

DO. No.: BSI – 8/1/PA/2019

Date: 31.12.2020

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 December, 2020.

Department: Botanical Survey of India

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

Scientists of BSI reported **six novel plant taxa as new to Science** viz. *Lactarius brunneoaurantiacus*; *L. indoscrobiculatus*; *Capparis danielii*; *Mycoenterolobium borivaliensis*, *Hiptage laxiflora* and *Amorphophallus konkanensis* var. *kinnerasaniensis*. Besides, **two taxa** viz. *Ludwigia decurrens* and *Eulophia promensis* have also been reported as new addition to the Flora of Jharkhand and Manipur states respectively. Rediscovery of a Balsam viz. *Impatiens cothurnoides* after a gap of 90 years from the Garo Hills of Meghalaya. The official journal of BSI *Nelumbo* - the Bulletin of the Botanical Survey of India Vol. 62 (2), containing 20 research articles has been published on its scheduled date 30<sup>th</sup> December, 2020.

**Important events / programmes organized / attended:**

- BSI, SHRC, Gangtok organized a virtual webinar cum Brainstorming on 'Himalayan Mountain Biodiversity –Threats and Solutions' on the occasion of 'International Mountain Day' on 10<sup>th</sup> December, 2020, in which a series of lectures were delivered by the Scientists of BSI and other subject experts from different organizations.
- BSI, WRC, Pune organized a virtual webinar on 'Plant diversity of the Western Ghats, India' on 12<sup>th</sup> December, 2020.
- BSI, HAWHRC, Solan celebrated its foundation day on 10<sup>th</sup> December, 2020 and organized a National Webinar Series Lecture-3 on "Alien Plant Species in India: Status and Consequences" on 17<sup>th</sup> December, 2020.

**Important publications:**

During this month, one book and 21 research papers have been published by BSI scientists in various international and national journals (**Annexure 1**).


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

No. of public grievances redressed during the month	No. of Public grievances pending at the end of month
0	1

9. 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,

Yours Sincerely,



31/12/2020  
(A. A. MAO)

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



सी.जी.ओ कॉम्प्लेक्स, तृतीय एम.एम.ओ भवन, ब्लॉक-एक (पाँचवा तल), डी एफ ब्लॉक, सेक्टर 1, साल्ट लेक सिटी, कोलकाता-700 064 फोन : 033-23344963

CGO Complex, 3rd MSO Building, Block F (5th Floor) DF Block, Sector 1, Salt Lake City, Kolkata -700064 Phone : 033-23344963  
E-mail : aamao2008@gmail.com

## IMPORTANT RESEARCH PAPERS:

1. BISWA, S., P. LAKSHMINARASIMHAN AND A. LOKHO. 2019. A new locality record for *Ludwigia decurrens* Walter (Onagraceae) in Jharkhand, India. *Indian J. Forest.* 42(4): 369–371.
2. CHAVHAN V.N., BHOGAONKAR P.Y., DHOLE P. A. AND P.P. KSHIRSAGAR. 2020. Ethnomedicobotany of Yavatmal District (M.S.) India. *Plant. Sci.* 3(6):82-88.
3. CHOWLU, KRISHNA, A.N. RAO, M.R. DEBTA AND V.K. RAWAT. 2020. *Eulophia promensis* (Orchidaceae) – An addition to the flora of Manipur, India. *Richardiana*: 232-237.
4. DAS, K., I. BERA AND A. GHOSH. 2020. *Lactarius brunneoaurantiacus* sp. nov. and *L. indoscrobiculatus* sp. nov. from India. *Nordic J. Botany*. doi: 10.1111/njb.02940
5. DAS, P., P. KHARE, R.P. SINGH, V. YADAV, P. TRIPATHI, A. KUMAR, V. PANDEY, P. GAUR, A. SINGH, R. DAS, C. HIREMATH, A.K. VERMA, A.K. SHUKLA, AND K. SHANKAR. 2020. Arsenic-induced differential expression of oxidative stress and secondary metabolite content in two genotypes of *Andrographis paniculata*. *J. Hazardous Mat.*, <https://doi.org/10.1016/j.jhazmat.2020.124302>.
6. DATTA, S. AND T. SEAL. 2020. Effect of solvent extraction in antioxidant activity and RP-HPLC based study of phenolic acids and flavonoids in *Cayratia trioloia* (L.) Domin. *J. Pharmacog. Phytochem.* 9(6): 896-900.
7. DUBEY, RASHMI AND AMIT D. PANDEY. 2020. *Mycoenterolobium borivaliensis* sp. nov. (Pleosporomycetidae, Dothideomycetes) from reported from India. *J. New Biol. Reports*: 9(3): 312 – 315.
8. GOGOI, R., N. SHERPA, M. MURUGESAN AND L.R. MEITEL. 2020. Rediscovery of *Impatiens cothurnoides* C.E.C. Fisch., taxonomic identity, lectotypification and notes on its distribution. *Botany Letters*. <https://doi.org/10.1080/23818107.2020.1856715>.
9. GOGOI, R., N. SHERPA AND S. BORAH. 2020. Taxonomic revision of *Impatiens laxiflora* Edgew. (Balsaminaceae) and its allied species in India, Nepal, Bhutan & China. *Botany Letters*. <https://doi.org/10.1080/23818107.2020.1857834>.
10. MASTAKAR, V.K. 2020. Five new additions to the Angiospermic Forest Flora of Chota Nagpur Plateau, Jharkhand State, India. *Int. J. Adv. Res. Biol. Sci.* 7(12): 63–68.
11. MURUGAN, C., R. MANIKANDAN, S.P. NITHYA, B. KARTHIK AND W. ARISDASON. 2020. *Capparis danielii* (Capparaceae), a new species from the Gulf of Mannar Biosphere Reserve, India. *Phytotaxa* 472(3): 283-291.
12. NAIK, M.C., L.J. SINGH AND GANESHAISH K.N. 2020. Floristic Diversity and Analysis of South Andaman Islands (South Andaman District), Andaman and Nicobar Islands, India. *Species* 21(68): 343-409.
13. PATIL, SAMEER. 2020. A neglected taxon of *Arisaema* (Araceae) from Western Ghats, India. *J. Japanese Bot.* 95(6): 332-335.
14. PUROHIT C.S. 2020. Seven families addition under class Polypetalae for flora of Todgahr-Raoli wildlife sanctuary, Rajasthan. *Indian J. Arid Hort.* 1(2): 91 – 95.
15. SAMPATH KUMAR, V. AND S. KARTHIKEYAN. 2020. New names for a few Indian flowering plants. *Phytotaxa*. 475(4): 296–298.
16. SINGH, L.J., M.D. DWIVEDI, S. KASANA, M.C. NAIK, G.A. EKKKA AND A.K. PANDEY. 2020. Molecular systematics of the genus *Musa* L. (Zingiberales: Musaceae) in Andaman and Nicobar Islands. *Biologia*. 75: 1825–1843.
17. SINGH, R.K. AND A. GARG. 2020. Amritadhara Sacred grove- an unparalleled conservatory of Endemic, Endangered and Medicinal Plants of Chhattisgarh. *Indian Forester*. 146(12): 1183-1184
18. SRIVASTAVA, NITISHA. 2020. Role of epidermal micromorphology in delimitation of taxa in genus *Andrographis* (Acanthaceae) in India. *Tropical Plant Research*, 7(2): 491–495.
19. SUJANA K. A. AND R. G. VADHYAR. 2020. *Hiptage laxiflora* (Malpighiaceae): a new species from South India, *Annales Botanici Fennici*. 58: 27-31.
20. SUNDARI, M.S., A. BENNIAMIN AND V. IRUDAYARAJ. 2020. Chromosome study on an Endangered Oak Leaf Fern *Tectaria zeilanica* (Houtt) Sledge (Dryopteridaceae) from South India. *Inter. J. Plant Biol. Res.* 8(1): 1115.
21. SWAMY, J. AND L. RASINGAM. 2020. A new variety of *Amorphophallus konkanensis* (Araceae) from Telangana, India. *Nelumbo* 62 (2): 4-11.

## BOOK: 1

MAJUMDAR, S. AND M. DEY. 2020. A Handbook on Bryophytes with Special Reference to Type Specimens of Liverworts and Hornworts in Indian Herbaria. ENVIS Resource Partner on Biodiversity, Botanical Survey of India, Kolkata. pp. 1–247.