BOTANICAL SURVEY OF INDIA, CENTRAL REGIONAL CENTRE, ALLAHABAD



DATE OF ESTABLISHMENT : 31ST JULY 1962

AREA UNDER JURISDICTION : Chhattisgarh, Madhya Pradesh

and Uttar Pradesh.

TOTAL AREA : 6,95,540 sq. km

G.P. Sinha

Scientist-E & Head of Office

A BRIEF INTRODUCTION ABOUT THE CENTRAL REGIONAL CENTRE, B.S.I., ALLAHABAD

- Central Regional Centre, BSI was established at 10 Chatham Lines, Allahabad on 31st July 1962, covering the areas of the then M.P., major parts of U.P. and Rajasthan with Dr. G. Panigrahi as Regional Botanist in—Charge.
- However, with the creation of AZC, Jodhpur in 1972, Rajasthan was excluded from the Central Regional Centre, BSI, Allahabad.
- At present the jurisdiction areas of Central Regional Centre cover a newly created state of CHHATTISGARH (1,46,361 sq km) (carved out of M.P. on 1st Nov., 2000), the present MADHYA PRADESH (3,08,252 sq km), and the present UTTAR PRADESH (2,40,927 sq km), covering a total area of ca 6,95,540 sq km.

- It encompasses two biogeographic zones viz. Upper Gangetic Plain and Central Indian zone along with Satpura and Vindhyan plateaus.
- At present Central Regional Centre is functioning in its own land of over 2 hectares of Associated garden with an office cum herbarium building and a residential complex.
- The centre has a well established Herbarium, Library, Museum and Associated Garden in order to take various research activities on taxonomy, ethno-botany, conservation of plants with well furnished laboratory for work on lichens.





OBJECTIVES OF CENTRAL REGIONAL CENTRE, BSI, ALLAHABAD

The Main objectives of the centre are:-

- To survey/explore plant wealth of entire jurisdiction areas covering M.P., U.P. and Chhattisgarh including Protected Areas, Wetlands (Fragile ecosystem) and their ethno-botanical aspects, if any.
- Documentation/Publication of state floras under its jurisdiction.
- To develop a living repository of plants of rare, threatened and endangered species. Introduction and propagation of medicinal and economic plants.

- Survey, inventorization and documentation of non-flowering plants.
- Library consultation/herbarium study tours to various herbaria in connection with the state Floras.
- Preservation of identified collected plants in the herbarium (BSA).
- EIA studies of the areas under jurisdiction of the circle.
- Assessment/Monitoring of Botanic Gardens.
- Advisory services to various institutes and state government organizations.

HERBARIUM

Acronym: BSA

Holdings:

Angiosperms & Pteridophytes- ca 99,000 specimens

Lichens- ca 10,500 specimens

MUSEUM

- ca 330 specimens of economic, medicinal and botanical interest.
- Several carpological collections.
- Several plant-based articles of common use prepared by the tribals of Madhya Pradesh and Chhattisgarh.

LIBRARY

HOLDINGS

Books 5614

English 5033 Hindi 581

Journals 3515

Foreign 1596 Indian 1917

ASSOCIATED BOTANIC GARDEN

Total Area: ca 2 Acres.

Location: Compound of Botanical survey of India,
 Central Regional Centre, 10 Chatham Lines,
 Allahabad.

 Objectives: 1. To develop a living repository of plants of rare, threatened and endangered species.

2. Introduction and propagation of medicinal and economic plants of the country for acclimatization and multiplication under local conditions.

- Total Collection of Live Plants: ca 600 species of trees, shrubs, herbs and aquatic plants.
- Rauvolfia serpentina (a rare plant) also included under CITES (App. II) is in cultivation.

STATE & DISTRICT FLORA

Published: 28 Books

Angiosperms: 16

- Exotic flora of Allahabad district (1984).
- Grasses of Madhya Pradesh (1984).
- Flora of Pachmarhi & Bori Reserve (1984).
- Flora of Raipur Durg & Rajnandgaon (1985).
- Drug Plant resources of Central India (1989).
- Flora of Bilaspur District Vol. I (1989), II (1999)
- Flora of Kasturba Gram, Indore (1991).
- Flora of Madhya Pradesh (Chhatarpur & Damoh) (1992).
- Floral elements of Madhya Pradesh (Acanthaceae & Euphorbiaceae) (1994).
- Dicotyledonous plants of Uttar Pradesh A checklist (1999).
- Flora of Madhya Pradesh Vol. I (1993), II (1997) & III (2001).
- Supplement to the Flora of Madhya Pradesh (2001).
- Flora of Indrawati Tiger Reserve (2003).
- Floristic Diversity, Chhattisgarh (2005).
- Flora of Mizoram, Vol. –II (2012).
- Flora of Uttar Pradesh Vol.- I (2016).

Pteridophytes: 07

- A dictionary of the Pteridophytes of India (1984).
- Floristic Diversity, Chhattisgarh (2005).
- A Census of Indian Pteridophytes (1984).
- Lycopodiaceae of India (1988).
- Selaginilaceae of India (1992).
- Pteridophytes of Andaman & Nicobar Islands (2001).
- Pteridophytes of Uttranchal (A Checklist) (2002).

Mosses: 01

A Checklist of Indian Mosses (2005).

Lichens: 04

- Macrolichens of Sikkim (2005).
- Indian lichens: An Annotated Checklist (2010).
- Lichen Flora of Sunderbans Biosphere Reserve, West Bengal (2012).
- Foliicolous Lichens of India (2014).

Manuscripts submitted:

- Flora of Uttar Pradesh Vol. II (59 families, 439 genera & 945 species)
- Flora of Uttar Pradesh Vol. III (34 families, 179 genera & 447 species)
- Phytodiversity of Katarniaghat Wild Life Sanctuary.
- Phytodiversity of Bakhira Bird Sanctuary.
- Phytodiversity of Suhelwa Wild Life Sanctuary.
- Flora of Chambal National Park, Uttar pradesh

The revisionary studies have also been completed in respect of Grasses and Sedges of Madhya Pradesh and few families of Pteridophytes. So far, 6 families, 1 genus and 1 tribe have been completed under revisionary studies. Central Regional Centre has described 54 new taxa (Angiosperms-14, Pteridophytes-04, Lichens-35 and Fungi-01).

ENVIRONMENTAL IMPACT ASSESSMENT

Environmental Impact Assessment (EIA) studies of following areas have been completed.

- Mara-Pump storage schemes (Hydroelectric Project of MPEB)
- Mongra Irrigation Project, Rajnandgaon, Madhya Pradesh
- Bansagar Canal Project, Madhya Pradesh and Uttar Pradesh.
- Rawghat iron ore mining area, Chhattisgarh

Fragile Ecosystem and Protected Areas studied include

- Flora of Salon Wetlands of Rai Bareli, Uttar Pradesh
- Wetland Flora of Lakha Bahosi, Kannauj, Uttar Pradesh.
- Flora of Bandhavgarh National Park, Madhya Pradesh.
- Pteridophytes of Mehao WLS, Arunachal Pradesh.
- Flora of Pachmarhi Biosphere Reserve, Madhya Pradesh.
- Flora of Indravati Tiger Reserve, Chhattisgarh.
- Flora of Kanha Tiger Reserve, Madhya Pradesh.
- Coal mines of Shahdol, Madhya Pradesh and Bilaspur, Chhattisgarh.
- Lichens of Mehao WLS, Arunachal Pradesh.
- Lichens of Sundarbans Biosphere Reserve, West Bengal.
- Lichens of Neora Valley National Park, West Bengal.

Funded projects completed by this Centre

- Floristic diversity of Kanger Valley National Park (2004).
- Floristic diversity of Sanjay Gandhi National Park (2004).
- Floristic diversity of Panna National Park (2004).
- Floristic diversity of Pachmarhi Biosphere Reserve (2004).
- Foliicolous lichens of North East India (2008).
- Documentation of Biological resources and traditional knowledge of Achanakmar - Amarkantak Biosphere Reserve (2008).

PUBLICATIONS

Concerted efforts by the Scientists of this centre have resulted in the publication of about 20 Red Data Sheets, over about 650 research papers, over 100 popular articles in Hindi and 33 Books.

NEW TAXA DESCRIBED: 54

* Angiosperms: 14 * Pteridophytes: 04

* Fungi : 01 * Lichens : 35

TYPE SPECIMENS DEPOSITED IN BSA

Angiosperms: 04 Types

Isotypes – 03

Paratype - 01

Pteridophytes: 04 Types

Holotype - 01

Isotypes – 03

Lichens/ Fungi: 54 Types

Holotypes-27; Isotypes-7; Paratypes - 20

Ongoing Projects at CRC, Allahabad

Sl. No.	Name of the Projects	Tenure	Executing officials		
1.	Floristic diversity of 'Bhoj Ramsar	2016-2018	Dr. Arti Garg, Scientist D		
ALC: Y	Site' in Madhya Pradesh				
2.	Flora of Chandra Prabha WLS,	2015-2017	Dr. A. N. Shukla, Scientist B and Dr. Nitisha Srivastava,		
47	Chandauli, UP (78 sq. km.)	1000	Bot. Asst.		
3.	Flora of Chhattisgarh Vol. I	2012-2017	Dr. A. N. Shukla, Scientist B and		
1300	(Dicot – 1750 spp.)	4000	Dr. Arjun Prasad Tiwari, Pres. Asst.		
4.	Flora of Chhattisgarh Vol. II (Monocot-570	2016-2018	Drs. G.P. Sinha, Scientist E, Arti Garg, Scientist-D, N.K.		
	spp.)		Gautam, Scientist-B, A.K. Verma, Scientist-B, Sri V.K.		
			Singh, Bot. Asstt. and Dr. N. Srivastava, Bot. Asstt.		
5.	Floristic diversity of Kishanpur W.L.S.	2016-2019	Dr. Neelam Gautam, Scientist B		
100	Lakhimpur Kheri, U.P. (227 sq. km.)		Dr. Arjun Prasad Tiwari, Pres. Asstt.		
6.	Floristic Diversity of Parvati Aranga Wildlife	2014-2017	Sri V. K. Singh, Bot. Asst. (under guidance of Dr. S. K.		
	Sanctuary and adjacent Tikri forest area,		Srivastava, Scientist E, NRC)		
JUAN 18	Gonda, UP with ecological aspects, population				
AND DESCRIPTION OF	status of endemics and GIS mapping (ca. 80	and the	PART THE RESERVE THE PROPERTY OF THE PART		
Fig. 1	sq. km.)	1 / 1			
7.	Lichens of Rajasthan, and Kutch Gujarat	2012-2017	Dr. G. P. Sinha, Scientist E		
8.	Ex situ conservation of EET plants in the	Ongoing.	Dr. A.N. Shukla, Scientist B		
	office garden	1			
9.	Taxonomic studies on lichenised non	2013-2018	Dr. Pushpi Singh, SPF and Dr. K.P. Singh, Ex Emeritus		
	Thelotremoid Indian Graphidaceae		Scientist		
10000	(Date of Joining : 02.08.2013)	STATE OF STATE			
10	Lichens of Terai regions of Uttar Pradesh	2013-2018	Dr. Pooja Gupta, SPF and Dr. G.P. Sinha, Scientist E.		
16 10	(Date of Joining : 26.08.2013)	8			

Action Plan 2017, Central Regional Centre, Allahabad

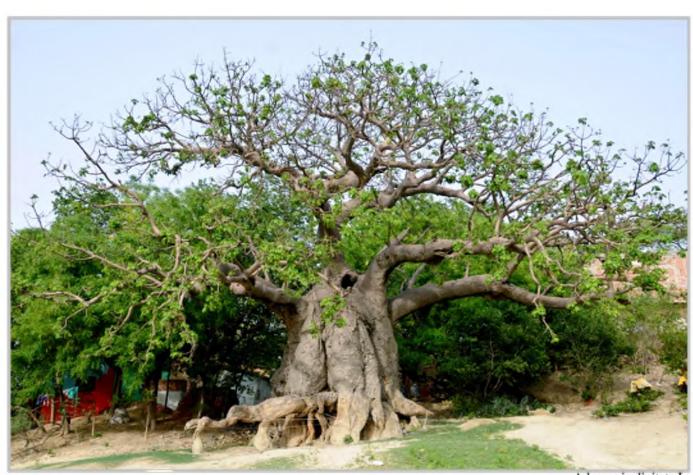
	Sl.	Name of the	Name of the	Tenure	Quantifiable deliverables (targets) for	Work done so far during	Quantifiable deliverables
	No.	project	executing	Winds.	2016-17	2016-17 (up to January	(targets) for 2017 (April to
ā,	9000	All Bridge Des	scientist	Marine.	2016)		December) and new project
	F 000		The same of the sa	W. San			proposals of 2017 (April to
	200	2000					December)
	1.	Lichens of	Dr. G. P. Sinha,	2012-	Q1. Identification of specimens collected	One Field Tour to Junagarh	Extension of another 6 months
	100	Rajasthan and	Scientist E	2017	earlier.	and Porebandar districts of	time is requested to compile the
7	13(3)	Kutch, Gujarat	TOWN STAN		Q2. Identification of specimens collected	Gujarat was undertaken	report.
2	5790				earlier.	w.e.f. 17.12.16 to 29.12.16	A STATE OF THE STATE OF
	1233				Q3. Survey and collection tour to Junagarh	and 43 F.Nos. were	
	253	THE R NUMBER	CONTROL OF A	0.09	and Porebandar districts of Gujarat in first	collected.	AND PROPERTY OF A
ă,		Million a little	Barrier Control	10x 10x	week of November 2016. Completion of	Identified 89 specimens in	MA BOAR MALERY
	994	Carlo Alexander	COMPANY OF THE PARTY OF THE PAR	ASCI	inventorization.	to 37 species, of which 10 is	4.00
9	190	0.00		-4-10	Q4. Completion of identification of lichens	addition for Rajasthan state.	100
	100				collected in previous tour; finalization and	Completed Taxonomic	
	1			1000	submission of mss.	description of 26 species.	
7	4363)		7.33555633		Total 01 Field tour		
4	2.	Floristic Diversity	Dr. Arti Garg,	2016-	Q1. Literature Survey and mapping of the	CoConducted 01 Field	Q1. Field Tour to the Bhoj
	1000	of 'Bhoj Ramsar	Scientist D	2018	area.		Ramsar Site in M.P.
		Site' in Madhya		0.193	Q2. Field Tour to the Bhoj Ramsar Site in	the second of th	Q2. Field Tour to the Bhoj
i.	300	Pradesh		10 M	M.P. identification of specimens	specimens into 20 species.	Ramsar Site in M.P.
		A COLUMN		AMOUNT	collected.	O One HT to Jabalpur and	
	270	ST. 128	CAP SECTION	10110	Q3. Herb Con. Tour to Barkatullah		collected in previous tours
					University, Bhopal Identification of		Q3. Description of 50 species.
s				0.000	specimens collected.	2017.	.Total 02 Field tours
Z.	-200		6-22-20		Q4. Identification of specimens collected.		
	173				Total 01 Field tour and 01 HCT.	A 32 32 10 15 1	
	3.		Dr. A. N. Shukla,	2012-	Q1. One Herbarium consultation tour to SFRI,	Herbarium consultation	Another one year extension is
	636	Chhattisgarh Vol.		2017.	Jabalpur for identification of unidentified	Tour to SFRI, Jabalpur	requested.
		I (Dicot – 1750			specimens collected.	completed.	
		spp.)	Tiwari,		Q2. To Q4. Finalization and submission of	Identified 1127 specimens in	
	4/1		Preservation	11111	manuscript.	to 570 species Tax. Descry.	
L	300	STEEL STEEL	Assistant Grade I		Total 01 Herb. Consultation Tour	Of 124 spp. completed.	

The same	100	A SULLAND	2000	A 1.1		THE RESIDENCE OF THE PARTY OF T	CHECK THE PLANT OF THE PARTY OF
4.	Flora of	Dr. G. P. Sinha,	2016-	1.	Dr. G.P. Sinha, Scientist E:	Following No. of species	Dr. B. Joshi, Bot. Asst.
100	Chhattisgarh Vol. II	Scientist E,	2018	4.00	Orchidaceae-69 spp	were described	(Dioscoriaceae to Pontedariaceae and
	(Monocot-570 spp.)	Dr. Arti Garg,		2.	Dr. A. Garg, Scientist-D: Poaceae	GP Sinha : 69/48 spp.	Commelinaceae – 57 spp) and Shri
	LATE OF LY	Scientist-D,	- N		– 120 species	Arti Garg : 120/09 spp.	R. Kar (Bot. Asstt. – Poaceae 55
		Dr. N.K. Gautam,	C. C.	3.	Dr. N.K. Gautam, Scientist-B –	NK Gautam: 47/25 spp.	species) part to be allotted to other
1950	NINE KINDS	Scientist-B,	0.680	8637	Flagellatiaceae to	AK Verma :122/67 spp.	Scientists/ officials during 2017-18.
8,000	ALL BOOK A THE	Dr. A. Verma,	4 100	8.11	Aponogetonaceae and	Bhavana Joshi:57 spp./0	The second second second
		Scientist-B,		3546	Zannichelliaceae – 47 species	R. Kar : 55 spp./ 0	
100	1000	Sri V.K. Singh,	Y - 10. 7	4.	Dr. A. Verma and Cyperaceae –	VK Singh : 52/32 spp.	
196		Bot. Asstt. and	100	US		N. Srivast. : 48/21 spp.	
		Dr. N. Srivastava,		5.	Dr. B. Joshi, Botanical Asstt.:		
	STATE OF THE STATE	Bot. Asstt		9733	Dioscoriaceae to Pontedariaceae	200	
	AND STATE OF THE S	A T. D. A. S. S. C.		800	and Commelinaceae – 57 species	36 3 3	
			100	6.	R. Kar, Bot. Asstt. – Poaceae 55		
3575	STAR KAY 68	15 C 1 C 1 C 1	0.00	95	species	E SAN SELECTION	
8,000	A STATE OF THE	S. P. W. L. Bill.	a De	7.	Sri V.K. Singh, Bot. Asstt.:	Service Control of the	Carlos Contract Contract
1390	The second	134000000000000000000000000000000000000		0,546	Hydrocharitaceae to		
1	100		2 - 30 P	20	Burmanniaceae and Xylariaceae –		
				8	52 species		
1 1 1 1 1		1.00		8.	Dr. N. Srivastava, Bot. Asstt.:		
		7 (30) 47- 24-		703	Poaceae – 48+55 species		The state of the s
5.	Flora of Chandra	Dr. A. N. Shukla,	2015-	Q1. (01 FT in Q3; 177 F. Nos.	Extension for six months period
	Prabha WLS,	Scientist B and	2017	ι		collected.	required.
3500	Chandauli, UP (78	Dr. Nitisha	0.0887.0	1000	anctuary. Identification and	Identified specimens: 173	
8,000	sq. km.)	Srivastava,	A SE		locumentation of specimens	STATE OF THE PARTY OF	DENIA TELEVISION
	•	Botanical Asst.			collected.	Identified species – 101	
9	100		2 - 30 7	Q2. I	Inventorisation of specimens	Taxonomic Description:	
						62 species	
	100000	1429 140	1000		Identification and documentation of	(C)	
		The state of the		-		Total 01 Field tour	
6 12 17 1	50 10 50		-8		collected.	AF BOOK OF	
					Finalisation and submission of		
	TO KN DE		1198		nanuscript.		
3.11	CANADA SE	Service Contraction	A BL		l 01 Field tour	STATE OF	THE RESERVE OF THE PARTY OF THE
-							

	6.	Floristic diversity of	Dr. Neelam	2016-		01 FT in Q2; 225 F.Nos.	Q1. Inventorisation of specimens
	3 1/3	Kishanpur Wildlife	Gautam, Scientist B	2019	previous collections.	(470) specimens	collected in previous tour.
33		Sanctuary,	Dr. Arjun Prasad	25 L	Q2. One Field tour in 2 nd week of August.	collected.	Q2. Identification and documentation
28	320	Lakhimpur Kheri,	Tiwari, Pres. Asstt.	ALC: N	Q3. Processing and identification of	Identified specimens - 26	of the all the specimens collected
36	19	UP.	and Dr. B. Joshi,	612	specimens collected during the	Identified species - 13	in previous tours.
Y.	188	(227 sq. km.)	Botanical Asstt.		previous field exploration tours.		Q3. Field Tour to the study area.
			70.58	477	Q4. One Field tour to 10 days in 2 nd week	Remaining 01 FT to be	Total 01 Field Tour
į,		SALES A LOS	As John Street	4 100	of Feb., 2017	undertaken in FebMarch	MARIA LOCATION
		STATE OF THE PARTY OF			Total 02 Field tours	2017	
4 5	7.	Floristic Diversity of	Sri V. K. Singh,	2014 –	Q1. Identification and taxonomic	One Field Tour	NA
	2	Parvati Aranga	Botanical Assistant	2017	description of 40 species. One field	undertaken to the study	
	1	Wildlife Sanctuary	(under guidance of	(2.5 °C)	tour in 3 rd week of June, 2016.	area.	
	-10	and adjacent Tikri		100	Q2. Identification and taxonomic	Identification of 52	
	12	forest area, Gonda,		13	description of 40 species.	specimens completed.	
Y.	188	UP with ecological			Q3. Identification and taxonomic	Description of 52 species	
		aspects, population		177 mg	description of 40 species. One	completed.	DE ROLF TO THE RESERVE
4		status of endemics	ASSESSMENT OF THE PARTY OF THE	4 300	herbarium consultation tour to NBRI.	Field Tour to be	MARIA LOCALINA MARIA
		and GIS mapping	A TOWNSHIP STORY OF THE STORY O		Q4. Finalisation and submission of	conducted from 23 – 30	
7	2/	(ca. 80 sq. km)	CAP SOLD TO	1110		Dec., 2016.	
	334	1			Total 01 Field tour & 01 Herbarium	Total 02 Field Tours	
	100			CATA		completed	
	8.	Taxonomic Studies	Dr. Arti Garg,	2017 –		V/20-000-00	Q1. Literature study. Library and
	12		Scientist D and Dr.	2020		40 12 3 10	Herbarium Consultation Tour to
	483	Strobilanthes Blume		7			CNH, Howrah.
	1	the state of the s	Tiwari, Pres. Asstt.	4.934			Q2. Field Tour for fresh specimen
4		India	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A De	A CAN DESCRIPTION OF THE PARTY	Street Budgetti	collection to Sikkim and North East.
		(New Project)				444	Q3. Identification and study of
7	29	(, b , r t o joce)	4/10/10	- 10		100	specimens collected.
	0	Elopiatio divensity of	De A V Voice	2017			Total 01 Field Tour, 1 HCT
	9.	Floristic diversity of				TO THE REAL PROPERTY.	Q1. Review of literature and
j k	-10		Scientist B and Sri	2018			herbarium consultation.
	ry	Researce, Bijnor,		-13. 3		44 1 3 3 10	Q2. Field tour to the selected site
Y	in A		Botanical Assistant				and processing of collected
	PASS.	(New Project)		1799			specimens.
i is		THE PARTY OF	de Maria de Cara	A BOO		Street Barbards	Q3.Identification and
	7	- A - A - A - A - A - A - A - A - A - A				4.00	documentation of collected
7	397	4116	Carlotte To	1130-7			specimens
	39/	ES III COMPANY		177.40		White States	Total 01 Field Tour

Cytotaxonomical	Dr. A. K. Verma,	2017-	The state of the s	- V- 14 2 3 6	Q1. Review of literature for availability, distribution and
					morphological characteristics of selected taxa of
Martin Salar Control of the Control			BEAUTIME AND		subtribe Cassiinae Irwin & Barneby
		a Day	A PARK TO STATE	Contract Contract	Q2. Collection of plant material for cytological
					investigations.
		2000			Q3. Study of somatic chromosome count and meiotic
(Trew 11 ofect)		THE SALE	TOTAL WINDS	200	behavior of selected plant species (5 species).
	1220	200	1220 1200	100000	Total 01 Field Tour
Studies of fossil and	Dr. Arti Garo	2017-	A STATE OF THE STA	TO A DOMESTICAL	Q1. Identification of 10 tree species, literature
				100	consultation of their distribution and abundance in
		2019			Gangetic Plains and Central India. BSIP tour for
		Creation.	SECTION AND AND		poject initiation and exchange of plant material.
		- Par	A PARK TO A PROPERTY.	Contract Contract	Q2. Field tour for plant collection, studies of population
					structure.
		2 - 30 9			Q3. Training of Scientists on studies of Fossil plants at
THE RESERVE OF THE PARTY OF		1000		200	BSIP, Lucknow. Identification of new lot of 10
		200	1000	The state of the s	plant species, literature consultation of their
			700000000000000000000000000000000000000	- 7 Table 100	distribution and abundance in Gangetic Plains and
Don', Edemiow)					Central India. Exchange of living and herbarium
		100			plant material between BSI and BSIP.
BINE KIN GEL		0.082	STATE OF THE PARTY OF		Total 01 Field Tour
A STATE OF THE PARTY OF	STATE OF THE STATE OF	A 100	S. POW LINE R.	Andrew William	02 Tours to BSIP
Trees of	Dr. G.P. Sinha,	2017-	An election (1)		Sales of the residence of the second of
Allahabad	Scientist E	2018		e de la constantina	
New Project					
Editing of Flora of	Dr. G.P. Sinha	2017-	AMERICAN TO THE		
Uttar Pradesh,	Scientist E	2018		- 1/4-10 Table	
Vol.II				3200	
New Project		Sept.		- Total Street	
	studies of selected taxa of Indian subtribe Cassiinae Irwin & Barneby (New Project) Studies of fossil and living plants with reference to the impact of climate change on flora of Gangetic Plains and Central India. (New Project in collaboration with BSIP, Lucknow) Trees of Allahabad New Project Editing of Flora of Uttar Pradesh, Vol.II	studies of selected taxa of Indian subtribe Cassiinae Irwin & Barneby (New Project) Studies of fossil and living plants with reference to the impact of climate change on flora of Gangetic Plains and Central India. (New Project in collaboration with BSIP, Lucknow) Trees of Dr. G.P. Sinha, Scientist E New Project Editing of Flora of Uttar Pradesh, Vol.II Scientist B Dr. Arti Garg, Scientist D, Dr. A. N. Shukla, Scientist B and Dr. Neelam Gautam, Scientist B Trees of Dr. G.P. Sinha, Scientist E	studies of selected taxa of Indian subtribe Cassiinae Irwin & Barneby (New Project) Studies of fossil and living plants with reference to the impact of climate change on flora of Gangetic Plains and Central India. (New Project in collaboration with BSIP, Lucknow) Trees of Allahabad Scientist E 2018 New Project Editing of Flora of Uttar Pradesh, Vol.II Studies of selected taxa of Indian Scientist B 2017-2019 Dr. Arti Garg, 2017-2019 Tor. A. N. Shukla, Scientist B and Dr. Neelam Gautam, Scientist B and Central India. (New Project in collaboration with BSIP, Lucknow) Dr. G.P. Sinha, 2017-2018	studies of selected taxa of Indian subtribe Cassiinae Irwin & Barneby (New Project) Studies of fossil and living plants with reference to the change on flora of Gangetic Plains and Central India. (New Project in collaboration with BSIP, Lucknow) Trees of Dr. G.P. Sinha, Scientist E 2018 New Project Editing of Flora of Uttar Pradesh, Vol.II Dr. Arti Garg, 2017-2019 Scientist D, 2019 Dr. A. N. Shukla, Scientist B and Dr. Neelam Gautam, Scientist B and Dr. Neelam	studies of selected taxa of Indian subtribe Cassiinae Irwin & Barneby (New Project) Studies of fossil and Irwin & Barneby (New Project) Studies of fossil and Irwin & Barneby (New Project) Studies of fossil and Irwin & Barneby (New Project in collaboration with BSIP, Lucknow) Trees of Dr. G.P. Sinha, Scientist E 2018 New Project Editing of Flora of Uttar Pradesh, Vol.II Studies of Indian (Dr. Arti Garg, 2017-2019 Dr. A. Arti Garg, 2017-2019 Editing of Flora of Uttar Pradesh, Scientist B and 2017-2019 Scientist B and 2017-2019 Editing of Flora of Uttar Pradesh, Vol.II

Nature of Tour	Q1	Q2	Q3	Q4	Total
Field Tour	01	05	01	40	07
Herbarium Consultation Tour/ Training	02	10	01	130.2	03



Adansonia digitata L.

THANK YOU