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Director



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

DO. No.: BSI – 8/1/PA/2019/1479

Date: 08.10.2025

Respected Sir,

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 **September, 2025**.

Department: Botanical Survey of India

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

Scientists of BSI have described **four (04) taxa as new to Science from India viz.** *Pseuduvaria livingstoneana* Sukdeb Bera & Karthig. (Miliuseae: Malmeoideae: Annonaceae) from the Andaman and Nicobar Islands; *Miliusa beddomei* Sukdeb Bera, Sujana and Karthig. (Miliuseae: Malmeoideae: Annonaceae) from Western Ghats, India and two fungal taxa namely *Gyrodon sharmae* Su. Datta, K. Das & Vizzini and *Lactifluus khasianus* D. Chakr., A. Ghosh & D. Tudu and *Gyrodon* (*Paxillaceae, Basidiomycota*). Besides, Scientists of BSI have reported **six (06) taxa** as new additions to India or different states viz. *Pedicularis dhurensis* R.R. Mill (Orobanchaceae) from Arunachal Pradesh, two edible fungi *Termitomyces medius* R. Heim & Grassé A. and *Termitomyces microcarpus* (Berk. & Broome) R. Heim A. from Arunachal Pradesh, *Hydrocotyle bowlesoides* Mathias & Constance (Araliaceae) from Karnataka and *Podosphaera xanthii*, and a new distribution record of false smut (*Graphiola phoenixis*) of *Phoenix sylvestris* from Telangana State.

Scientists of BSI conducted **14 field / local tours** and **1 HCT** and collected **992 field nos.** of specimens. BSI prepared metadata of **4463 herbarium specimens**. During this month, **5,42,548** visitors referred the official websites of BSI (**1,80,572** visitors referred official website, **2,69,219** visitors referred archives, and **92,757** visitors visited Indian Virtual Herbarium). Besides, **945** students / visitors visited the gardens and herbaria of BSI, and generated the revenue of about **Rs. 93,916** during this month.

Important events / programs organized / attended:

1. Dr. Kanad Das, Scientist-F & HoO, Central National Herbarium, Howrah took over the Charge as the Director, Botanical Survey of India (BSI) on 25th September 2025.
2. Botanical Survey of India and all its Regional Centres organized a massive cleaning drive under **The Swachhata Hi Seva** programme during September to commemorate the Swachhata 5.0 initiative.
3. Botanical Survey of India and its regional centres observed **'World Coconut Day'** on 02.09.2025; **Himalayan Day** on 9th September, 2025; **World Ozone Day 2025** on 16th September, 2025 and also organized **Hindi Pakhwada / Hindi fortnight** throughout September. During these programmes, several events like plantations, invited lectures, essay competition, Dictation, speech competition, noting and drafting, recitation, quiz competition etc. were organized.
4. Dr. Krishna Chowlu, Scientist-D, BSI- Arunachal Pradesh Regional Centre, Itanagar presented a copy of the book "Orchids of Arunachal Pradesh" to the Hon'ble Prime Minister Narendra Modi on September 22, 2025, during the Prime Minister's visit to Itanagar.
5. Dr. Kanad Das, Director, BSI; Dr. Pratibha Gupta, Sci. F & HoO, CBL, Howrah; Dr. S.S. Dash, Scientist F & Incharge, Tech. Sect. and Dr. D. K. Agrawala, Sci. E & Incharge, Pub. Sect. BSI, Kolkata attended a meeting at MoEF&CC, New Delhi on 29.09.2025 for briefing the **IUCN World Conservation Congress, 2025**.

During this month **38 Publications** including **25 Research Papers** and **13 Hindi Articles** were published by BSI Scientists in International and National journals of repute 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:** Inputs on Leveraging Space Technology & Application for Viksit Bharat 2047 were provided by BSI to the Ministry
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,

(Kanad Das)
Director

To, Shri .V. P. Mishra, JS, (CS-II), MoEF&CC, New Delhi – 3

PUBLICATION SEPTEMBER 2025

Research Publications:

1. AJAY, M., KIRAN, M., IQBAL, A.M., ARUN, R., KUMAR, S., MUFEEDA, K.T., MAHADEVAKUMAR, S., ANEESH, K.S. & GOPAKUMAR, S.N. 2025. First report of leaf spot caused by *Colletotrichum siamense* on *Bauhinia purpurea* from India. *Australasian Plant Pathology*. <https://doi.org/10.1007/s13313-025-01068-9>
2. BALAJI, R., K. DEVANATHAN, S. NITHANIYAL, M. THIRUVENGADAM, AND K. SEUNG-HYUM, 2025. Chloroplast genome assembly of *Garcinia indica* (Thouars): insights to nucleotide diversity and phylogenetic analysis among the *Garcinia*, *Plant Biotechnology Reports*. <https://doi.org/10.1007/s11816-025-01002-x>.
3. BERA, S. AND K. KARTHIGEYAN 2025. Know Your Plant: Beddome's Angled Flower Tree – 'Aanapanal'. *EIACP Newsletter* 39(4): 3.
4. BERA, S. AND K. KARTHIGEYAN 2025. *Pseuduvaria livingstoneana* (Miliuseae: Malmeoideae: Annonaceae): A new species from the Andaman and Nicobar Islands. *Phytotaxa* 718(1): 72–76. <https://doi.org/10.11646/phytotaxa.718.1.8>
5. BERA, S., SUJANA, K.A. AND K. KARTHIGEYAN 2025. An overlooked new species of *Milusa* (Miliuseae: Malmeoideae: Annonaceae) from Western Ghats, India. *Nordic J. of Botany* e04906. <https://doi.org/10.1002/njb.04906>
6. BHATTACHARYYA, S., S. PATIL, S. K. SINGH AND M. NANDIKAR. 2025. A reassessment on the occurrence of *Rhamnus colettii* (Rhamnaceae) in India. *J. Econ. Taxon. Bot.* Vol. 49(2): 72–74.
7. CHAKRABORTY, D., D. TUDU, A. GHOSH AND K. WISITRASSAMEEWONG 2025. New insights into *Lactifluus* sect. *Gerardii*: A novel taxon from Meghalaya, India. *Phytotaxa* 716 (4): 269–280.
8. DATTA, S., K., DAS AND A. VIZZINI. 2025. A new species of *Gyrodon* (Paxillaceae, Basidiomycota) from India. *Taiwania* 70: 646-652
9. DEVANATHAN, K., S. NITHANIYAL, R. BALAJI. 2025. In-silico validation of plastid DNA barcodes to delineate the wood ferns *Dryopteris* (Adanson, 1763), *Genetic Resources and Crop Evolution*, 72 (6).
10. ELAYA PERUMAL, U. AND M. PALANISAMY. 2025. Distribution of *Compsopogon caeruleus* (*Balbis ex C.Agardh*) Montagne (*Compsopogonales*, *Compsopogonophyceae*) in West Bengal, India. *Madras Agricultural J.* 112 (4-6): 107-117. <https://doi.org/10.29321/MAJ.10.701219>
11. GARG, A. AND S. TRIPATHI, 2025. Revisiting *Adansonia digitata* L. (Baobab) in the Indian Context: Pollen Morphometry, Dating, and Evolutionary Significance. *Quaternary Chronicles*. 7(2): 21
12. JESUBALAN, D., A. BENNIAMIN, K. SARKAR AND R. DAYAL 2025: Diversity and distribution of the Pteridophytic flora of Pushpagiri Wildlife Sanctuary, Western Ghats of Karnataka, South West, India. *J. Bombay Nat. Hist. Soc.* 122(2). doi: 10.17087/jbnhs/2025/v122/170819
13. KHANAL, M., B.K.MAJHI, S. SARKAR, K. SARKAR, S. K. RAI, D KUMAR AND A. GARG, 2025. *Pedicularis dhurensis* R.R. Mill (Orobanchaceae), a new record for India from Arunachal Pradesh. *Vegetos* 16 Sept. 2025.
14. MAHADEVAKUMAR, S., SAVITHA, A.S., DANTESWARI, C., SARMA, P.V.S.R.N., RENUKA, S.M., AJITHKUMAR, K., MAHESH, M. AND PATRO, T.S.S.K. 2025. Morpho-Molecular Characterization of *Agroathelia rolfsii* causing Leaf Blight of Sacred Lotus (*Nelumbo nucifera*) in the Andaman and Nicobar Islands. *Physiological and Molecular Plant Pathology*. 140: 102899. <https://doi.org/10.1016/j.pmpp.2025.102899>
15. MAHADEVAKUMAR, S., THOMAS, H.B., AJITHKUMAR, K., SAVITHA, A.S., SUJATHA, M., MAHESH, M., MAHARACHCHIKUMBURA, S.S.N., AND SREENIVASA, M.Y. 2025. Morphological and molecular characterization of *Podosphaera xanthii* associated with powdery mildew of betel leaves (*Piper betle* L.)-a new record from India. *Physiological and Molecular Plant Pathology*. 140: 102875. <https://doi.org/10.1016/j.pmpp.2025.102875>
16. MAHESH, M., SARMA, P.V.S.R.N., DANTESWARI, C., MAHADEVAKUMAR, S., CHANDRANAYAKA, S., AND SRIDHAR, K.R. 2025. A new distribution record of false smut (*Graphiola phoenicis*) of *Phoenix sylvestris* from Telangana State, India. *Mycological Spectrum* 1(2): 53-65.
17. PARIHAR A. (2025). New State Records of Two Edible Species of *Termitomyces* (Lyophyllaceae) From Arunachal Pradesh, India. *Journal of Plant Development Sciences* Vol. 17(8): 331–335. 2025.

18. PRASAD, R., K. CHAKRABORTY AND D. SINGH. 2025. A Comprehensive Review on the Nutraceutical, Pharmacological, Ethnobotanical and Commercial Importance of Underutilized Herb - *Typhonium trilobatum* (L.) Schott. *European Journal of Nutrition & Food Safety* 17(9): 210–221.
19. DEROLIYA, P. K. . 2025. *Tabernaemontana surinamensis*, a replacement name for *T. albiflora* (Miquel) Pulle (Apocynaceae) *Phytotaxa* 718(2): 160–162.. <https://doi.org/10.11646/phytotaxa.718.2.8>
20. RAJ, LA., S. NITHANIYAL, D. NARASIMHAN, S. DENNIS, P. CHARLES, L. ANTOINE, V. KAVIARASAN AND RAVINDHRAN 2025. DNA Barcoding as a tool for species authentication and conservation of Rudraksha (*Elaeocarpus angustifolius* Blume). *Ecological Genetics and Genomics*, 36: 100396.
21. REKHA, G., L. PRAKASH, AND SUJANA K.A. 2025. *Hydrocotyle bowlesioides* Mathias & Constance (Araliaceae), an addition to the flora of India. *Vegetos* <https://doi.org/10.1007/s42535-025-01472-y>.
22. SAHA, R., R.D. BARMAN AND A.K. MONDAL 2025. Characterization of new natural cellulosic fiber from *Calamus andamanicus* Kurz in special reference to its conservation. *Vegetos*. <https://doi.org/10.1007/s42535-025-01492-8>.
23. SHIL T. AND O.N. MAURYA 2025. Angiospermic diversity of baghar beel wetland, Katihar, North Bihar, India . *International Journal of Botany Studies* 10(8): 90–95.
24. SINDUJA S., ROSELINE J. G., AISWARYA K. P., RAJAKUMAR S., SANTHANAM P., PALANISAMY M., AND PERUMAL P. 2025. Food Engineering Approach to Sustainable Aquaculture production: Dual Culture of *Gracilaria edulis* and *Penaeus vannamei* in a Recirculating Maraponics System. *Journal of Food Process Engineering*. 48(7): e70191 <https://doi.org/10.1111/jfpe.70191>
25. SREEJA, K., SUJANA, K.A. AND A. PRAMANIK 2025. A study on Less known Ethnobotanical uses of medicinal plants among Irula tribes of Attappadi Hills in Kerala, India. In: Sanjeev Kumar (Ed.), *Glimpses of Ethnobotany and Medicinal Plants of India*. Bishen Singh Mahendra Pal Singh, Dehra Dun. pp. 489–497.

Hindi Articles

26. पंकज अरविंद ढोले, प्रकाश होरो, गौतम अनुज एक्का, अनिल कुमार मिडिगेसी, महादेवकुमार एस. एवं लाल जी सिंह जरायुजता: प्रजनन कौशल की एक क्षमता. 2024 वनस्पति बाणी 33:01-02
27. अनिल कुमार मिडिगेसी, पंकज अरविंद ढोले, गौतम अनुज एक्का, प्रकाश होरो, महादेवकुमार एस., एवं लाल जी सिंह अंडमान एवं निकोबार द्वीप समूह में एक आत्मघातक वृक्ष: सर्वेरा एल. (एपोसिनेसी). 2024 वनस्पति बाणी 33: 42-43
28. महादेवकुमार एस., श्रीधर के आर, पंकज अरविंद ढोले, प्रकाश होरो, अनिल कुमार मिडिगेसी, गौतम अनुज एक्का, एवं लाल जी सिंह अंडमान निकोबार द्वीप समूह का जंगली खाद्य मशरूम. 2024 वनस्पति बाणी अंक 33: 44-45.
29. सकुमार भक्ता, आर. के. गप्ता , शिव प्रसाद अधिकारी एवं सदिप्त कुमार दास प्रो. हरिहर पटनायक : शैवालविद एवं शिक्षाविद. 2024 वनस्पति बाणी अंक 33: 51-52
30. प्रकाश होरो वन एवं वन महोत्सव. 2024 वनस्पति बाणी अंक 33: 87
31. वाई. महेश, हरेकृष्ण स्वैन, आर. कोट्टईमुथु, विजय और एन. ओडुओ. 2024. हेबेनारिया एसी यू इफेरा वाल। एक्स. लिंड एल. (ऑर्किडेसी): भारत के मेघालय राज्य का एक जोरदार जंगली सजावटी आर्किड। वनस्पति बाणी अंक 33: 6–7.
32. हरेकृष्ण स्वैन, वाई. महेश, आर. कोट्टईमुथु और विजय. 2024. पूर्वोत्तर भारत में जैविक खेती: परिप्रेक्ष्य और अवसर. वनस्पति बाणी अंक 33: 59–60.
33. भावना जोशी, सुशील कुमार सिंह एवं अम्बर श्रीवास्तव 2024. जस्मिनुम पार्केरी डॉन : पश्चिमी हिमालय की संकीर्ण रूप से स्थानिक एवं लुप्त प्राय जाती. वनस्पति बाणी. 33:23-25.
34. वैशाली गौतम एवं सुशील कुमार सिंह. 2024. हरियाली होगी तो थान्कदक आएगी वनस्पति बाणी. 33:12-13.
35. गर्ग आरती. 2024. जलवायु परिवर्तन परिपेक्ष में उपरी गंगा रसमर सीते की अतुलिन्य जैविक संसाधन वनस्पति बाणी. 33:63-66.
36. गर्ग आरती. एवं सुशील कुमार सिंह. 2024. फोल्मोइदेस सुपेर्बा की जनसँख्या पर संभावित खतरे एवं वर्तमान स्थिति. वनस्पति बाणी. 33:84-86.
37. हरमिंदर सिंह, ब्रिजेश कुमार, सुशील कुमार सिंह. 2024. ब्रेनिया इन्सिगनिस (हुकर) जे स्मिथ – एक अनोखी संकटग्रस्त प्लाग जाति वनस्पति बाणी. 33:18-20.
38. लतिका सागार्वल, ब्रिजेश कुमार एवं सुशील कुमार सिंह..2024. पर्नागो में बीजरू विविधता एवं वर्गीकरण में उनका महत्व और योगदान वनस्पति बाणी. 33:14-17.