

ACHIEVEMENTS AND PROGRESS REPORT (2020–2021)

Name of the Project: **“Assessment of Plant diversity in Cauvery North Wildlife Sanctuary, Tamil Nadu”**

Executing Scientist (s): Dr. R. Manikandan, Sci. ‘E’ & Ms. R. Mehala Devi, Bot. Asst.

Duration of the Project: **19.09.2017 to 31.03.2021**

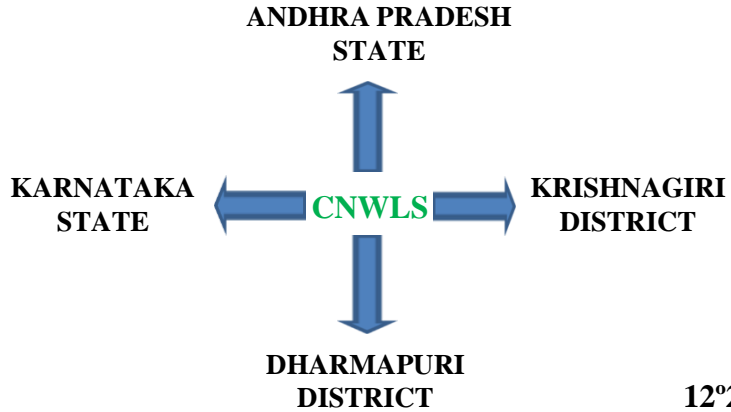
INTRODUCTION

- The name of the Sanctuary is derived from River Cauvery and established in the year 2014.
- Covering an areas of **504.33** sq. km
- It is situated in the Hosur Forest Division of the two districts namely Krishnagiri and Dharmapuri in the state of Tamil Nadu.
- The elevation varies from 200 m to 1410 m.
- The annual rainfall around 800 mm.

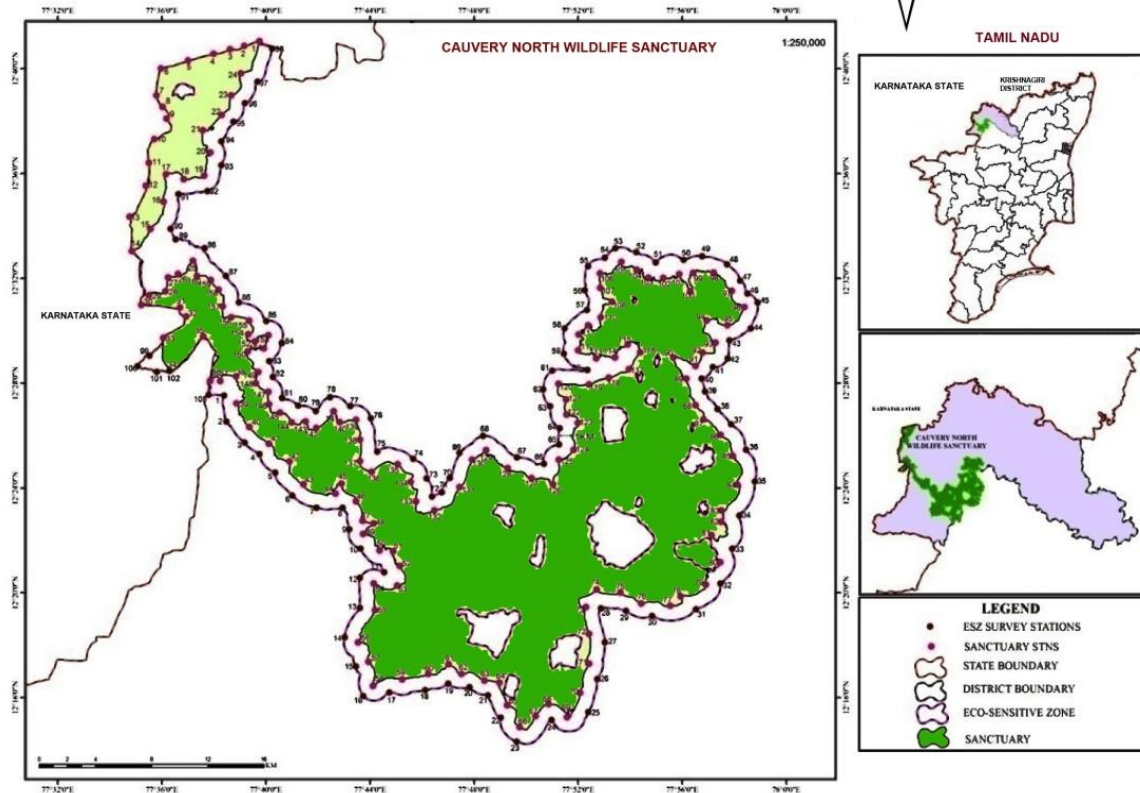


**Guthireyan Peak, Kodakarai Beat, Denkanikottai Range
(Highest Peak in CNWLS)**

STUDY AREA / MAP



12°25'–12°68' N and 77° 58'–77°97' E



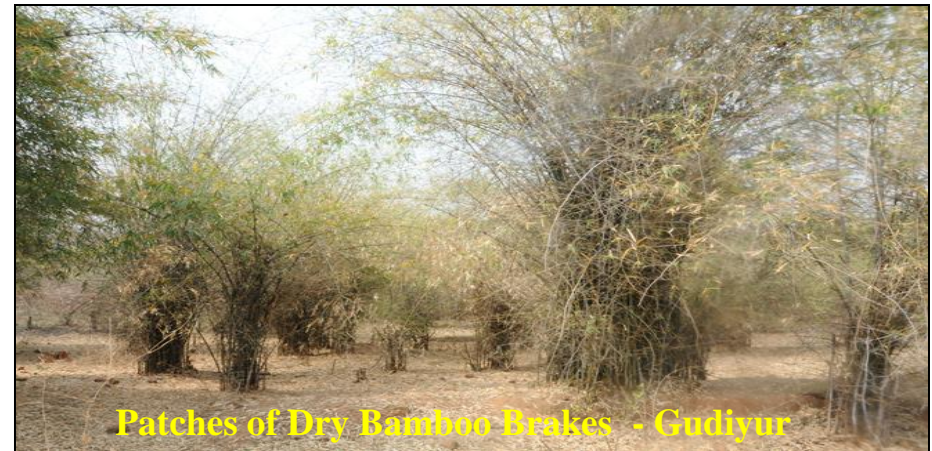
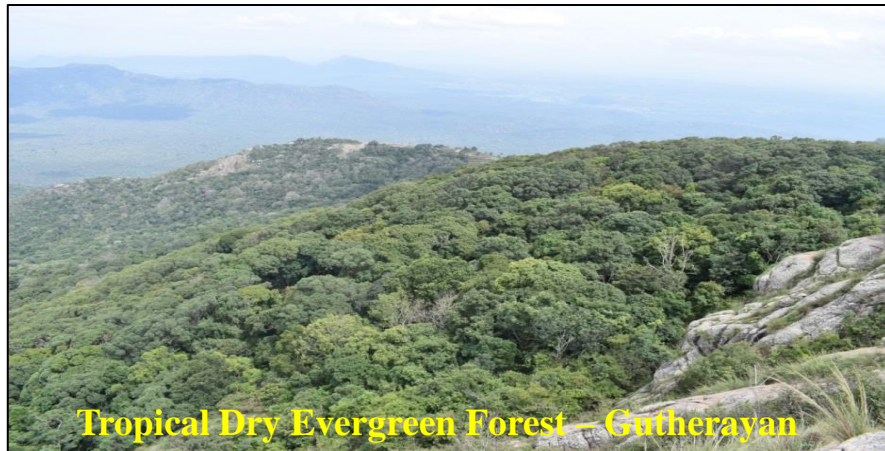
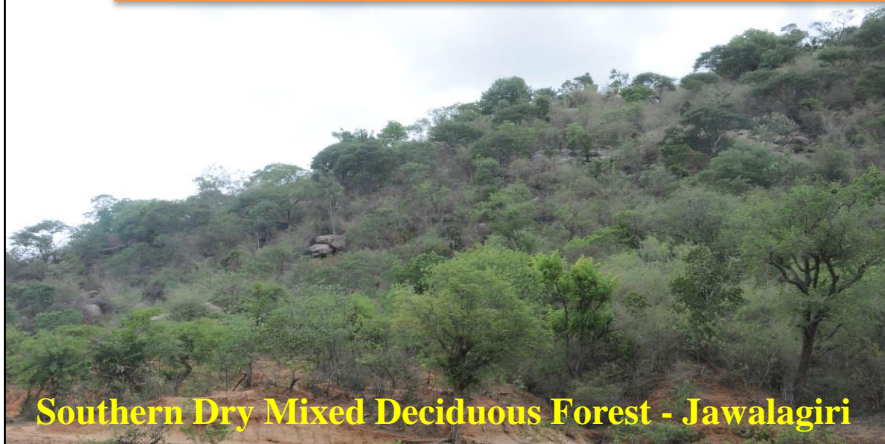
PREVIOUS WORKS

Title	Authors	Year
Flora of Dharmapuri District (recorded about 473 species)	Vajravelu & Rathakrishnan	1968
Three volumes of 'The Flora of Tamil Nadu Analysis' (State harbours about 5640 species and infraspecific taxa of flowering plants including cultivated species).	Nair & Henry	1983
	Henry & al.	1987 - 1989
He made remarkable collections from the Carnatic regions of Tamil Nadu and deposited his collections in Rapinat Herbarium, Tiruchirapalli (RHT).	Fr. K.M. Matthew	1981 - 1984
They explored the flora of Dharmapuri and Krishnagiri districts of Tamil Nadu and enumerated 1200 species, which were deposited in R&D Centre, Natural remedies Private Limited, Bangalore.	Silambarasan & Santhan	2014
They made vegetation analysis of plants from various forest types in Hosur forest division, Tamil Nadu and recorded 468 species of vascular plants belonging to 283 genera under 91 families	Umeshkumar & Ravikumar	2018
The Flora of Central and North Tamil Nadu (3 Volumes)	Fr. S. John Britto	2019

OBJECTIVES

- ❑ Documentation of the plant diversity of the Cauvery North Wildlife Sanctuary.
- ❑ Study of plant resources and their utilization practices by local communities living in and around the Sanctuary.
- ❑ To categorize the threat status of the endemic and distributionally interesting plants from the study area.

MAJOR VEGETATION TYPES OBSERVED IN THE SANCTUARY





Elephants at Bejarankana Pond, Anchetty Range



The 200-year old Banyan Tree (*Ficus bengalensis* L.) is located in the Bithireddy, Krishnagiri District, covers an area of 1.9 acre

MATERIAL AND METHODS

- A total of seven field explorations were made so far by covering different seasons, vegetation and vouched **1298 field numbers**.
- During the plant collection in the field, characters such as habitat, habit, GPS data, phenology of flowering and fruiting, colour of the flower, fruit, seed and distribution were observed and noted.
- The collected plant samples were processed, mounted and identified using regional floras, herbarium specimens housed at MH and adopted recent nomenclatural changes.

HERBARIUM CONSULTATION

KARNATAKA (20.8.2018–28.8.2018)		PUNE, MAHARASHTRA (03.09.2018–07.09.2018)	
FRLH (FRLHT)	Studied 150 species from research area	BSI, Pune	Studied specimens collected from Tamil Nadu including study area: 56
JCB (IISc)	Studied 15 species which were collected from the study area.	AHMA (Agharkar Research Institute (ARI))	Studied specimens collected from Tamil Nadu including study area: 10
RRCI (Regional Ayurveda Research Institute for Metabolic Disorder)	52 species studied		
TAMIL NADU			
THE RAPINAT HERBARIUM, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu from 04.01.2021 to 13.01.2021 (10 days).		400 specimens were consulted from the study area.	

DETAILS OF FIELD SURVEYS CONDUCTED SO FAR

Details	1st Survey	2nd Survey	3rd Survey	4th Survey	5th Survey	6th Survey	7th Survey	Total
Field Surveys undertaken	22.01.18-31.01.18 (10 days)	26.03.18-31.03.18 (6 days)	06.06.2018-15.06.2018 (10 days)	09.10.18-17.10.18 (9 days)	27.06.19-05.07.19 (9 days)	18.09.19-27.09.19 (10 days)	02.01.2020-11.01.2020 (10 days)	64 days
Field Nos. vouched	318	139	200	173	102	196	170	1298
Collected specimens	954	410	600	520	310	590	510	3894
Photographs taken	200	100	200	200	250	800	560	2310
Area Surveyed (sq. km.)	120	110	120	156	206	180	110	500
No. of specimens identified	318	126	197	135	102	196	170	1234
Live plants collected	4	6	3	5	3	5	4	30

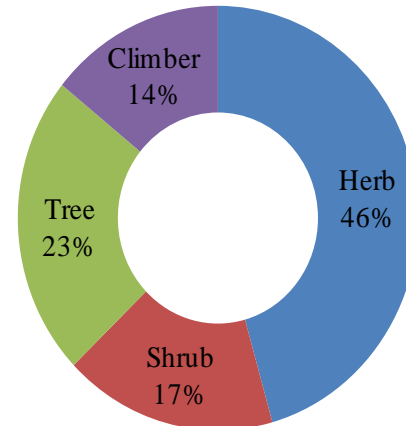
RESULTS AND DISCUSSION

The Assessment of Cauvery North Wildlife Sanctuary revealed the occurrence of **863** plant taxa under **473** genera belonging to **139** angiospermous families.

The life-form analysis shows that the herbs are dominant, which comprise **396** taxa followed by **199** tree taxa, **147** taxa of shrubs and climbers are represented by **121** taxa.

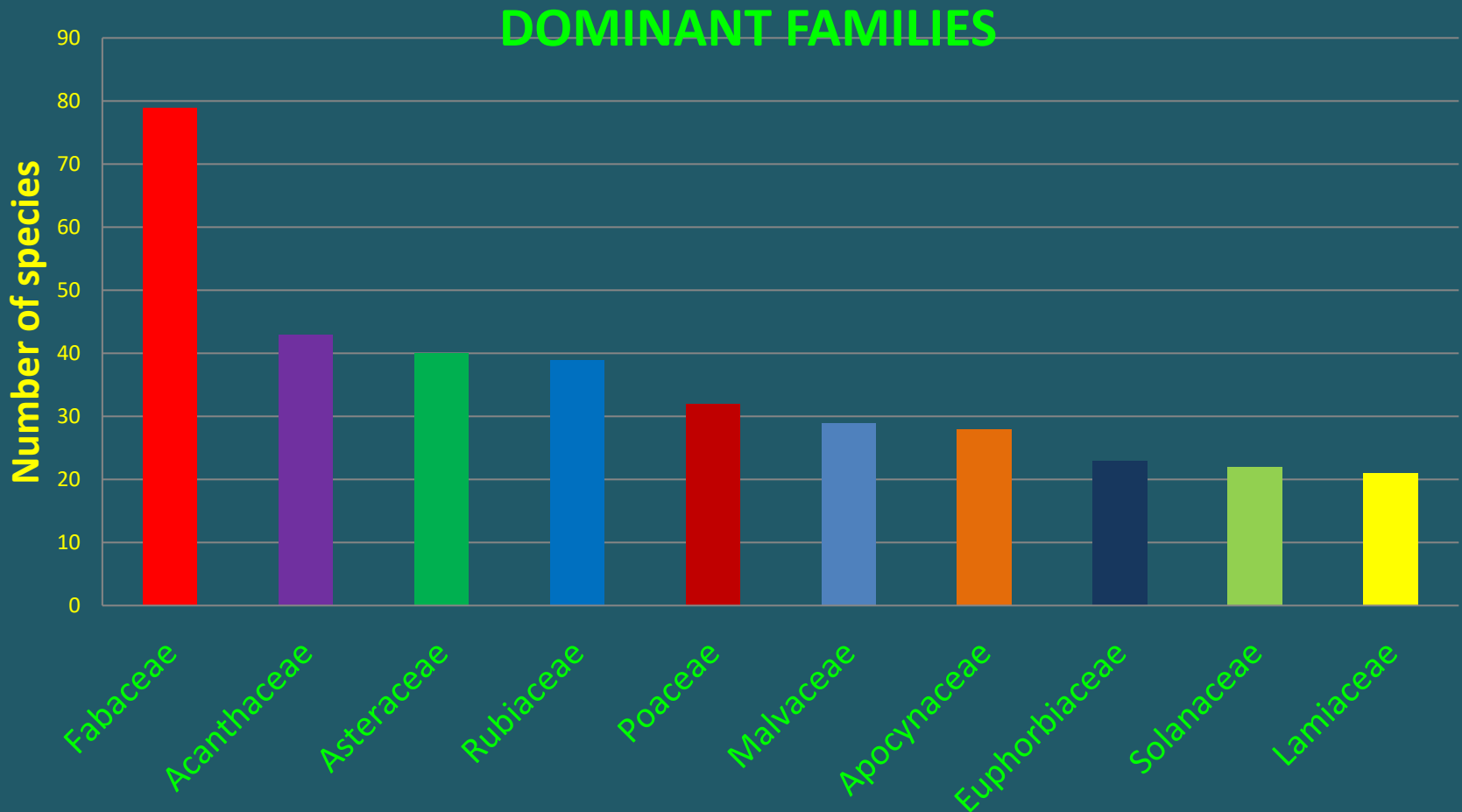
Life-forms	No. of taxa
Herbs	396
Trees	199
Shrubs	147
Climbers	121

Analysis of different life forms in CNWLS



DOMINANT FAMILIES



The top 10 predominant families (in terms of highest number of species) of the flora of Sanctuary are: Fabaceae (79 spp.), followed by Acanthaceae (43 spp.), Asteraceae (40 spp.), Rubiaceae (39 spp.), Poaceae (32 spp.), Malvaceae (29 spp.), Apocynaceae (28 spp.), Euphorbiaceae (23 spp.), Solanaceae (22 spp.) and Lamiaceae (21 spp.).



DATA SHEET

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Field #	Date	Botanical Name	Family	State	Locality	Lat	Long	Altitude	Habit	Distribution	Notes	Vern. Name	Collected By	Identified By
2	141201	23/10/12	<i>Cynanchum tunicatum</i> (Retz.) Alston	Asclepiadaceae	Tamil Nadu	Aiyur R.F.	12° 31' 28. 21"N	77° 47' 14. 02"E	823	Climber	Common	Twiner; branchlets glabrous. Leaves decussate, apex acuminate; stipules orbicular,	Vellsipal kodir	R. Manikandan	R. Manikandan & Mehala Devi R
3	141202	23/10/12	<i>Psychotrix dicoccos</i> Gaertn.	Rubiaceae	Tamil Nadu	Aiyur R.F.	12° 31' 28. 21"N	77° 47' 14. 02"E	823	Tree	Common	Leaves ovate-elliptic. Flower greenish white, fragrant. Fruit frupe	Nanjul	R. Manikandan	R. Manikandan & Mehala Devi R
4	141203	23/10/12	<i>Tarenna asiatica</i> (L.) Kuntze ex K.Schum.	Rubiaceae	Tamil Nadu	Aiyur R.F.	12° 32' 42. 34"N	77° 48' 18. 21"E	850	Small Tree	Common	Leaves entire. Flowers in cymes, cream to yellow in colour.	Tharani, Kottam	R. Manikandan	R. Manikandan & Mehala Devi R
5	141204	23/10/12	<i>Sesamone emetica</i> (Retz.) R. Br. ex Schult	Asclepiadaceae	Tamil Nadu	Aiyur R.F.	12° 30' 21. 42"N	77° 46' 11. 18"E	890	Climber	Common	Leaves linear-elliptic. Flowers in cymes. Seed-pods are paired.	Ankaravali	R. Manikandan	R. Manikandan & Mehala Devi R
6	141205	23/10/12	<i>Capparis grandis</i> Lf.	Capparidaceae	Tamil Nadu	Aiyur R.F.	12° 33' 24. 96"N	77° 43' 26. 49"E	908	Tree	Common	Leaves elliptic, ovate, woolly on both sides. Flower white, fragrant.	Thottimarai	R. Manikandan	R. Manikandan & Mehala Devi R
7	141206	23/10/12	<i>Sida acuta</i> Burm.f.	Malvaceae	Tamil Nadu	Aiyur R.F.	12° 34' 12. 58"N	77° 50' 31. 14"E	910	Shrub	Common	Leaves toothed. Flowers yellow in colour, solitary.	Palambazi	R. Manikandan	R. Manikandan & Mehala Devi R
8	141207	23/10/12	<i>Ventilago madraspatana</i> Gaertn.	Rhamnaceae	Tamil Nadu	Aiyur R.F.	12° 34' 12. 58"N	77° 50' 31. 14"E	910	Climber	Common	Woody climbers, Fl. Pale white,	Vempadam	R. Manikandan	R. Manikandan & Mehala Devi R
9	141208	23/10/12	<i>Zizyphus xylopyra</i> (Retz.) Willd.	Rhamnaceae	Tamil Nadu	Aiyur R.F.	12° 35' 33. 62"N	77° 51' 14. 42"E	930	Tree	Common	Leaves simple, Flower axillary cyme, greenish-yellow. Fruit a drupe	Kottai Elandsi	R. Manikandan	R. Manikandan & Mehala Devi R
10	141209	23/10/12	<i>Memecylon edule</i> Roxb.	Melastomataceae	Tamil Nadu	Aiyur R.F.	12° 36' 22. 92"N	77° 52' 12. 45"E	960	Small Tree	Rare	Leaves shiny, Opposite, Leathery. Flowers bright blue. Berry globose, deep purple to	Vachi, Anjani	R. Manikandan	R. Manikandan & Mehala Devi R
11	141210	23/10/12	<i>Sarcostemma acidum</i> (Roxb.) Voigt	Apocynaceae	Tamil Nadu	Aiyur R.F.	12° 36' 22. 92"N	77° 52' 12. 45"E	960	Climber	Common	Succulent stems; Flower cymes, white or yellow in colour	Kodikalli	R. Manikandan	R. Manikandan & Mehala Devi R
12	141211	23/10/12	<i>Viscum articulatum</i> Burm.f.	Viscaceae	Tamil Nadu	Aiyur R.F.	12° 36' 22. 92"N	77° 52' 12. 45"E	960	Shrub	Common	Leafless, Parasitic, Flower yellow, Minute.	Ottu	R. Manikandan	R. Manikandan & Mehala Devi R
13	141212	23/10/12	<i>Dendrophthoe falcata</i> (Lf.) Ettingsh.	Loranthaceae	Tamil Nadu	Aiyur R.F.	12° 37' 27. 82"N	77° 47' 49. 32"E	980	Shrub	Common	Parasitic, Leaves opposite. Flowers pink & yellow. Stamens 4-6 protrude outside.	Pulluri	R. Manikandan	R. Manikandan & Mehala Devi R
14	141213	23/10/12	<i>Zizyphus oenopilis</i> (L.) Mill.	Rhamnaceae	Tamil Nadu	Aiyur R.F.	12° 36' 46. 68"N	77° 46' 32. 54"E	1000	Shrub	Very Common	Leaves alternate, ovate. Young branches with paired thorns. Fruit are spherical, black,	Sursimullu, Sursi	R. Manikandan	R. Manikandan & Mehala Devi R
15	141214	23/10/12	<i>Evolvulus alpinoides</i> (L.) L.	Convolvulaceae	Tamil Nadu	Aiyur R.F.	12° 35' 43. 72"N	77° 41' 27. 43"E	1010	Herb	Common	Leaves densely clothed with white and silky hairs. Flower in pale blue.	Vizhankranthi	R. Manikandan	R. Manikandan & Mehala Devi R
16	141215	23/10/12	<i>Sida cordifolia</i> L.	Malvaceae	Tamil Nadu	Aiyur R.F.	12° 35' 43. 72"N	77° 41' 27. 43"E	1010	Herb	Common	Leaves ovate, serrate margin, Stellate tomentose beneath. Flower yellow.	Kurunthotti,	R. Manikandan	R. Manikandan & Mehala Devi R
17	141216	23/10/12	<i>Tephrosia purpurea</i> (L.) Pers.	Fabaceae	Tamil Nadu	Aiyur R.F.	12° 35' 43. 72"N	77° 41' 27. 43"E	1010	Undershrub	Common	Leaves compound. Flower are pink to purple.	Kavali, Kowati	R. Manikandan	R. Manikandan & Mehala Devi R
18	141217	23/10/12	<i>Galactia tenuiflora</i> (Willd.) Wight & Arn.	Fabaceae	Tamil Nadu	Aiyur R.F.	12° 32' 33. 68"N	77° 46' 51. 43"E	1045	Herb	Common	Climber, Stems puberulent. Flower solitary, blue or pink in colour. Pod tip curved		R. Manikandan	R. Manikandan & Mehala Devi R
19	141218	23/10/12	<i>Crotalaria evolvoloides</i> Benth.	Fabaceae	Tamil Nadu	Aiyur R.F.	12° 32' 33. 68"N	77° 46' 51. 43"E	1045	Herb	Common	Stems terete. Flower yellow with pubescent, stout hairs		R. Manikandan	R. Manikandan & Mehala Devi R
20	141219	23/10/12	<i>Polycarpus corymbosus</i> (L.) Lam.	Caryophyllaceae	Tamil Nadu	Aiyur R.F.	12° 32' 33. 68"N	77° 46' 51. 43"E	1045	Herb	Not common	Leaves pseudovitticillate. Flowers in corymbs, reddish colour. Seeds many.	Nilsacedachi	R. Manikandan	R. Manikandan & Mehala Devi R
21	141220	23/10/12	<i>Viscum orientale</i> Willd.	Viscaceae	Tamil Nadu	Aiyur R.F.	12° 33' 33. 84"N	77° 45' 28. 43"E	1060	Shrub	Common	Parasitic. Leaves opposite. Flowers axillary.	Itthilkanni	R. Manikandan	R. Manikandan & Mehala Devi R
22	141221	23/10/12	<i>Mukia madraspatana</i> (L.) M.Roemer.	Cucurbitaceae	Tamil Nadu	Aiyur R.F.	12° 33' 43. 86"N	77° 45' 19. 59"E	1070	Herb	Common	Prostrate herb. Leaves angular, margin denticulate. Flower yellow. Berry globose red.	Muzumukkalai	R. Manikandan	R. Manikandan & Mehala Devi R
23	141222	23/10/12	<i>Ipomoea staphylea</i> Roem. & Schult.	Convolvulaceae	Tamil Nadu	Aiyur R.F.	12° 33' 43. 86"N	77° 45' 19. 59"E	1070	Climber	Common	Leaves base cordate, tip pointed. Pink funnel shaped flower.	Onsankodi	R. Manikandan	R. Manikandan & Mehala Devi R
24	141223	23/10/12	<i>Blepharis madraspatensis</i> (L.) B.Heyne ex Roth	Acanthaceae	Tamil Nadu	Aiyur R.F.	12° 35' 31. 74"N	77° 45' 38. 51"E	1095	Herb	Common	Leaves ternate. Flower axillary, bracts with stiff elongated hairs, whitish with Purple	Elumu otti,	R. Manikandan	R. Manikandan & Mehala Devi R
25	141224	23/10/12	<i>Solanum incanum</i> L.	Solanaceae	Tamil Nadu	Aiyur R.F.	12° 35' 31. 74"N	77° 45' 38. 51"E	1095	Undershrub	Common	Stems and branches are armed with stout prickles. Leaves alternate. Flower purple with	Karimilli,	R. Manikandan	R. Manikandan & Mehala Devi R
26	141225	23/10/12	<i>Cajanus scarabaeoides</i> (L.) Thouars	Fabaceae	Tamil Nadu	Aiyur R.F.	12° 36' 12. 74"N	77° 45' 19. 39"E	1100	Climber	Common	Stem with reddish tomentose. Leaves trifoliate. Flowers yellow.	Kattumuthira	R. Manikandan	R. Manikandan & Mehala Devi R
27	141226	23/10/12	<i>Mimosa pudica</i> L.	Mimosaceae	Tamil Nadu	Aiyur R.F.	12° 36' 12. 74"N	77° 45' 19. 39"E	1100	Herb	Common	Stem 4-angular. Leaves alternate. Flower pink, margins with recurved prickles.	Thottaccurungi	R. Manikandan	R. Manikandan & Mehala Devi R
28	141227	23/10/12	<i>Toddalia asiatica</i> (L.) Lam.	Rutaceae	Tamil Nadu	Aiyur R.F.	12° 36' 12. 74"N	77° 45' 19. 39"E	1100	Subshrub	Common	Armed subshrub, Leaves trifoliate. Fruit orange color when ripen	Kindu mullu	R. Manikandan	R. Manikandan & Mehala Devi R
29	141228	23/10/12	<i>Scarrula cordifolia</i> (Wall.) G.Don	Loranthaceae	Tamil Nadu	Aiyur R.F.	12° 36' 12. 74"N	77° 45' 19. 39"E	1100	Parasitic	Common	Leaves subopposite, Flower orange-tawny.	Pulluravi	R. Manikandan	R. Manikandan & Mehala Devi R
30	141229	23/10/12	<i>Celastrus paniculatus</i> Willd.	Celastraceae	Tamil Nadu	Aiyur R.F.	12° 34' 36. 84"N	77° 46' 11. 29"E	1150	Climbing	Common	Lenticelled stem. Leaves alternate. Flowers in panicle, pale green colour.	Kuvarikuntal,	R. Manikandan	R. Manikandan & Mehala Devi R
31	141230	23/10/12	<i>Argyrea cuneata</i> Ker Gawl.	Convolvulaceae	Tamil Nadu	Aiyur R.F.	12° 34' 36. 84"N	77° 46' 11. 29"E	1150	Climber	Common	Stem with soft silky hairs. Bright purple funnel shaped flower.	Kavvalipoov,	R. Manikandan	R. Manikandan & Mehala Devi R
32	141231	23/10/12	<i>Crotalaria retusa</i> L.	Fabaceae	Tamil Nadu	Aiyur R.F.	12° 34' 36. 84"N	77° 46' 11. 29"E	1150	Climber	Common	Leaves simple, Flower yellow, terminal racemes, pod.		R. Manikandan	R. Manikandan & Mehala Devi R
33	141232	23/10/12	<i>Tarenna asiatica</i> (L.) Kuntze ex K.Schum.	Rubiaceae	Tamil Nadu	Aiyur R.F.	12° 35' 43. 86"N	77° 43' 16. 34"E	1160	Small Tree	Common	Leaves elliptic. Flowers cymes, cream to yellow in colour. Fruit with many seeds.	Tharani, Kottam	R. Manikandan	R. Manikandan & Mehala Devi R
34	141233	23/10/12	<i>Pleurostylia opposita</i> (Wall.) Alston	Celastraceae	Tamil Nadu	Aiyur R.F.	12° 33' 18. 76"N	77° 46' 24. 41"E	1180	Small Tree	Common	Small trees, Branchlets 4-angled, Flower green. Fruit ellipsoid		R. Manikandan	R. Manikandan & Mehala Devi R
35	141234	23/10/12	<i>Scutia myrtina</i> (Burm.f.) Kurz	Rhamnaceae	Tamil Nadu	Aiyur R.F.	12° 34' 38. 91"N	77° 48' 19. 41"E	1182	Shrub	Common	Branches with spines 2 per node, recurved. Leaves opposite. Flowers yellow-green.	Chimati,	R. Manikandan	R. Manikandan & Mehala Devi R
36	141235	23/10/12	<i>Opilia amentacea</i> Roxb.	Opiliaceae	Tamil Nadu	Aiyur R.F.	12° 34' 38. 91"N	77° 48' 19. 41"E	1182	Climbing	Common	Branchlets brown tomentose. Leaves alternate. Flower white, minute		R. Manikandan	R. Manikandan & Mehala Devi R
37	141236	23/10/12	<i>Waltheria indica</i> L.	Sterculiaceae	Tamil Nadu	Aiyur R.F.	12° 34' 38. 91"N	77° 48' 19. 41"E	1182	Subshrub	Common	Stems and leaves with grey, velvety hairs. Flowers orange.	Shengalipoovu	R. Manikandan	R. Manikandan & Mehala Devi R
38	141237	23/10/12	<i>Spermocoe hispida</i> L.	Rubiaceae	Tamil Nadu	Aiyur R.F.	12° 33' 21. 76"N	77° 41' 34. 29"E	1200	Subshrub	Common	Leaves sessile, hirsute. Flower pink	Kudschurukki	R. Manikandan	R. Manikandan & Mehala Devi R
39	141238	23/10/12	<i>Pentaena indicum</i> (L.) Ling	Asteraceae	Tamil Nadu	Aiyur R.F.	12° 33' 21. 76"N	77° 41' 34. 29"E	1200	Herb	Common	Leaves sessile, alternate, nerves with white cottony beneath. Flower yellow	Kammalchedi	R. Manikandan	R. Manikandan & Mehala Devi R
40	141239	23/10/12	<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.	Asteraceae	Tamil Nadu	Aiyur R.F.	12° 33' 35. 76"N	77° 45' 34. 29"E	1220	Herb	Common	Leaves ovate. Flower many, white.	Vesapacha	R. Manikandan	R. Manikandan & Mehala Devi R
41	141240	23/10/12	<i>Polygala javana</i> DC.	Polygalaceae	Tamil Nadu	Aiyur R.F.	12° 36' 24. 91"N	77° 42' 24. 42"E	1228	Herb	Common	Leaves alternate, obovate. Flowers yellow & purple.	Selagachedi	R. Manikandan	R. Manikandan & Mehala Devi R
42	141241	23/10/12	<i>Acemilla paniculata</i> (Wall. ex DC.) R.K.Jansen	Asteraceae	Tamil Nadu	Aiyur R.F.	12° 36' 24. 91"N	77° 42' 24. 42"E	1228	Herb	Common	Leaves ovate. Flower many, white.		R. Manikandan	R. Manikandan & Mehala Devi R

HERBARIUM LABEL

	A	B	C	D	E	F	G	H	I	J
1										
2	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>भारतीय वनस्पति सर्वेक्षण दक्षिणी क्षेत्रीय केंद्र पादपालय कोयम्बटूर तमिलनाडु</p> </div> <div style="width: 45%; text-align: right;"> <p>Botanical Survey of India Southern Regional Centre Herbarium (MH) Coimbatore Tamil Nadu</p> </div> </div> <div style="text-align: center; margin-top: 10px;">  </div>					<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>भारतीय वनस्पति सर्वेक्षण दक्षिणी क्षेत्रीय केंद्र पादपालय कोयम्बटूर तमिलनाडु</p> </div> <div style="width: 45%; text-align: right;"> <p>Botanical Survey of India Southern Regional Centre Herbarium (MH) Coimbatore Tamil Nadu</p> </div> </div> <div style="text-align: center; margin-top: 10px;">  </div>				
3	Name of the Project Cauvery North Wildlife Sanctuary, Krishnagiri Dist., TN					Name of the Project Cauvery North Wildlife Sanctuary, Krishnagiri Dist., TN				
4	Field No. 141867		Date 10-10-18				Field No. 141868		Date 10-10-18	
5	Botanical Name Pergularia daemia (Forsskal) Chiov.					Botanical Name Excoecaria oppositifolia var. crenulata (Wight) Chakrab. & M.Gangon.				
6	Family Asclepiadaceae					Family Euphorbiaceae				
7	State Tamil Nadu					State Tamil Nadu				
8	Locality Denkanikottai range, on the way to Guthirayan R.F.					Locality Denkanikottai range, kodakarai, on the way to Guthirayan R.F.				
9	Latitude(N) 12° 17' 192"N		Altitude: (m) 1038.1488				Latitude(N) 12° 17' 172"N		Altitude:(m) 1046.3784	
10	Longitude(E) 77° 51' 348"E		Distribution					Longitude(E) 77° 51' 589"E		Distribution
11	Habit Climber		Common					Habit Tree		Common
12	Notes Pubescent twiner. Leaves ovate, caudate-acuminate, base deeply cordate; nerves 4-5 pairs; petiole to 6 cm long. Flowers creamy, in branched cymes.					Notes Branchlets terete, glabrous. Leaves simple, opposite, margin crenulate, apex acuminate. Fruit capsule, trilobed, subglobose.				
13	Vernacular Name Uttamani					Vernacular Name 0				
14	Collected By R. Manikandan & Mehala Devi R.					Collected By R. Manikandan & Mehala Devi R.				
15	Identified By R. Manikandan & Mehala Devi R.					Identified By R. Manikandan & Mehala Devi R.				

LIST OF PLANT SPECIES OF CONSERVATION VALUE

Scientific Name	Family	Status
<i>Acalypha alnifolia</i> J.G. Klein ex Willd.	Euphorbiaceae	Endemic to Southern India
<i>Achyranthes coynei</i> Santapau	Amaranthaceae	Endemic to Peninsular India
<i>Alysicarpus bupleurifolius</i> var. <i>hybridus</i> DC.	Fabaceae	Endemic to India
<i>Andrographis serpyllifolia</i> (Rottler ex Vahl) Wight	Acanthaceae	Endemic to Southern India
<i>Argyreia cuneata</i> Ker Gawl.	Convolvulaceae	Endemic to India
<i>Asystasia dalzelliana</i> Santapau	Acanthaceae	Endemic to Peninsular India
<i>Barleria montana</i> Nees	Acanthaceae	Endemic to India
<i>Barleria mysorensis</i> B. Heyne ex Roth	Acanthaceae	Endemic to Southern India
<i>Barleria tomentosa</i> Roth	Acanthaceae	Endemic to Southern India
<i>Boswellia serrata</i> Roxb. ex Colebr.	Burseraceae	Endemic to India
<i>Byttneria herbacea</i> Roxb.	Sterculiaceae	Endemic to Southern India
<i>Cajanus sericeus</i> (Baker) Maesen	Fabaceae	Endemic to Southern India
<i>Cissus woodrowii</i> (Stapf ex T. Cooke) Santapau	Vitaceae	Endemic to Peninsular India
<i>Cryptolepis grandiflora</i> Wight	Apocynaceae	Endemic to India
<i>Cyanotis tuberosa</i> (Roxb.) Schult. & Schult.f.	Commelinaceae	Endemic to India
<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	Endemic to Southern India
<i>Dendrobium nanum</i> Hook.f.	Orchidaceae	Endemic to Southern India
<i>Didymocarpus tomentosus</i> Wight	Gesneriaceae	Endemic to Southern India
<i>Diospyros neilgerrensis</i> (Wight) Kosterm.	Ebenaceae	Endemic to Southern India
<i>Dolichandrone arcuata</i> (Wight) C.B. Clarke	Bignoniaceae	Endemic to Southern India
<i>Dolichandrone atrovirens</i> (Roth) K. Schum.	Bignoniaceae	Endemic to Southern India
<i>Dolichandrone falcata</i> (Wall. ex DC.) Seem.	Bignoniaceae	Endemic to Peninsular India
<i>Dyschoriste vagans</i> (Wight) Kuntze	Acanthaceae	Endemic to Peninsular India
<i>Endostemon viscosus</i> (Roth) M.R. Ashby	Lamiaceae	Rare
<i>Eranthemum capense</i> var. <i>concanense</i> (C.B. Clarke) Santapau	Acanthaceae	Endemic to Peninsular India
<i>Euphorbia fusiformis</i> Buch.-Ham. ex D. Don	Euphorbiaceae	Rare

Scientific Name	Family	Status
Gardenia gummifera L.f.	Rubiaceae	Least Concern
Glossocardia bosvallia (L.f.) DC.	Asteraceae	Endemic to India
Grangea maderaspatana (L.) Poir.	Asteraceae	Least Concern
Habenaria rariflora A. Rich.	Orchidaceae	Endemic to Peninsular India
Habenaria roxburghii Nicolson	Orchidaceae	Endemic to Peninsular India
Hardwickia binata Roxb.	Fabaceae	Endemic to India
Hemidesmus indicus var. pubescens Hook.f.	Apocynaceae	Endemic to Peninsular India
Heracleum candolleum (Wight & Arn.) Gamble	Apiaceae	Endemic to Southern India
Indigofera mysorensis DC.	Fabaceae	Endemic to India
Ixora brachiata Roxb.	Rubiaceae	Endemic to Peninsular India
Justicia tranquebariensis L.f.	Acanthaceae	Endemic to Southern India
Leucas hirta (B.Heyne ex Roth) Spreng.	Lamiaceae	Endemic to Southern India
Mallotus stenanthus Muell.-Arg.	Euphorbiaceae	Endemic
Miliusa eriocarpa Dunn	Annonaceae	Endemic to Southern India
Ochna gamblei King ex Brandis	Ochnaceae	Endemic to India
Pavetta crassicaulis Bremek.	Rubiaceae	Endemic to Peninsular India
Radermachera xylocarpa (Roxb.) Roxb. ex K. Schum.	Bignoniaceae	Endemic to Southern India
Rhynchosia cana (Willd.) DC.	Fabaceae	Rare
Santalum album L.	Santalaceae	Vulnerable
Shorea roxburghii G. Don	Dipterocarpaceae	Vulnerable
Strobilanthes carnatica Carine, J.M. Alexander & Scotland	Acanthaceae	Endemic to Southern India
Strobilanthes consanguinea (Nees) T.Anderson	Acanthaceae	Endemic to Southern India
Terminalia paniculata Roth	Combretaceae	Endemic to Southern India
Thunbergia tomentosa Wall. ex Nees	Acanthaceae	Endemic to India
Wrightia indica Ngan	Apocynaceae	Endemic to Western Ghats

*Endemic Vascular Plants of India, Botanical Survey of India, (Singh & al., 2015)

* <https://www.iucnredlist.org>

PLANT SPECIES OF CONSERVATION VALUE



Argyreia cuneata (Willd.) Ker Gawl.



Andrographis serpyllifolia (Rottler ex Vahl) Wight



Achyranthes coynei Santapau



Barleria montana Wall. ex Nees



Dendrobium nanum Hook.f.



Habenaria rariflora A. Rich.



Habenaria roxburghii Nicolson



Cissus woodrowii (Stapf ex T. Cooke) Santapau



Ochna gamblei King ex Brandis



Ixora brachiata Roxb. ex DC.



Diospyros neilgerrensis (Wight) Kosterm.



Indigofera mysorensis DC.



***Peperomia dindygulensis* Miq.**



***Mallotus stenanthus* Muell.-Arg.**



***Wrightia indica* Ngan**



***Leucas hirta* (B. Heyne ex Roth) Spreng.**



***Dolichandrone atrovirens* (Roth) K. Schum.**



***Cryptolepis grandiflora* Wight**



***Thunbergia tomentosa* Wall. ex Nees**



***Dyschoriste vagans* (Wight) Kuntze**



***Strobilanthes consanguinea* (Nees)**
T. Anderson

Strobilanthes carnatica
Carine, J.M. Alexander &
Scotland



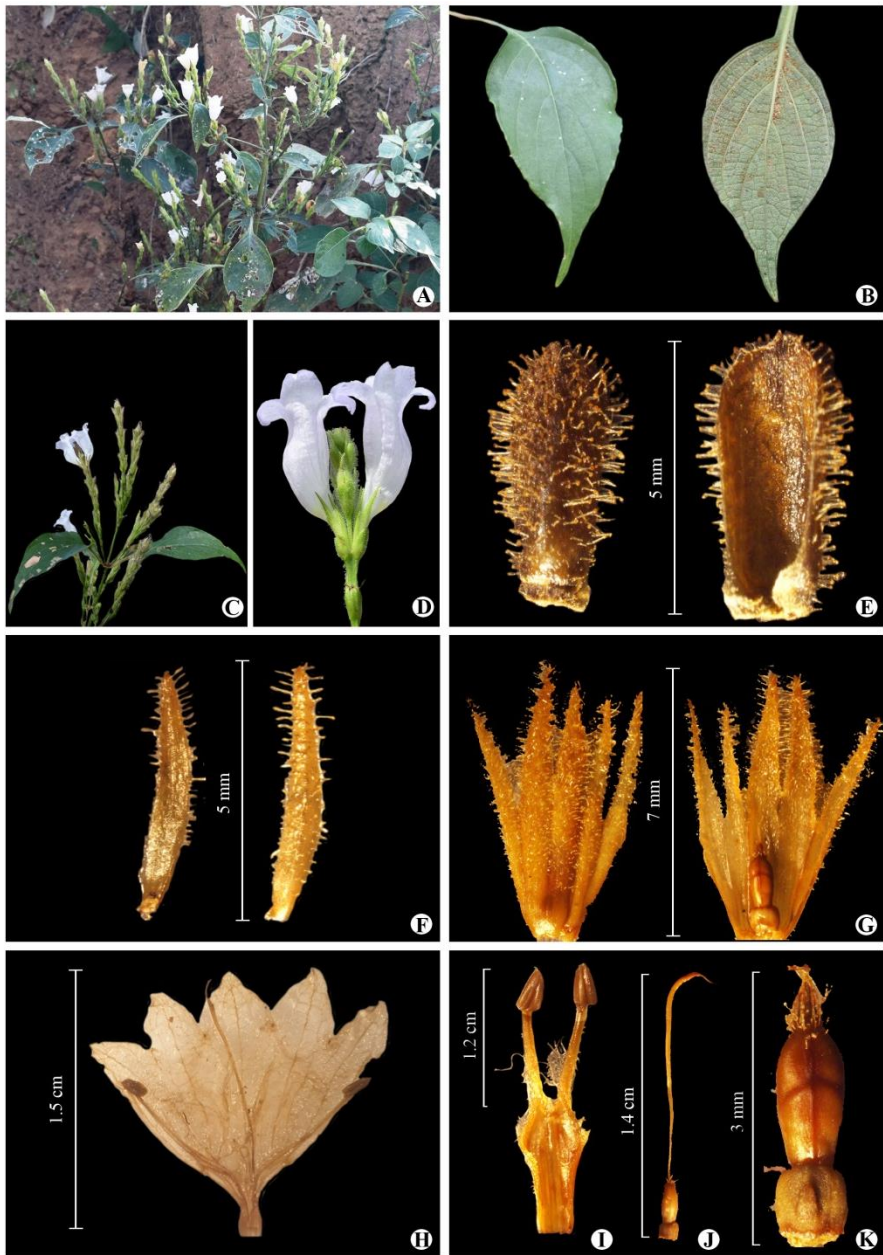


Fig. 1. A. Habit; B. Leaf adaxial and abaxial surfaces; C. Flowering-twig; D. Flowers close-up; E. Bract outer and inner views; F. Bracteole inner and outer views; G. Calyx outer and inner views; H. Corolla split-open; I. Stamens; J. Pistil on a cupular disk; K. Ovary with disk.

Strobilanthes carnatica Carine, J.M. Alexander & Scotland, an endemic and less-known species is recollected after about 40 years from the type locality

Poisonous plants of Cauvery North Wildlife Sanctuary, Tamil Nadu, India

S. No.	Scientific Name	Family Name	Vernacular Name (Tamil)	Poisonous parts	Poisonous action
1	Abrus precatorius L.	Fabaceae	Kundumani	Seed	Poisonous causing vomiting, paralysis, gastroenteritis, liver failure and death. Seeds are eaten by livestock causes severe diarrhoea and weakness.
2	Ageratum conyzoides (L.) L.	Asteraceae	Aappakkoti	Entire plant	Fish poison.
3	Alangium salviifolium (L.f.) Wangerin	Alangiaceae	Alangimaram	Root, Bark	Decoction of root and bark given internally in minute doses cause depresses heart; in large quantities produces unusual respiration.
4	Ammannia baccifera L.	Lythraceae	Kallu-rivi	Entire plant	It produces blisters.
5	Anacardium occidentale L.	Anacardiaceae	Mundiri-kottai	Fruit	Skin irritant, Induce kidney stone formation.
6	Anagallis arvensis L.	Primulaceae	Anicham	Entire plant	It produces intense headache and nausea
7	Andrographis paniculata (Burm.f.) Wall. ex Ness	Acanthaceae	Nelavepu	Seed	Seed powder is used orally to counter snake poisons
8	Argemone mexicana L.	Papaveraceae	Pirammathandu	Fruits and seeds	Seed oil is emetic and narcotic. If consumed by animals cause diarrhoea.
9	Asclepias curassavica L.	Apocynaceae	Ariyaman	Entire plant	Constriction of blood vessels later, dyspnoea, vomiting and diarrhea
10	Barringtonia acutangula (L.) Gaertn.	Lecythidaceae	Samutrapalam	Bark, Root	Crude pounded bark, roots and seeds as fish poison.
11	Butea monosperma (Lam) Taub.	Fabaceae	Porasu	Seed	Fish poison.

Natural Dye Yielding Plants of Cauvery North Wildlife Sanctuary, Tamil Nadu, India

S. No.	BOTANICAL NAME	VERNACULAR NAME	FAMILY	HABIT	PART USED	COLOUR OF THE DYE
1	Abrus precatorius L.	Kundumani	Fabaceae	Climber	Flower, Seed	Black
2	Acacia nilotica (L.) Willd. ex Delile subsp. indica (Benth.) Brenan	Karuvelam	Fabaceae	Tree	Bark	Brown
3	Achyranthes aspera L.	Nayuruvi	Amaranthaceae	Shrub	Flower	Reddish brown/Pink
4	Adhatoda vasica Nees.	Adhatoda	Acanthaceae	Shrub	Leaves, Flower	Yellow/ Green
5	Ageratum conyzoides L.	Aappakkoti	Asteraceae	Shrub	Flower	Brown
6	Artocarpus hirsutus Lam.	Aiyinipila	Moraceae	Tree	Wood	Yellow
7	Basella alba L.	Kodipasali	Basellaceae	Climber	Fruit	Violet
8	Bauhinia racemosa Lam.	Kokkumantharai	Fabaceae	Tree	Bark	Red
9	Bixa orellana L.	Kongaram	Bixaceae	Small tree	Fruit	Red
10	Butea monosperma Roxb. ex Willd.	Kincukam	Fabaceae	Tree	Flower	Red
11	Cassia auriculata L.	Aavaram	Fabaceae	Shrub	Flower	Yellow
12	Cassia fistula L.	Sarakonnai	Fabaceae	Tree	Bark	Yellow
13	Cassia tora L.	Thagarai	Fabaceae	Shrub	Seeds	Yellow
14	Cassytha filiformis L.	Ambarvel	Lauraceae	Climber	Stem	Black
15	Catunaregam spinosa (Thunb.) Tirveng.	Madukarei	Rubiaceae	Shrub	Bark	Brown

Achievements made in the year 2020-2021

- ❑ Number of specimens identified: **3894** specimens were identified
- ❑ Label writing for all specimens is completed.
- ❑ Number of specimens mounted on sheets: **3894** specimens were pasted on mounted.
- ❑ Further accession and barcoding for all collected specimens are under progress.
- ❑ Maps and colour photo plates depicting various habitats and vegetation types and individual plant are under preparation.
- ❑ Finalisation of the manuscript is in progress and Final report will be submitted shortly.

PUBLICATION/PAPER PRESENTATION

MEHALA DEVI R., R. MANIKANDAN, NITHYA S.P. AND M. PREMKUMAR. 2019. Angiosperm Diversity of Cauvery North Wildlife Sanctuary, Tamil Nadu: A Preliminary Assessment Report. In International Symposium of Plant Taxonomy and Ethnobotany, organized by Botanical Survey of India at Kolkata on 13–14 Feb, 2020. (Oral presentation and Abstract published in Book of Abstract, p. 89).

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Thank you