ANNUAL RESEARCH PROGRAMMES (ARP)
2023-24
OF
BOTANICAL SURVEY OF INDIA

Final

भारतीय वनस्पति सर्वेक्षण
BOTANICAL SURVEY OF INDIA

Botanical Survey of India
Ministry of Environment, Forest and Climate Change
Government of India
Kolkata - 700064

AJC BOSE INDIAN BOTANIC GARDEN, HOWRAH

Sl. No.	Name of the Project	Period	Quantifiable deliverables for 2022-23
1.	**Development and Maintenance of aquatic plant section in AJCBIBG** 1. Dr. Devendra Singh, Scientist E 2. Dr. S.P. Panda, Scientist-C 3. Dr. J. Swamy, Scientist 4. Dr. R. Saravanan, Botanist 5. Ms. Titir Saha, Bot. Assistant ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1 – Q4:** A circular pool measuring to 30 ft. diam. to be constructed. About 50 Nymphaea and all the Nelumbo of AJCBIBG will be introduced in the said section. *Victoria amazonica* and *V. cruziana* will also be introduced in this section.
2.	**Curatorial work in the Garden and Maintenance** 1. Dr. S.P. Panda, Scientist-C 2. Dr. R. Saravanan, Botanist 3. Ms. Titir Saha, Bot. Assistant ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1 – Q4:** Maintenance of Rosarium in AJCBIBG, Howrah; Woodland development in AJCBIBG (Indigenous species will be introduced in the garden).Development and maintenance of nursery of Palms, woody plants, endemic trees (at least 30 species with minimum of 500 seedlings of each species
3.	**Introduction and *ex-situ* conservation of RET species in AJC Bose Indian Botanic Garden** All staff members of AJCBIBG up to the level of Preservation Asst. *cum* Garden Overseer ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1.** Study of literature and maintenance of RET species in the Garden. **Q2. One Field tour** to Central India / and Andaman & Nicobar Island. **Q3. One Field tour** to Western Ghats / Eastern Ghats **Q4. One Field tour** to North East Region /Eastern Ghats **Total Tours: 3 F.T.**
4.	**Legumes of AJC Bose Indian Botanic Garden, Howrah, West Bengal, India** 1. Dr. V.K. Mastakar, Botanist 2. Dr. J. Swamy, Scientist-C 3. Dr. Devendra Singh, Scientist-E ***New Project*** ***Note: The final report to be submitted by March 25th 2025.***	2023-2025	**Q1.** Literature survey. **Q2.** Regular survey, collection, identification, and documentation of legume diversity at AJCBIBG. **Q3.** Regular survey, collection, identification and documentation of legume diversity at AJCBIBG. **Q4.** Regular survey, collection, identification, and documentation legume diversity at AJCBIBG.
5.	**Survey, Collection and *Ex-situ* Conservation of Some Essential Oil Containing Plants** 1. Shri Ravi Prasad, Botanist, 2. Dr. S. P. Panda, Scientist-C 3. Dr. Pradeep Kumar Kamila, Botanist ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1:** Library consultation and literature collections **Q2:** Survey, collection, identification, documentation and ex-situ conservation of the Essential Oil Containing Plants or plants of Phytocosmetics value. *Ca* 100 saplings/ whole uprooted plants of each accession will be collected Compilation of data and information **Q3:** *Ca* 100 saplings/ whole uprooted plants of each accession will be collected Compilation of data and information **Q4:** *Ca* 100 saplings/ whole uprooted plants of each accession will be collected Compilation of data and information.

ANDAMAN & NICOBAR REGIONAL CENTRE, PORT BLAIR			
6.	**Multiplication and Nursery development of Bamboos, Palms, Zingibers, Endemic trees species of Andaman & Nicobar Islands at Dhanikhari Experimental Garden Cum Arboretum** 1. Dr. Anil Kumar Midigesi, Botanist 2. Dr. Pankaj A. Dhole, Botanist 3. Shri Gautam Anuj Ekka, Bot. Asstt. ***Note: The final report to be submitted by March 25th 2024.***	2022-2024	**Q1.** Literature survey, consultation of the herbarium and identification of the collected specimens. **Q2. One Field Tour** to be undertaken to Nancowery group of Island, Literature survey, consultation of the herbarium and identification of the collected specimens. **Q3. One Field Tour** to be undertaken to South Andaman, Literature survey, consultation of the herbarium and identification of the collected specimens. **Q4.** Finalization of report. **Total tours: 2**
7.	**Macrofungi of Andaman & Nicobar Islands** Dr. Mahadevakumar, S., Scientist C ***New Project*** ***Note: The final report to be submitted by March 25th 2027.***	2023-2027	**Q1.** Literature survey- identification of research gap and if any previous literature will be taken into consideration. **Q2. Field Tour** will be conducted to South Andaman and macrofungal resources will be documented. Processing & identification of specimens collected during Field tour. Identification will be based on micro-morphological features. **Q3. Field Tour** will be conducted to Middle Andaman and macrofungal resources will be documented. Processing & identification of specimens collected during **Field tour**. Identification will be based on micro-morphological features. **Q4.** Study and Identification of collected specimens. **Total Tours: 2**
8.	**Ethnobotanical Study of Ranchi communities / settlers of Andaman Islands** 1. Dr. Pankaj A. Dhole, Botanist 2. Mr. Gautam Anuj Ekka, Botanical Assistant (Deployed at ANRC, Port Blair) 3. Dr. Lal Ji Singh, Scientist-E ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1:** Literature survey pertaining to study area. **Q2. One Field Tour** to be conducted to study area. **Q3. One Field Tour** to be conducted to study area. **Q4.** Study of the collected specimens during Field tours. **Total Tours: 2**
9.	**Flora of Cinque Wildlife Sanctuary, South Andaman** 1. Dr. Anil Kumar Midigesi, Botanist 2. Shri Gautam Anuj Ekka, Botanical Assistant 3. Dr. Lal Ji Singh, Scientist-E ***New Project*** ***Note: The final report to be submitted by March 25th 2025.***	2023-2025	**Q1.** Literature survey. **Q2. One Field Tour** to be conducted to Cinque Wildlife Sanctuary, South Andaman. Processing & identification of specimens collected during Field tour. **Q3. One Field Tour** to be conducted to Cinque Wildlife Sanctuary, South Andaman. Processing & identification of specimens collected during Field tour. **Q4.** Study of the collected specimens during Field tours. **Total Tours: 2**
10.	**A pictorial guide to Flora of Mount Manipur National Park, South Andaman** 1. Dr. Pankaj A. Dhole, Botanist 2. Mr. Gautam Anuj Ekka , Botanical	2023-2025	**Q1:** Literature survey pertaining to study area. **Q2 – Q3. One Field Tour** will be conducted to Mount Manipur National Park, South Andaman and flora will be documented. Processing & identification of specimens collected during Field

	Assistant 3. Dr. Lal Ji Singh, Scientist-E ***New Project*** ***Note: The final report to be submitted by March 25th 2025.***		tour. **Q4. Field Tour** will be conducted to Mount Manipur National Park, South Andaman and flora will be documented. Processing & identification of specimens collected during Field tour. **Total Tours: 2**
11.	**A pictorial guide to Flora of Shaheed Dweep (Neil Island), South Andaman** 1. Dr. Pankaj A. Dhole, Botanist 2. Dr. Lal Ji Singh, Scientist-E ***New Project*** ***Note: The final report to be submitted by March 25th 2025.***	2023-2025	**Q1.** Literature survey, consultation of the herbarium and identification of the collected specimens. **Q2 – Q3. One Field Tour** to be undertaken to Shaheed Dweep, South Andaman. Literature survey, consultation of the herbarium and identification of the collected specimens. **Q4. One Field Tour** to be undertaken to Shaheed Dweep, South Andaman. Literature survey, consultation of the herbarium and identification of the collected specimens. **Total Tours: 2**
ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR			
12.	**Metadata preparation and Digitization of ARUN Herbarium** Dr. Ranjit Daimary, Botanist ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1-Q4.** Metadata preparation and Digitization of 7000 herbarium specimens.
13.	**Pteridophytic Flora of Arunachal Pradesh – A Pictorial guide** 1. Dr. Vineet Kumar Rawat, Sci. E 2. Sh. Suman Halder, Botanist 3. Sh. Arijit Ghosh, Bot. Asstt. ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1**: Preparation of the list of species based Tiger on herbarium specimens (ARUN) and literature studies. **Q2**: **Field Tour** to any study area in Arunachal Pradesh. **Q3**: **Field Tour** to **Field Tour** to any study area in Arunachal Pradesh. **Q4: Field Tour** to any study area in Arunachal Pradesh. **Total Tour : 3 F.T.**
14.	**Taxonomic studies on Wild edible Mushrooms of Arunachal Pradesh** Dr. Arvind Parihar, Scientist - C ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1:** Literature Study of Earlier Taxonomic Work done in the State of Arunachal Pradesh. **Q2: One Field Tour** to different location and Forest Areas of West Kameng District, of Arunachal Pradesh. **Q3: One Herbarium Consultation Tour** to Central National Herbarium (CAL) for the Microscopic study of collected specimens in the CAL. **Q4: One Herbarium Consultation Tour** to Central National Herbarium (CAL) for the Microscopic study of collected specimens in the CAL. **Total Tour : 1 F.T. & 2 H.C.T.**

ARID ZONE REGIONAL CENTRE, JODHPUR			
15.	**Maintenance and conservation of Economically important, Endemic and Threatened species of the Arid region** 1. Dr. S.L. Meena, Scientist-E 2. Dr. C.S. Purohit, Scientist-D 3. Shri Amit Kumar, Sr. Pres. Asstt. ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1**: Maintenance and conservation of Economic, , Endemic and Threatened species of the arid region in the experimental Garden of AZRC. Introduction of 30 woody species in the garden. **Q2**: **One Field Tour** (Rajasthan) for collection of RET species from field, their introduction & further multiplication. **Q3**: **One Field Tour** (Rajasthan) for collection of RET species from field, their introduction & further multiplication. **Q4:** Maintenance and conservation of introduced RET species & their further multiplication. **Total tour: 2 F.T**
16.	**Metadata preparation and digitization of herbarium specimens** 1. Dr. R.K. Singh, Botanist 2. Dr. P.K. Deroliya, Bot. Asstt. 3. Shri Ramesh Kumar, Bot. Asstt. 4. Shri Amit Kumar, Sr. Pres. Asstt.) ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1 – Q4:** 1. Completion of metadata of 3600 herbarium specimens per quarter. (900 per quarter by each) 2. Digitization 2400 herbarium specimens per quarter. 3. Identification of 40 unidentified specimens, accession and incorporation in every quarter. (10 specimens by each)
17.	**Flora of Mount Abu Wilflife Sanctuary, Rajasthan** 1. Dr. Sanjay Mishra, Sci. C (Transferred at BSI, CRC, Allahabad) 2. Dr. S.L. Meena, Scientist-E ***Note: The report to be submitted by August 2023.***	**2021-2023** *Extended upto* ***August, 2023***	**Updation and final submission of project report.**
18.	**Grasses of Rajasthan** Dr. Pushpa Kumari, Scientist-E ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1 – Q4:** Study of literature and herbarium specimens. **One field tour** to any study area in Rajasthan.
19.	**Vegetation of Indian desert of Rajasthan and Gujarat: present scenario, GIS mapping and IUCN Assessment of Endemic, Endangered and regionally rare species** 1. Dr. C.S. Purohit, Scientist D 2. Dr. S.L. Meena, Scientist-E 3. Ramesh Kumar, Bot. Asstt. 4. Amit Kumar, Sr. Pres.Asst. ***New Project*** ***Note: The final report to be submitted by March 25th 2027.***	2023-2027	**Q1 – Q4:** Study of literature and herbarium specimens. **Two field tours** to any study area in Rajasthan.
BOTANIC GARDEN OF INDIANREPUBLIC, NOIDA			
20.	**Mass germination and multiplication of Horticultural and ornamental plants/ season flowers in BGIR.** 1. Dr. Sandeep Kr. Chauhan, Scientist–E 2. Ms L.I. Chanu, Botanist	Ongoing	**Q1 – Q4:** Overall maintenance and development of different Horticulture landscape sections of BGIR, Noida. *Note: List of the target species and its nos. in each zone to be submitted to HQ.*

	3. Mr. Yogesh Lahane, Botanist ***Note: The report to be submitted by March 25th every year.***		
21.	**Establishment and enrichment of existing Forest Types and Proposed Phytodiversity at BGIR Noida (zone 5,6,7,8) by introduction of plant sps., based on respective forest types and phyto-diversity region, Development of Sacred Section** 1. Dr. Priyanka A. Ingle, Scientist C 2. Mr. Yogesh Lahane, Botanist ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1**: **One filed Tour** to HP for collection of endemic and other plants for *ex-situ* conservation at BGIR. **Q2 – Q3**: Maintenance of the garden. . **Q4**: **One filed Tour** to Uttar Pradesh for collection of endemic and other plants for *ex-situ* conservation at BGIR. **Total tours: 2** *Note: List of the target species and its nos. in each zone to be submitted to HQ.*
22.	**Establishment of Seed bank lab unit and studies of seed germination protocol of endemic and threated plant species vis a vis setting of Plant conservatoires and vermicomposting unit at BGIR Noida** 1. Dr. Sandeep Kr. Chauhan, Scientist E 2. Dr. G. S. Panwar, Scientist E 3. Ms L.I. Chanu, Botanist ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1 – Q4**: Establishment of all lab instrument in link operation. Seed collection of 100 endemic plant spp. (including threatened plants); Preparation of defined seed germination protocol /Methodology for endemic/threatened plant spp. (seed collected in particular season of quarter).
23.	**QR based plant modeling based plant labeling for the Plant species in entire woodland of BGIR, Noida** 1. Dr. Sandeep Kr. Chauhan, Scientist E and 2. Dr. G. S. Panwar, Scientist E 3. Dr. Priyanka A. Ingle, Scientist C ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1**: Zonation survey and re-identification of plants including the mortality if any with comparison sheets of 2006-07 till 2020-21. GSP modelling of all plants identified with numbers (20 plants spp) **Q2**: Zonation survey and re-identification of plants including the mortality data if any with comparison plant record data sheets of 2006-07 till 2020-21. GSP modelling of all plants identified with numbers (20 plants spp) **Q3**: GSP modelling of all plants identified with numbers (20 plants spp). Preparation of plant spp description in detail (20 plant spp.,) for QR code **Q4:** GSP modelling of all plants identified with numbers (20 plants spp). Preparation of plant spp description in detail (30 plant spp.,) for QR code
CENTRAL BOTANICAL LABORATORY, HOWRAH			
24.	**Diversity of Soil Cyanoprokaryotes and Algae in AJC Bose Indian Botanic Garden, Howrah** Dr. Pratibha Gupta, Scientist F ***Note: The final report to be submitted by March 25th 2025.***	2022 - 2025	**25 Divisions of AJCBIBG, Howrah** **Q1**: Division 01 to 09 will be completed. **Q2**: Division 10 to 18 will be done. **Q3**: Division 10 to 18 will be done. **Q4:** Division 10 to 18 will be done.
25.	**Nutraceutical studies of wild edible plants of North-East Region in India** 1. Dr. Tapan Seal, Scientist-E 2. Dr. Kaushik Chaudhuri, Botanist	2022-2025	**No of Target plants : Twenty** **Q1 – Q4**: Proximate composition, minerals content, Vitamin content, antioxidant properties, Phenolics, flavonoid content and

	3. Ms. Basundhara Pillai, Botanist ***Note: The final report to be submitted by March 25th 2025.***		Antinutritional composition of **twenty** wild plants.
CENTRAL NATIONAL HERBARIUM, HOWRAH			
26.	**Molecular phylogeny, morphology and taxonomy of Boletoid mushrooms in Uttarakhand** Dr. Kanad Das, Scientist-E ***Note: The final report to be submitted by March 25th 2025.***	2022-2025	**Q1 – Q4**: Micromorphological characterization, Micro-photography, Micromorphological drawings from the remaining dry samples collected during the last macrofungal survey undertaken during 2022 – 2023. DNA extraction, amplification and sequencing to be done from collected species. **Q2**: **One field Tour** to Chamoli, Bageshwar and/or Rudraprayag Districts of Uttarakhand. **Field tour: 1**
27.	**Bio-prospecting and Economic Potential of selected Marine Macro Algae of India** Dr. M. Palanisamy, Scientist -E ***Note: The final report to be submitted by March 25th 2024.***	2022-2024	**Q1**: DNA sequencing using standard molecular markers. Phytochemical analysis of selected seaweeds. **Q2**: **One field Tour** to Gulf of Mannar area, Kanyakumari (Tamil Nadu) and Vizhinjam, Thirumullavaram (Kerala) for selected seaweed collection. DNA sequencing using standard molecular markers. **Q3**: **One field Tour** to Gulf of Kutch, Gujarat for selected seaweed collection. DNA sequencing using standard molecular markers. **Q4:** Identification of bioactive compounds, Antimicrobial screening, Cytotoxicity. Preparation & Submission of final report. **Field tours: 2**
28.	**Morpho-Molecular and Phytochemical identification of 30 CITES Listed Plants in high International Trade.** • *(10 taxa each year)* 1. Dr. Avishek Bhattacharjee, Scientist-D 2. Mr. Ranjith Layola M.R., Botanist 3. Ms. Farheen Banu, Preservation Assistant-cum-Garden Overseer 4. Dr. Tapan Seal, Scientist E ***New Project*** ***Note: The final report to be submitted by March 25th 2026 in the form of Manual.***	2023-2026	**Q1:** Protologues, Floras, authentic literatures, herbarium specimens at CAL (including types) pertaining to the targeted species will be consulted for confirming identity. **Q2: One field-cum-herbarium consultation Tour** in Eastern Himalaya/ N.E. India to be conducted to collect targated species; HPLC profiling of collected samples; DNA extraction and PCR amplification. **Q3:** HPLC profiling, DNA extraction and PCR amplification of collected samples **Q4: One field-cum-herbarium consultation Tour** in Eastern India/ Eastern Himalaya to be conducted to collect targated species. HPLC profiling of collected samples; DNA extraction and PCR amplification. **Total: 2 Field *cum* HCT** *Note: List of the 10 targeted species every year to be submitted to HQ.*
29.	**Taxonomic Revision of *Meconopsis* Vig. (Papaveraceae) in India** 1. Dr Kumar Avinash Bharati, Scientist-D 2. Dr Anand Kumar, Botanist 3. Dr Rajib Gogoi, Scientist E ***New Project***	2023-2026	**Q1**: Preparation of the list of *Meconopsis* spp. based on herbarium specimens and literature studies. **Q2: Two field tours with herbarium consultation** at DD. **Q3:** Identification of the collected specimens. **Q4:** Identification of the collected specimens. **Total: 2 Field tours and 1 HCT**

	Note: The final report to be submitted by March 25th 2026.		
30.	**Digitization of herbarium specimens (about 5000) belonging to the family Asteraceae** 1. Dr Kumar Avinash Bharati, Scientist-D 2. Dr Anand Kumar, Botanist ***New Project*** ***Note: The final report to be submitted by March 25th 2024.***	2023-2024	**Q1-Q4:** A total of 5000 specimens belonging to the family Asteraceae will be digitized.
31.	**Taxonomic Revision of *LIGULARIA* Cass (Asteraceae) in India** 1. Dr. Partha Pratim Ghoshal, Botanist 2. Dr. Shyam Biswa, Botanical Assistant ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1:** Preparation of the list of *Ligularia* spp. based on herbarium specimens and literature studies. **Q2**: **One Field Tour** to Sikkim with herbarium consultation at BSHC. **Q3:** Identification of collected specimens and morphological characterization of specimens will be conducted **Q4**: Identification of collected specimens and morphological characterization of specimens will be conducted. **Tour: 1 F.T. & 1 HCT**
CENTRAL REGIONAL CENTRE, ALLAHABAD			
32.	**Flora of Madhya Pradesh Vol-I including Pictorial Checklist** (Revised edition) Families Rannunculaceae- Plumbaginaceae: 83 families. 1. Dr. Arti Garg Scientist – E 2. Dr. A.K. Verma, Scientist C 3. Mr. B. Lakshmanudu, Sr. Pres., Asstt. 4. Dr. O.N. Maurya, Sci-D 5. Dr. Nitisha Srivastava, Bot. Asst. *6.* Dr. Saurabh Sachhan, Bot. Asst. ***Note: The final report to be submitted by March 25th 2024.***	2022-2024	**Q1-Q4:** Writing, finalization of manuscript and submission of the report.
33.	**Flora of Haiderpur wetland – a Ramsar site, Bijnor & Muzaffarnagar, Uttar Pradesh.** 1. Dr. O.N. Maurya, Sci-D. 2. Dr. Saurabh Sachan, Bot. Asst. ***Note: The final report to be submitted by March 25th 2024.***	2022-2024	**Q1**: Identification of the collected specimens of Q4 of 2022-23. **Q2**: Identification of the collected specimens. **One Field Tour to study area**. **Q3**: Identification of the collected specimens and all other unidentified specimens. Writing of manuscript. **One Field Tour to study area**. **Q4:** Finalization of manuscript and submission of the report. **Total tours: 2**
DECCAN REGIONAL CENTRE, HYDERABAD			
34.	**Preparation of metadata, digitization and maintenance of herbarium specimens** Dr. G. Swarnalatha, Bot. Asstt. ***Note: The metadata report to be submitted by March 25th 2024.***	Ongoing	**Q1-Q4:** Digitization and development of Database of Herbarium specimens. **Q1-Q4:** Development of Museum of DRC, Hyderabad. *Note: Previous report on database of Herbarium specimens to be submitted to HQ.*
35.	**Lichens of Telangana state**	2022-2026	**Q1:** Study and identification of specimens **Q2: One field tour**. Drying, mounting and

	Dr. Swamalatha G., Bot. Asstt. ***Note: The final report to be submitted by March 25th 2026.***		preparation of herbarium packets, field data incorporation. Study and identification of collected lichen specimens. **Q3: One field tour**. Drying, mounting and preparation of herbarium packets, field data incorporation. Study and identification of collected lichen specimens. **Q4:** Study, identification and photographic documentation of collected specimens. **Field tours: 2**
36.	**Flora of Sri Lankamalleswara Wildlife Sanctuary (464.42 sq.km) (Kadapa & SPSR District, Nellore)** 1. Dr. Sankara Rao Mudadla, Scientist C 2. Dr. P. Harikrishna, Bot. Asst. ***Note: The final report to be submitted by March 25th 2025.***	2022-2025	**Q1:** Literature collection. **Q2: One Field tour** and identification of previous collections. **Q3: One Field Tour** and identification of previous collections. **Q4:** Study, identification & documentation of collected plants. **Field tours: 2**
37.	**Flora of Pakhal Wildlife Sanctuary, Telangana** 1. Dr. L. Rasingam, Scientist E 2. Dr. P. Harikrishna, Bot. Asst. ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1:** Literature collection. **Q2: One Field tour to study area.** **Q3: One Field Tour to study area** and processing, identification of previous collections. **Q4:** one Herbarium Consultation **Tour** to MH, Coimbatore and Kakatiya university, Warangal. **Total tours: 2 Field tours and 1 HCT**
EASTERN REGIONAL CENTRE, SHILLONG			
38.	**Micropropagation of EET Plants of North East India in ERC, Shillong.** Dr. Deepu Vijayan, Scientist - C ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1 – Q4:** To standardize the protocol, mass multiplication of EET plants of Northeast India namely *Eriodes barbata* (Lindl.) Rolfe, *Pholidota katakiana* Phukan and *Micropera rostrata* (Roxb.) N.P. Balakr. Maintenance of in vitro raised plants of *Armodorum senapatianum* and *Cymbidum tigrinum* in plant tissue culture, garden and polyhouse.
39.	**Maintenance of the Experimental Botanic Garden, BSI, ERC, Barapani** 1. Mr. B.B.T. Tham, Botanist 2. Shri L.R. Meitei, Bot. Asst. ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1:** Regular maintenance of the Garden. **Q2: One Live Plants Collection Tour** to Dima Hasao, Assam for Enrichment, Replenishment and New addition to Botanic Garden Collection if any. **Q3: One Live Plants Collection Tour** to Garo Hills Meghalaya for Enrichment, Replenishment and New addition to Botanic Garden Collection if any **Q4:** Regular maintenance of the Garden for Enrichment, Replenishment and New addition to Botanic Garden Collection if any. **Total tours: 2**
40.	**Maintenance of Herbarium of ERC, Shillong (ASSAM)** 1. Smt. Nandita Sarma, Bot. Asst. 2. Shri. Vijay, Bot. Asst. 3. Miss. Debala Tudu, Bot. Asst. ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1 - Q4:** Regular maintenance of herbarium Preparation of database and incorporation of metadata of all digitised herbarium specimens. Digitization of herbarium specimen of ASSAM. Target: 15,000 herbarium specimens (5000 per head per year).
41.	**DNA barcoding and Phylogenetic analysis of the endemic genus *Hypericum* of North-East India and Chemical composition, antioxidant activities of the essential oil**	2022-2024	**Q1: A.** Qualitative and Quantitative phytochemical analysis by using plant extracts for GCMS/LCMS analyses (outsourced). B. **Collection Tour to Assam**. **Q2: A.** DNA barcoding of collected plants using

	produced. 1. Dr. Deepu Vijayan, Scientist-C 2. Mr. Harekrushna Swain, Senior Preservation Assistant ***Note: The final report to be submitted by March 25th 2024.***		appropriate primers. B. **Collection Tour to** Arunachal Pradesh, Nagaland. **Q3:A.** Isolation, purification and characterization of the active constituents of the selected plants if found any. **B. Collection Tour to** Tripura and Manipur. **Q4:A.** Data interpretation and statistical analysis and Final report preparation. **B.** Manuscript Preparation for Publication of Research. **Total tours: 3 Field Tours**
42.	**Backlog clearance of unidentified Herbarium sheets at ASSAM.** 1. Smti. Nandita Sarma, Bot Asstt., 2. Shri. Vijay, Bot Asstt., 3. Shri. Harminder Singh, Bot Asstt., 4. Smti. Debala Tudu, Bot Asstt., 5. Shri. Harekrushna Swain, Sr. Preservation Asstt., 6. Shri. Y Mahesh, Sr.Preservation Asstt. Under the supervision of Dr. Chaya Deori, Sci-E. ***Note: The final metadata to be submitted by March 25th every year.***	Ongoing	**Q1**: Segregation of herbarium sheets. Collecting the field related information whose field books are not available. Data entry of herbarium sheets. Identification of 700 plants. Fumigation & incorporation of identified sheets. **Q2**: Identification of 700 plants fumigation & incorporation of them. **Q3**: Identification of 700 plants fumigation &incorporation of them. **Q4:** Identification of 700 plants & fumigation & incorporation of them. Preparation& submission of final report.
43.	**Understanding the phylogenetic relationships between the genus Tupistra and Rohdea complexity in Indian phyto-geographical context based on the analysis of DNA sequences.** Dr. David Lalsama Biate, Scientist - C ***Note: The final report to be submitted by March 25th 2024.***	2022-2024	**Q1**: Genomic DNA extraction, PCR amplification using selected nuclear and chloroplast primers and DNA sequencing. **Q2**: Genomic DNA extraction, PCR amplification using selected nuclear and chloroplast primers and DNA sequencing. **One collection Tour** to **Assam** **Q3**: Genomic DNA extraction, PCR amplification using selected nuclear and chloroplast primers and DNA sequencing and analysis. **One collection Tour to Arunachal Pradesh** **Q4:** Genomic DNA extraction, PCR amplification using selected nuclear and chloroplast primers and DNA sequencing and analysis. Finalization and submission of manuscript. **Total tours: 2**
44.	**Morphotaxonomy and Molecular Phylogeny of Wild edible Mushrooms of Meghalaya** Dr. Dyutiparna Chakraborty, Scientist -C ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1: A.** Literature consultation. **Q2: A. One field Tour** to Nonghyllem Wild life sanctuary and Upper Shillong Reserve Forest and their adjoining forested areas, B. Macromorphological characterization for those 30 collected specimens. **Q3: A.** Standardization of DNA extraction protocol from the freshly collected specimens will be done. Similarly, standardization of PCR protocol using fungi specific primers (ITS, LSU) and purification of the PCR products will be performed. **B. Herbarium (CAL) and literature consultation Tour (CNH Library) to Central National Herbarium, Kolkata.** **Q4: A.** Standardization of DNA extraction protocol from the freshly collected specimens will be done. **B.** Manuscript will be prepared and communicated for interesting collection(s). **C.** GPS based map will be prepared for approximately 30 collected specimens. **Total Tour: 1 F.T and 1 H.C.T.**
NORTHERN REGIONAL CENTRE, DEHRADUN			

45.	**Assessment of Plant diversity in Rajaji National Park, Uttarakhand.** 1. Dr. Puneet Kumar, Scientist-C, 2. Dr. S.K. Singh, Scientist-E 3. Dr. P.K. Deroliya, Bot. Asst. & 4. Poulami Ghosh, Bot. Asst. ***Note: The final report to be submitted by March 25th 2024.***	2021 –2024	**Q1-Q4: One Field Tour** in each Quarter. Processing, identification and documentation of collected specimens.Finalization and submission of the report in Q4. **Total tours: 4**
46.	**Maintenance and conservation of the endemic, threatened and economic plants of the garden of NRC, Dehradun.** 1. Dr. S.K. Singh, Scientist E, 2. Dr. Puneet Kumar, Scientist-C 3. Dr. P.K. Deroliya Bot. Asst. ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1-Q4:** Regular maintenance and conservation of the endemic threatened and economic plant species in the garden of NRC. Documentation of monthly data on flowering and fruiting.
47.	**Grasses of western Himalayas** Dr. Manish Khandwal, Scientist-'E ***Note: The final report to be submitted by March 25th 2024.***	2021- 2024	**Q1**: Literature survey and study of previous collections. **Q2**: **One field** to Jammu & Kashmir, and local tours to Uttarakhand. Processing, identification and documentation of collected specimens. **Q3**: **One field** to Himachal Pradesh. Processing, identification and documentation of collected specimens. **Herbarium consultation tours to LWG.** **Q4:** Identification and documentation of remaining specimens and preparation of final report and its submission. **Total tours**: **2 FT & 1 HCT.**
48.	**SEM studies of spores of Fern & Fern allies of Western Himalaya.** 1. Dr. Brijesh Kumar, Sci-C, 2. Dr. S.K. Singh, Sci.-E 3. Ms. Latika Sagarwal, Bot. Asstt. ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1.** Compilation scrutiny of available literature in library and Internet. **Q2.** Preparation of spores and SEM imaging. (20sp.). **One filed Tour** to Unexplored areas in Western Himalaya for collection of Plant material. **Q3.** Preparation of spores and SEM imaging. (30 sp.) **Q4.** Preparation of spores and SEM imaging and description. (30 sp.) **Total tour: 1**
49.	**Flora of Himachal Pradesh, Vol. 3** [*c.* 800 taxa] **a. Rubiaceae- Plumbaginaceous** except Asteraceae [*c.* 100 taxa] 1. Dr. Puneet Kumar, Scientist-D **b. Asteraceae** [*c.*401 taxa], 2. Dr. S.K. Singh, Scientist-E; 3. Dr. Monika Mishra, Botanist; 4. Ms Poulami Ghosh, Bot. Asst.; 5. Mr. Subhasmit Bhattacharyya, Bot. Asstt.; 6. Ms. Latika Sagarwal, Bot. Asstt.; 7. Mrs. Priti Gangwar, Senior Pres.Asstt.; **c. Primulaceae- Apocynaceae**, [*c.*125 taxa] 8. Dr. Bhavana Joshi, Botanist **d. Loganiaceae – Polemoniaceae, Ehretiaceae, Convolvulaceae** [*c.*105 taxa] 9. Dr. Sameer Patil, Botanist **e. Boraginaceae** [*c.* 56 taxa] 10. Dr. Kumar Ambrish, Scientist-E 11. Dr. Kuldip S. Dogra, Scientist-D *(High Altitude Western Himalayan Regional Centre, Solan)* **f. Cuscutaceae & Solanaceae** [*c.*52 taxa] 12. Dr. Brijesh Kumar, Scientist-C ***New Project***	2023-2025	**Q1**: Documentation of 100 taxa **Q2**: Documentation of 100 taxa **Q3:** Documentation of 100 taxa **Q4:** Documentation of 100 taxa. One Herbarium Consultation **Tour** to PUN, PAN, RRL & PLP. **Total Tour: 1 HCT** **Q1**: Listing of species from literature and herbaria. Documentation of 10 spp. In 1st Quarter. **Q2**: **One Field Tour** to different parts of Lahaul & Spiti district for plant collections and photography. Preservation and identification of collected specimens. Documentation of 10 spp. 1. [Dr. Kumar Ambrish, Scientist-E & 2. Dr. Kuldip S. Dogra, Scientist-D, HAWHRC, Solan] **Q3**: **One herbarium consultation Tour** to BSD & DD, Dehradun herbaria and documentation of 10 spp. [Dr. Kumar Ambrish, Scientist-E & 2. Dr. Kuldip S. Dogra, Scientist-D, HAWHRC, Solan]

	Note: The final report to be submitted by March 25th 2025.		**Q4:** Documentation of 10 spp. in 4th Quarter. **Total Tours: 1 FT & 1 HCT**
SIKKIM HIMALAYAN REGIONAL CENTRE, GANGTOK			
50.	**Maintenance of Germplasm of *Rhododendron* L. (Ericaceae) and *Impatiens* Riv ex L. (Balsaminaceae) in EBG, BSI-SHRC.** 1. Dr. Rajib Gogoi, Scientist E 2. Dr. J. H. Franklin Benjamin, Scientist D ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1:** Maintenance of Germplasm **Q2: One Tour** to North District **Q3**: **One Tour** to West Sikkim District **Q4: One Tour** to North Sikkim District **Total tours: 3**
51.	**Flora of Kitam Bird Sanctuary, South District, Sikkim** 1. Dr. Rajib Gogoi, Scientist E 2. Dr. Monalisa Dey, Scientist C 3. Dr. Basant Singh, Bot. Asst. ***Note: The final report to be submitted by March 25th 2024.***	2022-2024	**Q1:** Identification, preparation of descriptions,photo-plates of previously collected specimens. **Q2**: **One Field Tour** to Kitam Bird Sanctuary for survey, collection and photographic documentation of plants. **Q3**: Continuation of identification, preparation of descriptions, photo-plates of previously collected specimens. **One Field Tour** to Kitam Bird Sanctuary for survey, collection and photographic documentation of plants. **Q4:** Continuation of identification, preparation of descriptions, photo-plates of previously collected specimens. Preparation and submission of the final project report. **Total Tours: 2**
52.	**Wild edible plants of Sikkim and Darjeeling Himalaya.** 1. Dr. Rajib Gogoi, Scientist E 2. Dr. J. H. Franklin Benjamin, Scientist D ***Note: The final report to be submitted by March 25th 2024.***	2021-2024 *Extended upto* ***March, 2024***	**Q2:** One field tour to North Sikkim areas. Finalization and submission of the report.
SOUTHERN REGIONAL CENTRE, COIMBATORE			
53.	**Flora of Tamil Nadu, Vol. 1 (Introduction, Ranunculaceae to Connaraceae)** 1. Dr. W. Arisdason, Sci.'E' 2. Ms. M. Anantha Lakshmi, Bot. Asst. ***Note: The final report to be submitted by March 25th 2024.***	2021-2024	**Q1**: Identification, documentation and manuscript updation of 150 species and Preparation of Keys. **Q2**: **One Field Tour** to various parts of Nilgiris District, Tamil Nadu. Identification, documentation and manuscript updation of 150 species and Preparation of Keys. **Q3:** Identification, documentation and manuscript updation of 50 species and Preparation of Keys. **Q4**: Preparation of taxonomic account of remaining families. Preparation of herbarium specimens, identification of all collected specimens. Finalization and submission of final report. **Total tours: 1 F.T.**
	Flora of Tamil Nadu, Vol. 2. (Fabaceae to Sambucaceae) 1. Dr. K. A. Sujana Sci.'E' 2. Shri R.G. Vadhyar, Bot. Asst.	2021-2024	**Q1:** Preparation of description, updating of distribution (200 species). **Q2**: Preparation of description, updating of distribution (200 to Anamalais of Tamil Nadu. **Q3**: Preparation of description, updating of distribution (180 species) **One Field Tour** to Kolli hills of Tamil Nadu **One Herbarium consultation Tour** to The Rapinat Herbarium St Joseph's College, Tiruchirapalli. Processing of herbarium specimens, identification, documentation and compilation of data collected previous quarter. **Q4:** Preparation of description, updating of

	Note: The final report to be submitted by March 25th 2024.		distribution (50 species). Compilation and submission of final report. **Total tours: 1 F.T. & 1 H.C.T.**
	Flora of Tamil Nadu, Vol. 3 (Rubiaceae to Gentianaceae) 1. Dr. C. Murugan, Sci. E' (Hqrs.) 2. Dr. M. Murugesan, Sci. 'C' 3. Dr. S. Arumugam, Bot. Asst. ***Note: The final report to be submitted by March 25th 2024.***	2021-2024	**Q1**: Identification, documentation and manuscript updation of 100 species and Preparation of Keys. **Q2**: **One Field Tour** to various parts of Nilgiris District, Tamil Nadu. Identification, documentation and manuscript updation of 100 species and Preparation of Keys. **Q2**: Preparation of description, updating of distribution (200 to Anamalais of Tamil Nadu. **Q3:** Identification, documentation and manuscript updation of 50 species and Preparation of Keys. Processing of herbarium specimens, identification, documentation and compilation of data collected previous quarter. **Q4**: Preparation of description, updating of distribution (50 species) Processing of herbarium specimens, identification, documentation and compilation of data collected previous quarter. Compilation and submission of final report. **Total tours: 1 F.T.**
	Flora of Tamil Nadu, Vol. 4 (Menyanthaceae to Lamiaceae) 1. Dr. V. Sampath Kumar, Sci. 'E' 2. Ms. Lydia Thomas, Bot. Asst. 3. Ms. RiniVijayan, Sr. Preserv. Asst. ***Note: The final report to be submitted by March 25th 2024.***	2021-2024	**Q1**: Identification, documentation and manuscript updation of 100 species and Preparation of Keys. **Q2**: Identification, documentation and manuscript updation of 100 species and preparation of keys. **Q3: One Field Tour** to various parts of Tamil Nadu. Identification, documentation and manuscript updation of 100 species and preparation of keys. **Q4**: Preparation of taxonomic account of remaining families. Preparation of herbarium specimens, identification of all collected specimens. Finalization and submission of final report. **Total tours: 1 F.T.**
	Flora of Tamil Nadu, Vol 5. (Plantaginaceae to Ceratophyllaceae) 1. Dr. R. Manikandan, Sci. 'E' 2. Ms. R. Mehala Devi, Bot. Asst. 3. Shri Soumitra Bera, Preserv. Asst.-cum-Gard. ***Note: The final report to be submitted by March 25th 2024.***	2021-2024	**Q1**: Identification, documentation and manuscript updation of 100 species and Preparation of Keys. **Q2**: Identification, documentation and manuscript updation of 100 species and Preparation of Keys. **Q3: One filed Tour** to various parts of Anamalai Tiger Reserve, Tamil Nadu. Identification, documentation and manuscript updation of 50 species and Preparation of Keys. **Q4**: Preparation of taxonomic account of remaining families. Preparation of herbarium specimens, identification of all collected specimens. Finalization and submission of final report. **Total tours: 1 FT.**
	Flora of Tamil Nadu, Vol. 6 (Hydrocharitaceae to Eriocaulaceae) 1. Dr. M.U. Sharief, Sci. 'E' 2. Dr. S.S. Hameed, Sci. 'E' 3. Dr. W. Arisdason, Sci. 'D' 4. Dr. V. Ravichandran, Sr. Preserv. Asst. ***Note: The final report to be submitted by March 25th 2024.***	2021-2024	**Q1**: Identification, documentation and manuscript updation of 100 species and preparation of keys. **Q2**: One **Field Tour** to various parts of Nilgiris, Tamil Nadu. Identification, documentation and manuscript updation of 75 species and Preparation of Keys. **Q3:** Identification, documentation and manuscript updation of 50 species and Preparation of Keys. **Q4**: Preparation of taxonomic account of remaining families. Preparation of herbarium specimens, identification of all collected specimens. Finalization and submission of final report. **Total tours: 1 FT.**

	Flora of Tamil Nadu, Vol. 7 (Cypereaceae and Poaceae) 1. Dr. C. Murugan, Sci. 'E' (Hqrs.) 2. Dr. A.A. Kabeer, Sci. 'E' (CBL) 3. Dr. S. Arumugam, Bot. Asst. ***Note: The final report to be submitted by March 25th 2024.***	2021-2024	**Q1**: Identification, documentation and manuscript updation of 100 species and preparation of keys. **Q2**: Identification, documentation and manuscript updation of 50 species and Preparation of Keys. **Q3: One filed Tour** to various parts of Tamil Nadu. Identification, documentation and manuscript updation of 50 species and Preparation of Keys. **Q4**: Preparation of taxonomic account of remaining families. Preparation of herbarium specimens, identification of all collected specimens. Finalization and submission of final report. **Total tours: 1 FT.**
54.	***Ex-situ* Conservation of Endemic, Endangered and Threatened Plants (Orchids, Medicinal, Economic Important and Ornamental Plants)** 1. Dr. S. Kaliamoorthy, Sci. 'E' 2. Dr. T.S. Sarvanan, Bot. Asst. 3. Mr. Arjun S.K., Bot. Asst. ***New Project*** ***Note: The final report to be submitted by March 25th every year.***	Ongoing	**Q1**: Maintenance and multiplication of orchids, endemic and endangered and threatened plants present in the garden. Recording of phenology of flowering plants of the garden. **Q2. One Field Tour** to Kalakkad Mundanthurai Tiger Reserve and Kanyakumari Wildlife Sanctuary. **Q3: One Field Tour** to Kalakkad Mundanthurai Tiger Reserve and Kanyakumari Wildlife Sanctuary. **Q4:** Maintenance and multiplication of orchids, endemic and endangered and threatened plants present in the garden. Recording of phenology of flowering plants of the garden. **Total tours: 2 FT**
55.	**Lichens of Tamil Nadu.** Dr. T.A.M. Jagadesh Ram, Scientist-E ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1:** Literature survey **Q2:** Morphological, anatomical and chemical characterization, and identification. **One Herbarium Consultation Tour** to NBRI, Lucknow. **Q3:** Morphological, anatomical and chemical characterization, and identification. **Q4:** Morphological, anatomical and chemical characterization, and identification. **One Field tour.** **Total tour: 1 F.T. & 1 H.C.T.**
WESTERN REGIONAL CENTRE, PUNE			
56.	**Phyto-Database of Konkan (Maharashtra).** Dr. Prashant K. Pusalkar, Scientist-E ***Note: The final report to be submitted by March 25th 2024.***	2020-2024 *(Extended for one year)*	**Q1**: Data compilation of Phyto-Diversity of Konkan to be continued including general diversity, floristic uniqueness, Phyto-conservation prioritization and economic phyto-resource documentation. **Q2**: Data compilation of Phyto-Diversity and forest/vegetation types of Konkan to be continued. **One Field Tour** to different parts of Konkan, Maharashtra **Q3**: Phytodata compilation completion, data updation (if any), category-wise finalization and analysis **Q4:** Checking, formatting, finalization and submission of the report **Total tour: 1 F.T.**
57.	**Bambusicolous Fungi of Goa.** 1. Dr. Rashmi Dubey, Scientist-E 2. Mr. Amit Diwakar Pandey, Botanical Assistant	2020-2024	**Q1**: Isolation, Morpho-Molecular identification, documentation and preservation of Bambusicolous fungi **Q2: One Field Tour** to protected forest areas of Goa and its adjoining areas.Isolation, Morpho-Molecular identification, documentation and preservation of Bambusicolous fungi **Q3: One Herbarium Consultation Tour** to Dept. of

	Note: The final report to be submitted by March 25th 2024.		Forest Ecology & Biodiversity Conservation, Kerala Forest Research Institute (KFRI) Thrissur, Kerala. Isolation, Morpho-Molecular identification, documentation and preservation of Bambusicolous fungi. **Q4:** Isolation, Morpho-Molecular identification, documentation and preservation of Bambusicolous fungi. Finalization and submission of Manuscript. **Total tours: 1 FT. & 1 HCT**
58.	**Maintenance of the Botanic Garden of BSI, Pune** 1. Dr. M. Y. Kamble, Scientist E 2. Shri B.P. Kadam, Bot. Asstt. ***Note: The report to be submitted by March 25th every year.***	Ongoing	**Q1 – Q4:** Preparation of database on live plants of garden (real time data). Maintenance and development of Phytodiversity section of Konkan and adjoining areas of Western Ghats
59.	**Conservation through Micropropagation of Endemic and Threatened Pteridophytes from Central Western Ghats of Karnataka** 1. Dr. A. Benniamin, Scientist E 2. Mr. Kaushik Sarkar, Bot. Asst. 3. Mr. Rajeshwar Dayal, Bot. Asst. ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1:**Literature collection and consultation of Herbarium specimens house in BSI, WRC herbarium. Correspondence to forest department for necessary permission to undertake field survey and collection of plant materials from different forest areas. **Q2: One Field Tour** to Central Western Ghats of Karnataka for collection of Pteridophytes with mature spores for *in-vitro* spores and tissue culture **Q3: One Field Tour** to Central Western Ghats of Karnataka for collection of Pteridophytes with mature spores for *in-vitro* spores and tissue culture **Q4:** Processing and Identification of plant specimens collected during **Field tours**. Optimization of sterilizing agents and medium for different endemic and threatened explants for in-vitro culture. **Total Tour: 2**
60.	***Ex-situ* conservation of Endemic, Endangered and Threatened species of Northern Western Ghats and Konkan, Maharashtra** 1. Dr. M. Y. Kamble, Scientist E 2. Mr. Anubhav Mandal, Bot. Asst. ***New Project*** ***Note: The final report to be submitted by March 25th 2026.***	2023-2026	**Q1:** Consultation of BSI, Pune herbarium for study of endemic, endangered and threatened species found in study area. Collection of literature for updating information of targeted species. **Q2**: **One field tour** in Konkan area. Collection, Introduction, Multiplication and maintenance of collected species in the garden. *Target: 50 spp. Ca 300 saplings.* **Q3: One Field Tour** to Northern Western Ghats and Konkan. Collection, Introduction, Multiplication and maintenance of collected species in BSI, WRC, Garden. *Target: 50 spp. Ca 300 saplings.* **Q4: One Field Tour** in Northern Western Maharashtra and Konkan. Collection, Introduction, Multiplication and maintenance of collected species in BSI, WRC, Garden. *Target: 50 spp. Ca 300 saplings.* **Total Tour: 3**
INDUSTRIAL SECTION INDIA MUSEUM, KOLKATA			
61.	**Barcoding, Database and Digitization of BSIS Herbarium.** 1. Mrs. Sushreya Pal, Bot. Asstt, 2. Ms. Shrabasti Das, Sr. Prev. Asstt	Ongoing	**Q1 – Q4:** In every quarter about 250 herbarium specimens will be barcoded and digitized.

	Note: The report to be submitted by March 25th every year.		
62.	**Collection of economically important plants/ plant products for enrichment and upliftment of Botanical Gallery, ISIM, BSI** 1. Dr. Debasmita Dutta Pramanick, Scientist-C, 2. Dr. Mahua Pal, Botanist 3. Mr. Ranjit Patra, Sr. Pres. Assistant ***New Project*** ***Note: The final report to be submitted by March 25th every year.***	2023-ongoing	**Q1 – Q2:** Regular maintenance in Botanical Gallery **Q3: One Field Tour** to Toto Para, West Bengal for Ethno-botanical collection of plants and plant products along with good field photographs. **Q4: One Field Tour** to Dinhata, Cooch Behar/Rajahmundry, Andhra Pradesh for collection of narcotic plants and plant products along with good photographs. Processing of collections and revise and uplift Totopara's display at Botanical gallery. **Total tours: 2**
PUBLICATION DIVISION, HEADQUARTERS			
63.	**Revision of the genus *Aristida* L.(Poaceae) in India** Dr. Nagaraju Siddabathula, Botanist ***Note: The final report to be submitted by March 25th 2024.***	2022-2024	**Q1:** Study of relevant literature pertaining to the study area. **Q2: One field tour.** **Q3-Q4:** Study of collected specimens and submission of final report.
TECHNICAL DIVISION, HEADQUARTERS			
64.	**Plants of Kolkata** 1. Dr. S. S. Dash, Scientist -E 2. Dr. R. K. Chakraborty, Retd. Sci. 3. Dr. A. A. Mao, Director 4. Dr. Umeshkumar L. Tiwari, Scientist-D (with assistance of Ms. Sinchita Biswas, Bot. Asst.) ***Note: The final report to be submitted by March 25th 2024.***	2021-2024	**Q1 – Q4:** Compilation and submission of the manuscript in the form of A Hand book on Plants of Kolkata. (**5 local tours)**.
65.	**Wild useful/edible plants of Arunachal Pradesh** 1. Dr. Umeshkumar L. Tiwari, Scientist-D 2. Dr. S.S. Dash, Scientist-E 3. Dr. K. Chowlu, Scientist-C, APRC ***Note: The final report to be submitted by March 25th 2024.***	2021-2024	**Q1.** Literature survey and labelling of data on herbarium sheets. **Q2. One Field tour**. **Q3. One Field tour**. Literature survey and identification of collected plant specimens. **One H.C. Tour to ARUN.** **Q4.** Submission of final report. **Total tour: 2 FT (HQ team) and 1 HCT (HQ team).**
66.	**Documentation of economically important seaweeds of the Indian Coast** Dr. S. K. Yadav, Botanist ***Note: The final report to be submitted by March 25th 2025.***	2022-2025	**Q1-Q2:** Study and collection of relevant literature, documentation of the economically important seaweeds from the various coastal states. **Q3. One Field Tour** to Odisha coast. **Q4. One Herbarium consultation Tours** to CSIR-Central Salt & Marine Chemicals Research Institute (CSMCRI), Bhavnagar, Gujarat for study of herbarium and protocol for economic algae. **Total tours: 1 FT. and 1 HCT**