A. A. Mao 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**

Date: 02.11.2021

DO. No.: BSI - 8/1/PA/2019 / 1093

Dear Smt. Pandey,

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 October, 2021 Department: Botanical Survey of India

Important policy decisions taken, major achievements during the month:

Scientists of BSI reported three new taxa of plants including a new fungus genus Biligiriella and species B.indica from the forest of the Biligiri Rangaswamy Temple Wildlife Sanctuary, Karnataka, and a bryophyte taxon i.e. Riccia keralensis from the Kozhikode and Malappuram districts of Kerala, India. Besides, BSI also reported ten taxa as new additions to various states viz. Bulbophyllum tenuifolium and B. parviflorum (Orchidaceae) to the flora of Assam; Veronica ciliata subsp. cephaloides to the flora of Himachal Pradesh; Oldenlandia umbellata (Rubiaceae) to the flora of Andaman and Nicobar Islands; Sehima ischaemoides, Dactyloctenium austral, Chrysopogon serrulatus (Poaceae); Fimbristylis cinnamometorum (Cyperaceae), Dioscorea pubera Blume (Dioscoreaceae) and Habenaria barbata (Orchidaceae) to the flora of Telangana state. During the months, scientists of BSI completed metadata of 41949 herbarium specimens. Also, 7 field / local tours were conducted and 350 field numbers of plants were collected.

Important events / programmes organized / attended:

- Dr. A.A. Mao, Director, BSI attended virtually on 24th October, 2021 as a chief guest in the virtual inauguration of Jammu, Kashmir and Ladakh Chapter of Society of Ethnobotanists (SEB), organized by the Department of Botany, University of Jammu. He also held a meeting with the PCCF, Manipur on 30th October 2021 and discussed on the Flora of Manipur. He also visited CSIR - NBRI, Lucknow on 25th October, 2021 as a member of the selection committee for selection of scientists. He also attended a virtual meeting on 27.10.2021 as a member of the Award Committee of ICAR for selection of 'Plant Genome Savior Community Award' of ICAR for farmers / farming community.
- BSI, AJCB Indian Botanic Garden, Howrah, in collaboration with the Regional Outreach Bureau, Kolkata (Ministry of Information and Broadcasting, Govt. of India) organized a 5 days photo exhibition from 29th September, 2021 to 3rd October, 2021 for increasing awareness among the general public.
- BSI observed Vigilance Awareness Week w.e.f. 26th October 2021 1 November, 2021 and organized a 'Workshop on Vigilance Awareness' with the theme 'Independent India @ 75: Self Reliance with Integrity' on 28th October 2021 at CNH, Howrah.
- BSI, AJC Bose Indian Botanic Garden, Howrah received 'Howrah Gorbo Award' in a Programme organized at Sarat Sadan, Howrah on 02.10.2021.
- BSI, ISIM, Kolkata organized an exhibition on 'Textile collections of Botanical Gallery' w.e.f. 1st to 10th October, 2021 to dedicate Azadi Ki Amrit Mahotsov.
- BSI organized Two days National Workshop (online) on Plant Identification and Herbarium Methodology in collaboration with Bareilly College, Bareilly, UP on 29th October (for higher plants) and 1st November, 2021 (for lower plants). During the workshop, more than 600 faculties, research scholars and students of Botany participated actively and learnt the methods of plant identification and herbarium preparation.
- Dr. S.S. Dash, Scientist E & Incharge, Tech. sect., BSI attended the West Bengal Biodiversity Board meeting on 01.10.2021 and 17th Review meeting with State Biodiversity Boards and UTs Biodiversity Council on 10.10.2021 and discussed on the threatened species under Section 38 of the Biological Diversity Act, 2002.
- Dr. S.K. Singh, Scientist E & Head, BSI, NRC Dehradun attended Haryana State wildlife board meeting on 19.10.2021.
- Dr. A. Benniamin Scientist E & Head, BSI, WRC, Pune 17th State Biodiversity Board Meeting at Malabar Hill, Mumbai on 12.10.2021 and released his book titled 'Pteridophytes of the Western Ghats, India - A Pictorial Guide'.

Important scientific publications:

During this month one book and 27 research publications have been published by BSI scientists in various international and national research journals (Annexure 1).

- Important policy matter is held up on account of prolonged inter-ministerial consultation: NIL
- Compliance of COS decisions: Nothing pending
- No. of cases of 'Sanction for prosecution' pending for more than 3 months: NIL
- Particulars of cases in which there has been a departure from the Transaction of Business Rules or established policy of the government: NIL
- Status of implementation of e-governance: PFMS, CPGRAMS, e-Publications, GEM Portal of Nelumbo etc. have already been implemented. 6.
- Details of cases in which ACC directions have not been complied with: NIL 7.

Status of Public grievances:

No. of public grievances redressed during the month	No. of Public grievances pending at the end of month
0	0

Information on the specific steps taken by the ministry/department for utilization of the space technology based tools and applications in governance and development: NIL

With regards,

Smt. Manju Pandey, Jt. Secretary, (CS), MoEF & CC, New Delhi - 3



List of Publications in October, 2021

Research Papers published: 27

- 1. ARIGELA, R.K., K. A. A. KABEER AND B. SADASIVIAH 2021. Taxonomic notes on *Acrachne borii, Acrachne sundararajii, Brachystelma telanganense* and *Striga scottiana*. *Species* 22(70): 330–337.
- 2. BASUMATARY, S., S. BARUAH AND L.J. SINGH 2021. Two new additions to the orchid flora of Assam, India. *J. Threatened Taxa*: 13 (11): 19665–19670.
- 3. BHATTACHARJEE, A., D. K. AGRAWALA, J.S. JALAL AND C. DEORI 2021. Status of *Gastrochilus minimus* (Orchidaceae)-a recently described species from China. *Rheedea* 31(3): 181-185
- 4. MANE, S.S., G. AMIT ASHOK, M.Y. KAMBLE. 2021. Concise Botanical Consideration On Various Plant Parts (Prayojyanga) Stated In Ayurveda. Internation Ayurvedic Medical Journal. http://www.iamj.in/posts/images/upload/2232_2240.pdf
- 5. JALANDER, V. AND J. SWAMY 2021. Two new generic records to the Flora of Telangana, India. *Bioinfolet* 18 (3): 372-375.
- 6. KULLOLI, R.N., C.S. PUROHIT AND K.V.C. GOSAVI 2020. Extended distribution of critically endangered plant *Dipcadi sasorum* Medik. from Mount Abu Wildlife Sanctuary, India. *NeBIO* 11(4): 260 264.
- 7. KUMAR, P., G. S. PANWAR AND S. K. SINGH 2021. A brief analysis of Threatened plant of India with rational comment on plant diversity and endemism in the Western Himalaya. Indian Forester.
- 8. KUMAR, P., P. K. DEROLIYA AND S. K. SINGH 2021. *Veronica ciliata* subsp. *cephaloides* (Pennell) D.Y. Hong: a new record for the flora of Himachal Pradesh (India) with an updated checklist of the genus *Veronica* L. in India. *Indian J. Forestry*. 43(4): 322-327.
- 9. MANJU, C. N., B. K. CHADNI, S. K. SINGH AND K. P. RAJESH 2021. A new species of *Riccia* (Ricciaceae: Marchantiophyta) Western Ghat of Kerala. *The Bryologist*. 124(3):376-384.
- 10. MURUGAN, P., C. MURUGAN AND K. KARTHIGEYAN 2021. Typification of twelve names in the genus *Anaphalis* DC. (Asteraceae). *Adansonia*, sér. 3, 43 (17): 197–204.
- 11. NAIK, M.C., L.J. SINGH AND G.A. EKKA 2020. *Oldenlandia umbellata* L. (Rubiaceae): an addition to the flora of Andaman and Nicobar Islands, India. *Indian J. Forestry* 43(2): 127-129.
- 12. PRADHAN, B., S. MAHARANA, S. BHAKTA AND M. JENA 2021. Marine phytoplankton diversity of Odisha coast, India with special reference to new record of diatoms and dinoflagellates. Vegetos, https://doi.org/10.1007/s42535-021-00301-2
- 13. RAVIKIRAN S. P. AND W. ARISDASON 2021. Nomenclatural note and lectotypification of the synonyms of *Dioscorea bulbifera* and varieties in *D. pentaphylla* (Dioscoreaceae). *J. Japanese Botany* 96(5): 284–291.
- 14. SEAL, T., D. SAHA, SUNITA K, K. CHAUDHURI AND B. PILLAI 2021. Water soluble vitamin in ten wild edible fruits consumed by the tribal people of north-

- eastern region in India: simultaneous estimation by high performance liquid chromatography (HPLC) method. *Inter. J. Pharmac. Sciences Res.* 12(10): 5517-25.
- 15. SENGUPTA, S. AND RASHMI DUBEY 2021. *Biligiriella indica* gen. et sp. nov.- a new hyaline synnematous fungus from hills of Biligiri Rangaswamy Temple Wildlife Sanctuary, Karnataka, India *J. Mycopathol. Res.* 59(3):319-321.
- SHUKLA, A.N., D. VERMA AND S.K. SRIVASTAVA 2021. Enumeration of Vascular plants of Kalesar National Park, Yamuna Nagar, Haryana. *Nelumbo* 63(1): 130-157.
- 17. SIDDABATHULA N., L. PARAMESH AND V.B.A. REDDY. 2021. A rattail grass *Sehima ischaemoides* Forssk. an addition to the flora of Telangana state, India. *Species* 22(70): 338-341.
- 18. SIDDABATHULA, N., L. PARAMESH AND R.K. ARIGELA. 2021. Durban grass *Dactyloctenium australe* Steud. (Poaceae), an addition to the Flora of Telangana State, India. *Species* 22(70): 293-295.
- 19. SIDDABATHULA, N., L. PARAMESH AND R. A. VIJAYABHASKAR 2021. *Chrysopogon serrulatus* Trin. (Poaceae), an addition to the Flora of Telangana State, India. *Species* 22(70), 296-299.
- 20. SINGH, L.J. AND D.R.MISRA 2020. Reappraisal of the genus *Cycas* L. (Cycadaceae) in Andaman and Nicobar Islands, India. *Indian J. Forestry* 43(1): 46-57.
- 21. SINGH, S.K. AND S.KUMAR 2021. Notes on extended distribution of *Drepanolejeunea spicata* and *Lejeunea stevensiana* (Lejeuneaceae: Marchantiophyta) Two scarily known species in India. *Acta Botanica Hungarica*. 63(1-2): 211-219.
- 22. SWAMY, J., L. RASINGAM AND D. VEERANJANEYULU 2021. *Fimbristylis cinnamometorum* (Vahl) Kunth (Cyperaceae), an addition to the Flora of Telangana from Kinnerasani Wildlife Sanctuary. *EPTRI-ENVIS RP Newsletter* 27 (2): 6-7.
- 23. SWAMY, J., L. RASINGAM AND D. VEERANJANEYULU 2021. *Dioscorea pubera* Blume (Dioscoreaceae): an addition to the Flora of Telangana, India. EPTRI-ENVIS RP Newsletter 27 (2): 4-5.
- 24. SWAMY, J., S. GAYATHRI AND D. VEERANJANEYULU 2021. Notes on the Taxonomy and distribution of *Urochloa trichopus* (Hochst.) Stapf (Poaceae: Paniceae) in India. *EPTRI-ENVIS RP Newsletter* 27 (1): 1-4.
- 25. SWAMY, J., S.S. YASHVARDHAN AND L. RASINGAM 2021. *Habenaria barbata* Wight ex Hook.f. (Orchidaceae): a new Addition to the Flora of Telangana from Amrabad Tiger Reserve. *EPTRI-ENVIS RP Newsletter* 27 (1): 5-6.
- 26. TIWARI U.L., A. BHATTACHARJEE, H.Z. TIAN, T. YUKAWA AND P. KUMAR 2021. *Chamaegastrodia poilanei* an interesting mycoheterotrophic orchid from India. *Rheedea* 31(3): 191–196.
- 27. VIVEK, C.P, G.V.S. MURTHY AND V. J. NAIR. 2021. The genus *Eragrostis* (Poaceae: Chloridoideae) in India: A Taxonomic Revision. *Nelumbo* 63(1): 33-101.

BOOK: 1

1. SINHA, G.P. AND A.N. SHUKLA 2020. Flora of Uttar Pradesh, Vol. II. Botanical Survey of India, Kolkata, pp. 519.