelumbo* 65(1): 229–238. 2023.
25. SAMPATH KUMAR, V., L. N. RAY AND P. S. N. RAO Myrtaceae, Lecythidaceae, Melastomataceae, Sonneratiaceae, Punicaceae, Crypteroniaceae, Onagraceae, Passifloraceae, Caricaceae, Cucurbitaceae, Begoniaceae, Datisceae In Flora of Andaman and Nicobar Islands, Vol. 2, PP. 1–17. 2023. Botanical Survey of India, Kolkata.
26. K. A. SUJANA AND R. G. VADHYAR (2023). A new species of *Mussaenda* (Rubiaceae) from the southern extent of the Western Ghats Mountain Range, India, *Taiwania* 68(4): 458–464.
27. G. REKHA, L. PRAKASHI, P. RAMESHKUMAR AND K.A. SUJANA (2023). New distributional record of *Cyclospermum leptophyllum* (Pers.) Sprague ex Britton & P. Wilson (Apiaceae) for southern India from Bandipur Tiger Reserve, Karnataka, *Nelumbo* 65(1): 165–167.
28. SREEJA K. AND SUJANA K. A. (2023). Lectotypification of *Chilocarpus malabaricus* (Apocynaceae), a liana endemic to Southern India, *Nelumbo* 65(1): 196–197.
29. PAUL, M. & al. (2023). Lectotypification of two names in *Calanthe* R. Br. (Orchidaceae). *Nelumbo* 65: 189–192.
30. S. N. RAY P. K. DAS, S. S. HANSDA, A. K. JENA, A. BENNIAMIN & R. K. Mohalik (2023). First Record of the Threatened Fern *Pronephrium triphyllum* (Sw.) Holttum (Thelypteridaceae) from Peninsular India, *Indian Fern Journal*, Vol 40(2) : 72-77 (2023).
31. C. R. MAGESH, A. BENNIAMIN, M. S. SUNDARI, D. JESUBALAN & SAMPATHA KANK (2023). Pteridophytic Flora of Dalma Wildlife Sanctuary, Jharkhand, India, *Indian Fern J.* 40(2) : 21-27.
32. A. BENNIAMIN, M. S. SUNDARI, D. JESUBALAN & KAUSHIK SARKAR (2023). A Preliminary Survey of Pteridophytes from Bhadra Tiger Reserve, Central Western Ghats of Karnataka. *Indian Fern J.* 40(2) : 112-118.

BOOK:

1. ARIGELA, R.K., K.A.A. KABEER, AND G.V.S. MURTHY, Endemic and Threatened Flowering Plants in Kodaikanal Wildlife Sanctuary, Tamil Nadu, India. Botanical Survey of India. Kolkata (2023). ISBN: 978-81-962540-8-6.