



iJRASET

International Journal For Research in
Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 12 **Issue:** VIII **Month of publication:** August 2024

DOI: <https://doi.org/10.22214/ijraset.2024.64053>

www.ijraset.com

Call: 08813907089

| E-mail ID: ijraset@gmail.com

Floristic Composition of P.G. Centre Nandihalli, VSK University, Ballari District, Karnataka

M.Siddeshwari¹, Nayana N M C², Bhavana³

¹Assistant professor, Taxonomic and Floristic Laboratory, P. G Department of Botany, Vijayanagara Sri Krishnadevaraya University Ballari, Karnataka, India-583105

^{2, 3}P.G student, P.G Department of botany, Vijayanagara Sri Krishnadevaraya University Ballari-583105

Abstract: The current study based on the broad survey on the floristic composition of Jnana sarovara campus Nandihalli, post-graduate centre of VSKUB. This research enumerates total 204 plants species belonging to 156 genera 61 families. Among the collected plant families dominant are Fabaceae with 23 species (11.2%) stands first followed by Euphorbiaceae with 17(8.3%), Poaceae 15(7.3%), Apocynaceae 11(5.3%) and Lamiaceae 8(3.9%). Dominant plants species were *Parthenium hysterophorus*, *Lantana camara*, *Rostellularia procumbens*, *Senna uniflora*, *Dactyloctenium aegyptium*. Also documented the pteridophytes plant species like *Adiantum philippense*, *Perkinsonia acutata*, *Madhuca longidolia*. Among the species this shows IUCN RED LIST, PG Center, Nandihalli. As per research paper most of collected species belongs to , LC 82 (40%) , EN 2 (0.9%), DD 1(0.4%). The survey reveals that, the Herbs 102 species (50%) are dominant followed by the shrubs 50(24.5%), trees 37(18.1%), and climbers 15 (7.3%). Majority of the documented plant species were used against several diseases, either alone or in combination with other plants. Herbal medicine offers safe, gentle and effective treatment. It does not just treat the isolated signs and symptoms of disease but treats the whole of us – physically, mentally because the healing cannot be fully achieved unless all are addressed .

Keywords: Conservation, Medicinal plants, Phytodiversity, Threatened species.

I. INTRODUCTION

“Floristic diversity” can be defined as the diversity of indigenous plants present in a specific area during a particular time period. India is a country rich in a wide variety of Biodiversity. Most of the plants that grow here serve a high medicinal purpose . In India, from the pre-medieval age, holds a possession over natural medicine. Traditional uses of floristic diversity are the foremost vital part of indigenous information system, which is widely practiced by human populations all across the world. This knowledge has been transferred orally from generation to generation.

Floristic studies is nothing but exploring the region by identifying plants and grouping them, data collection of plants present in the region and counting of them. These studies have gifted mankind with the knowledge of plants which are economically important and of high medicinal value. From the ancient time plants are used as food, fodder and medicinal purpose. Studying floristic diversity helps in understanding ecological interactions, conservation needs, and the impacts of environmental change of plant communities. By analyzing floristic composition, researchers can assess biodiversity, monitor changes in plant communities, and identify conservation priorities. It serve as a crucial tool for understanding ecological dynamics and managing natural habitats effectively.(Gowramma, B., Kyagavi, G., Karibasamma, H., & Ramanjinaiah, K. M. 2020)

II. MATERIALS AND METHODS

A. Study area

The plant species were collected during 2023-2024 from Jnana sarovara Nandihalli post-graduate centre,VSKUB located at about 8 KMs from Sandur Town. Sandur talluk is located in the central part of Ballari district and Eastern part of Karnataka state. Sandur is 565m above sea level and lies between 15°00' and 15°15' N latitude and 76°20' and 76°55' E longitude. The total geographical area is 1,243.95 Sq.km. Sandur has a tropical savannah climate which lies on the border of semi-arid type of bellary and hospet,This lush green campus is situated in a valley is surrounded by Hill ranges and spans over a vast expanse of 242.65 Acres area. The climate of the study area is cooler due to its elevation and has recorded a maximum temperature of 42 degrees and a minimum of 6 degrees. It receives 750mm of precipitation but has seen more than 1000mm of rainfall.

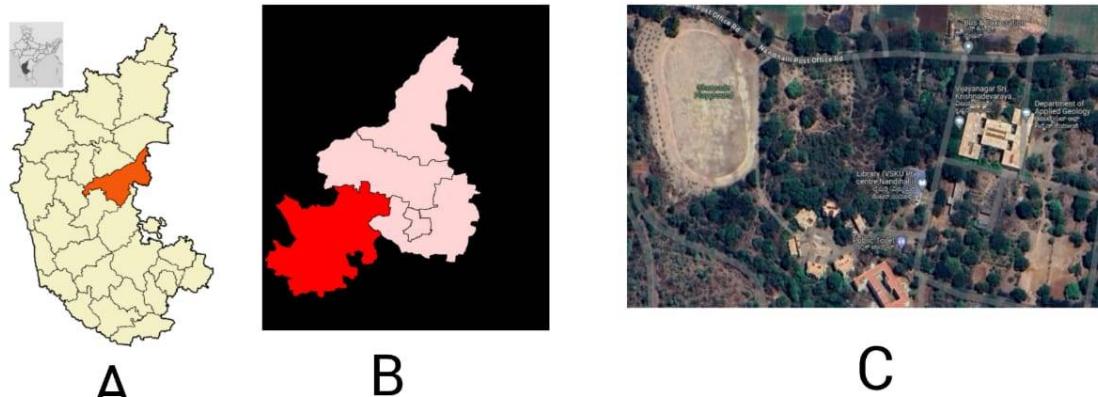


Fig.1: A. Map of Karnataka it indicates Ballari. B. Map of Sandur. C. Satellite map of PG Center, Nandihalli.

III. RESULT AND DISCUSSION

The Floristic composition of nandihalli reveals total 204 plant species belonging to 156 genera 61 families were documented of plant species in nandihalli. Among the plant families Fabaceae 23 species(11.2%) is dominant one followed by Euphorbiaceae 17(8.3%), Poaceae 15(7.3%), Apocynaceae 11(5.3%), Lamiaceae 8(3.9%), Malvaceae and Amaranthaceae 7 (3.4%), Asteraceae 6(2.9%), Convolvulaceae, Rubiaceae and Acanthaceae 5 (2.4%) species each in fig 2.

Among the species this shows IUCN RED LIST, PG Center, Nandihalli. As per research paper most of collected species belongs to , LC 82 (40%) , EN 2 (0.9%), DD 1(0.4%) LC - Least Concern, VU - Vulnerable, EN - Endangered, DD - Data Deficient. fig 3.

Habit of plant shows majority were the herbs 102(50%) are dominant ones followed by the shrubs 50(24.5%), trees 37(18.1%), climbers 15(7.3%). Total 204 plant species were tabulated including botanical names, vernacular names, IUCN status, habit and their uses fig 4.

In terms of the life form the majority of the plants belongs to perennial (84%), and annual(14%), biennial(2%) fig 5.

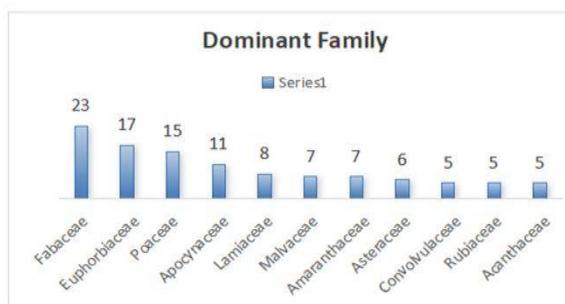


Fig.2: Dominant Family



Fig.3: IUCN Status

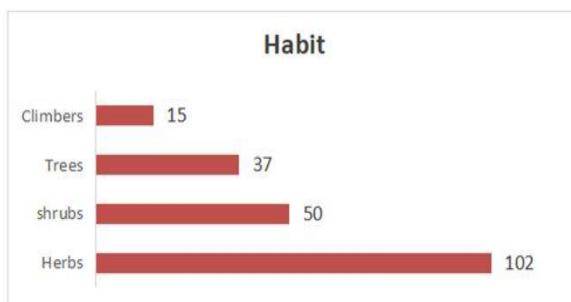


Fig.4 : Habit

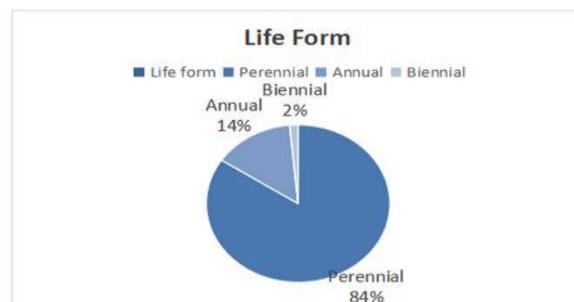


Fig.5 : Life Form



Fig.6:

- A. *Terminalia catappa* L.
- C. *Senna uniflora* (Mill.) H.S.Irwin & Barneby
- E. *Caesalpinia pulcherrima* (L.) Sw.
- G. *Euphorbia heterophylla* L.
- I. *Amaranthus viridis* L.
- K. *Tridax procumbens* L.
- N. *Ocimum tenuiflorum* L.
- P. *Andrographis paniculata* (Burm.f.) Nees
- R. *Bougainvillea spectabilis* Willd.
- T. *Cleome forskoalii* vahl

- B. *Lantana camara* L.
- D. *Azadirachta indica* A.Juss
- F. *Peltophorum pterocarpum* (DC.) K.Heyne
- H. *Rostellularia procumbens* (L.) Nees
- J. *Polygala eriopetra* D C.
- M. *Clitoria ternatea* L.
- O. *Phyllanthus maderaspatensis* L.
- Q. *Dactyloctenium aegyptium* (L.) Willd.
- S. *Croton bonplandianus* Baill.
- U. *Hibiscus lobatus* (Murray) Kuntze

Table I. Shows Floristic composition of Nandihalli, in ballari district. It contains their Family, Varnacular Names, IUCN, Habitat, Life forms and Uses.

Sl. No	Name of species	Family	Varnacular name	IUCN	Habitat	Lif e for ms	Uses
1	<i>Acacia auriculiformis</i> A.Cunn. ex Benth.	Fabaceae	Northern black wattle	LC	Tropical and subtropical	P	Digestive issues
2	<i>Acalypha ciliata</i> Forssk.	Euphorbiaceae	Hairy acalypha	NA	Road side	P	Used for food
3	<i>Acalypha indica</i> L.	Euphorbiaceae	Koppa	NA	Road sides	P	Fever and skin condition
4	<i>Acalypha wilkesiana</i> Müll.Arg.	Euphorbia ceae	Fire dragon	LC	Forest and coastal areas	P	Ornamental
5	<i>Achyranthes aspera</i> L.	Amaranthaceae	Uttarani	NA	waste places	P	Facilitating delivery and asthma
6	<i>Aegle marmelos</i> (L.)	Rutaceae	Bellada hannu	NA	Tropical and subtropical	P	Fever, digestive issue
7	<i>Ailanthus excelsa</i> Roxb.	Simaroubaceae	Mahanimba	DD	Tropical and subtropical	P	Antimicrobial and antioxidant
8	<i>Allamanda blanchetti</i> A.DC.	Apocynaceae	Allamanda	NA	Tropical regions	P	Fever and skin diseases
9	<i>Allium cepa</i> L.	Amarylidacee	Onion	NA	Road sides	P	Used in food
10	<i>Allium sativum</i> L.	Amarylidacee	Garlic	NA	Tropical and subtropical	P	Used in food
11	<i>Aloe vera</i> (L.) Burm.f.	Asphodelaceae	True aloe	NA	Rocky area	P	Digestive issues
12	<i>Alpinia mutica</i> L.	Zingerbiaceae	Small shell ginger	LC	Tropical and subtropical	P	Skin problems
13	<i>Alternanthera ficoidea</i> (L.) Sm.	Amaranthaceae	Brazilian show flower	NA	Garden	P	Antisepic
14	<i>Alternanthera pungens</i> Kunth	Amaranthaceae	Mullu honaganne soppu	NA	lawns pasures	P	Heatitis, Bronchitis
15	<i>Alternanthera sessilis</i> (L.) R.Br. ex DC.	Amaranthaceae	Honagonne soppu	NA	Wet land areas	P	Treat wounds and bronchities
16	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Spiny amaranthus	NA	Waste lands	P	Used as food
17	<i>Amberboa ramosa</i> (Roxb.) Jafri.	Asteraceae	Bitterweed	NA	Cultivated fields	A	Insecticide
18	<i>Anisomeles malabarica</i> (L.) R.Br. ex Sims	Lamiaceae	Gandu biranagida	NA	Dry and moist deciduous	P	Fragrances, cosmetics
19	<i>Annona squamosa</i> L.	Annonaceae	Seetaphala	LC	Tropical and subtropical	P	Furniture making
20	<i>Apium graveolens</i> L.	Apiaceae	Wild celery	LC	Wetlands	B	Fodder
21	<i>Apluda mutica</i> L.	Poaceae	Blunt tipped	NA	Grassland	P	Traditional

			flatgrass					medicine
22	<i>Argemone mexicana</i> L.	Papaveraceae	Mexican poppy	NA	H	Tropical and subtropical	A	Digestive issues
23	<i>Aristida adscensionis</i> L.	Poaceae	Ascension grass	NA	H	Road side	A	Landscaping
24	<i>Aristolochia bracteolata</i> Lam.	Aristolochiaceae	Bracteate-birthwort	NA	C	Tropical and subtropical	P	Traditional medicine
25	<i>Aristolochia indica</i> L.	Aristolochiaceae	Duck flower	NA	C	Tropical and subtropical	P	Antimicrobial Properties
26	<i>Asparagus racemosus</i> Willd.	Asparagaceae	Indian asparagus	NA	S	Tropical and subtropical	P	Stress and menstrual problems
27	<i>Azadirachta indica</i> A.Juss.	Meliaceae	Neem tree	NA	T	Tropical and subtropical	P	Used as insecticide
28	<i>Basella alba</i> L.	Basellaceae	Bussley soppu	NA	H	Fellow lands	A	Herbal folk medicne
29	<i>Bergera koenigii</i> (L.)	Rutaceae	Curry leaves	LC	T	Tropical and subtropical	P	Used as food
30	<i>Biophytum sensitivum</i> (L.) DC.	Oxalidaceae	Little tree	NA	T	Tropical and subtropical	P	Anti-inflammatory
31	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	adakaputtana gida	NA	H	waste places	P	Jaundice
32	<i>Boerhavia erecta</i> L.	Nyctaginaceae	Punarnava	NA	H	sandy and rocky soil	P	Traditional medicine and food
33	<i>Bougainvillea glabra</i> Choisy	Nyctaginaceae	paper flower	NA	C	Road sides	p	Fever and respiratory issues
34	<i>Bouteloua rigidiseta</i> (Steud.) Hitchc.	Poaceae	Bouteloua grass	LC	H	Rocky outcrops	p	Ornamental
35	<i>Brassaia setionophilla</i> Endl.	Araliaceae	Brassaiopsis	NA	S	woodlands	P	Ornamental
36	<i>Bryophyllum pinnatum</i> (Lam.) Oken	Crassulaceae	Miracle leaf	NA	H	Dry woodlands	P	Respiratory issues
37	<i>Cadaba fruticosa</i> (L.) Druce	Capparaceae	Cadaba	NA	S	Dry woodlands	p	Natural dye
38	<i>Calotropis procera</i> (Aiton) W.T.Aiton	Apocynaceae	Giant milk weed	LC	S	Road sides	P	Rheumatism and skin disease
39	<i>Capparis zeylanica</i> L.	Capparaceae	Wild caper	NA	C	Dry forest	P	Natural dye
40	<i>Cascabela thevetia</i> (L.)	Apocynaceae	Yellow oleander	LC	S	Road sides	P	Ornamental
41	<i>Cassia javanica</i> L.	Fabaceae	Pink shower	LC	T	Tropical forest	p	Ornamental
42	<i>Cassia roxburghii</i> DC.	Fabaceae	Indian laburnum	LC	T	Wood lands	p	Furniture making
43	<i>Catharanthus roseus</i> (L.) G.Don	Apocynaceae	Vinca rosea	NA	H	Road sides	P	Diabetes, cancer
44	<i>Celosia argentea</i> L.	Amaranthaceae	Plumecelosia	LC	H	Road sides	A	Natural dye

45	<i>Cenchrus ciliaris</i> L.	Poaceae	Buffelgrass	LC	H	Tropical and subtropical	P	Fodder
46	<i>Citrus limon</i> (L.) Burm. F.	Rutaceae	Nimbu	LC	S	Garden	P	Food
47	<i>Cleome felina</i> L.f.	Cleomaceae	Adavi sassive	NA	H	rocky places	A	To cure stomach alinmnets
48	<i>Cleome gynandra</i> L.	Cleomaceae	Ajagandha	NA	H	waste places	A	Alleviation of malnutrition
49	<i>Cleome viscosa</i> L.	Cleomaceae	Nayi sassive	NA	H	Rocky palces	A	Blood diseases
50	<i>Clerodendrum indicum</i> (L.)	Lamiaceae	bag flower	NA	S	Forest	P	Ornamental
51	<i>Clinopodium umbrosum</i> (M.Bieb)Kuntze	Lamiaceae	Sanmiguel savy	NA	H	Grass land	P	To treat cut and wounds
52	<i>Clitoria ternatea</i> L.	Fabaceae	Shanku pushpa	NA	H	Grass land	P	memory enhancer
53	<i>Coccus hirsutus</i> (L.) W.Theob.	Nenispermaceae	Hairy coccus	NA	C	Grass land	P	Insecticide
54	<i>Cocos nucifera</i> L.	Aracaceae	Tengina mara	NA	T	Tropical coastal area	P	Food
55	<i>Colocasia</i> Schott	Aracaceae	Elehant ear	NA	H	wet lands	p	Cosmetic
56	<i>Commelina erecta</i> L.	Commelinaceae	White outh day flower	LC	H	Grass land	P	To cure skin rashes and sores
57	<i>Conocarpus erectus</i> L.	Combretaceae	Button wood	LC	S	Mangrove forest	P	Timber
58	<i>Cordia dichotoma</i> G.Forst.	Boraginaeae	indian cherry	LC	T	Forest	P	Food
59	<i>Cordia sebestena</i> L.	Boraginaeae	Cordia	LC	T	Dry forest	P	Ornamental
60	<i>Crossandra infundiduliformis</i> (L.) Nees	Acanthaceae	Fire cracker flower	NA	S	Grassland	P	Insecticide
61	<i>Crotalaria hebecarpa</i> (DC.) Rudd	Fabaceae	Hill rattlepod	NA	H	Tropical and subtropical	P	Fodder
62	<i>Crotalaria juncea</i> L.	Fabaceae	Indian hemp	NA	H	Tropical	A	Ornamental
63	<i>Crotalaria retusa</i> L.	Fabaceae	Rattleweed	NA	H	Tropical and subtropical	A	Insecticide
64	<i>Croton bonplandianus</i> Baill.	Euphorbiaceae	utti gida	NA	H	Road sides	P	Cure against ring worms
65	<i>Cryptostegia grandiflora</i> R.Br.	Apocynaceae	Rubber wine	NA	C	Moist shaded areas	P	Rubber producion
66	<i>Cyanotis axillaris</i> (L.) D.Don ex Sweet	Commelinaceae	Pilea	LC	H	Tropical and subtropical	P	Used as food
67	<i>Cyanotis cristata</i> (L.) D.Don	Commelinaceae	Cats tail	LC	H	Moist shaded areas	P	Ornamental
68	<i>Cyanotis tuberosa</i> (Roxb.) Schult. & Schult.f.	Commelinaceae	Blue commelina	NA	H	Tropical and subtropical	P	Ornamental
69	<i>Cycas circinalis</i> L.	Cycadaceae	Queen sago	EN	S	Tropical and subtropical	P	Antioxidant properties

70	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Barmuda grass	NA	H	Tropical and subtropical	P	Control soil erosion
71	<i>Cyperus compressus</i> L.	Cyperaceae	Flat sedge	LC	H	Grassland	P	Fodder
72	<i>Cyperus rotundus</i> L.	Cyperaceae	Coco grass	LC	H	Tropical and subtropical	P	Anti-inlammatory
73	<i>Dactyloctenium aegyptium</i> (L.) Willd.	Poaceae	Egyptian grass	NA	H	Grass lands	A	To treat small pox and wounds
74	<i>Dalbergia sissoo</i> Roxb. ex DC.	Fabaceae	Indian rose	LC	T	Tropical and subtropical	P	Heart problems and dysentery
75	<i>Datura stramonium</i> L.	Solanaceae	Thorn apple	NA	S	Waste lands	B	Traditional mediine
76	<i>Delonix regia</i> (Boj. ex Hook.) Raf.	Fabaceae	Flame tree	LC	T	Tropical and subtropical	P	Used as ornamental purpose
77	<i>Digera muricata</i> (L.)Mart	Amarantaceae	Gorjepalya	NA	H	Terrestrial	A	Cure kidney stone
78	<i>Dodonaea viscosa</i> Jacq.	Sapindaceae	Sticky dodonea	LC	S	Forest	P	Stomach pain and skin infection
79	<i>Dracaena trifasciata</i> (Prain) Mabb.	Asparagaceae	Devil,s toungue	NA	H	Gardens and parks	P	Urinary diseases and fungal infection
80	<i>Echinochloa colonum</i> (L.)	Poaceae	Jungle rice	LC	H	Wetlands	A	Used as food
81	<i>Elephantopus scaber</i> L.	Asteraceae	Elephants foot	NA	H	Grassland	P	Ethnomedicine
82	<i>Enicostema axillare</i>	Gentianaceae	Billirajaka	LC	H	Foot hills	A	To treat cough amd diabetes
83	<i>Eragrostis japonica</i> (Thunb.) Trin.	Poaceae	Japanes love graass	LC	H	Road sides	P	Fodeer
84	<i>Euphorbia heterophylla</i> L.	Euphorbiaceae	Mexican fire plant	LC	H	Road sides	A	Asthma and bronchitis
85	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Hallu kudi	NA	H	Road sides	A	Traditional used for female disorder
86	<i>Euphorbia hypericifolia</i> L.	Euphorbiaceae	Graceful spurge	NA	H	Disturbed areas	P	Ornamental
87	<i>Euphorbia serpens</i> Kunth	Euphorbiaceae	Thorni spurge	NA	H	Road sides	P	Warts and coughs
88	<i>Euphorbia tithymaloides</i> L.	Euphorbiaceae	Fires ticks	LC	S	Topical and subtropical	P	Folk medicine
89	<i>Evolvulus nummularius</i> (L.) L.	Convolvulaceae	Dollar weed	NA	H	Moist areas	P	Fever and burns , cuts
90	<i>Evolvulus alsinoides</i> (L.)L.	Convolvulaceae	Vishnukrantha	NA	H	Wet forest to dessert	P	Fever and skin diseases
91	<i>Ficus benghalensis</i> L.	Moraceae	Banyan fig	NA	T	Road sides	P	Traditional medicine
92	<i>Ficus carica</i> L.	Moraceae	Common fig	LC	S	Forest areas	P	Used as food
93	<i>Ficus religiosa</i> L.	Moraceae	Peepal tree	LC	T	Forest area	P	Inflammatory swellings and

								burns
94	<i>Flueggea leucopyrus</i> Willd.	Euphorbiaceae	Silver bush	LC	S	Tropical and subtropical	P	Treating cancer
95	<i>Gloriosa superba</i> L	Colchicaceae	Glory lilly	LC	H	Grassland	P	Snake bites and scorpion stings
96	<i>Hardwickia binata</i> Roxb.	Fabaceae	Anjan	LC	T	Dry forest	P	Used as timber
97	<i>Helicteres isora</i> L.	Malvaceae	Indian screw tree	LC	S	Forest	P	Used as antigastric modic disorders
98	<i>Hemelia patens</i> Jaceq.	Rubiaceae	Flat-top hemelia	LC	S	Road sides	P	Used as herbal medicine
99	<i>Hemidesmus indicus</i> (L.) R.Br.	Apocynaceae	Falls sarsaparilla	NA	C	Grassland	P	Urinary diseases and snake bites
100	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Chinese hibiscus	NA	S	Tropical and subtropical	P	Infections, hair loss and gastric ulcers
101	<i>Hyptis suaveolens</i> (L.) Poit.	Lamiaceae	Chan	NA	H	Tropical and grassland	P	Indigestion and cold
102	<i>Indigofera tinctoria</i> L.	Fabaceae	Chinese indigo	NA	S	Tropical and forest	P	Dyeing
103	<i>Ipomoea aquatica</i> Forssk.	Covolvulaceae	Water morning glory	LC	H	Ponds and lakes	P	Ring worm and fever
104	<i>Ipomoea cairica</i> (L.) Sweet	Covolvulaceae	Coast morning glory	LC	C	Subtropical and tropical	P	Rashes and fever
105	<i>Ischaemum indicum</i> (Houtt.) Merr.	Poaceae	Indian centipede grass	LC	H	Waste areas and road side	A	Ornamental
106	<i>Jacaranda mimosifolia</i> D.Don	Bignoniaceae	Blue jacaranda	VU	T	Tropical and subtropical	P	Acne and wounds
107	<i>Jasminum multiflorum</i> (Burm. f.) Andrews	Oleaceae	Star jasmin	NA	C	Gardens and forest	P	Used for manufacturing process
108	<i>Jasminum officinale</i> L.	Oleaceae	Common jasmin	EN	C	Forest garden	P	Abdominal pain and liver disorders
109	<i>Jasminum sambac</i> (L.) Aiton	Oleaceae	Arabian jasmin	NA	C	Forest garden	P	Used for perfume
110	<i>Jatropha glandulifera</i> Roxb.	Euphorbiaceae	Spotted jatropa	VU	S	Forests and road side	P	Snake bites
111	<i>Jatropha gossypiifolia</i> Carl Linnaeus	Euphorbiaceae	Bellyache bush	LC	S	road side and forest	P	Anti-inflammatory and anti-microbial
112	<i>Jatropha mollissima</i> (Pohl) Baill.	Euphorbiaceae	Soft jatropa	NA	S	Dry forest	P	Used as biofuel
113	<i>Lagascea mollis</i> cav.	Asteraceae	Hairy ragweed	NA	H	Graslands with roadsides	A	Cold and cough
114	<i>laguncularia racemosa</i> L.	Combretaceae	White mangrove	LC	S	Coastal areas	P	Fevers and ulcers
115	<i>Lantana camara</i> L.	Verbenaceae	Lantana	NA	S	Road side	P	High blood pressure and

								malaria
116	<i>Limonia acidissima</i> L.	Rutaceae	Wood apple	NA	T	Forests	P	Diarrhea and Dysentry
117	<i>Livistonia chinensi</i> R. Br.	Arecaceae	Chinese palm	NA	H	Tropical and subtropical	P	Landscaping
118	<i>Magnolia champaca</i> (L.)	Magnolia ceae	Yellow champaca	LC	T	Tropical and subtropical	P	Anti-inflammatory, anti-oxidant
119	<i>Manilkara zapota</i> (L.) P.Royen	Sapotaceae	Chiku	NA	T	Tropical and subtropical	P	Antifungal
120	<i>Merremia gangetica</i> (L.) Cufodontis	Convolvulaceae	Indian jalapa	NA	C	Tropical and subtropical	P	Headache,nose troubles
121	<i>Misopates orontium</i> (L.) Raf.	Serophul ariaceae	Phasey beans	NA	H	Road sides	A	Used for food
122	<i>Monoon longifolium</i> Sonn. B.Xue & R.M.K.Saunders	Annonaceae	Indian guanabana	LC	T	Tropicaal region	P	Hypertension
123	<i>Morinda tinctoria</i> Roxb.	Rubiacea ea	Indian mulberry	NA	S	Dry deciduous forest	P	Cancers, gastrics
124	<i>Neltuma juliflora</i> (Sw.) Raf.	Fabaceae	Mesquite	NA	T	Waste lands, forest	P	Used for fuel
125	<i>Nelumbo nucifera</i> Gaertn.	Nelumbo naceae	Lotus	NA	H	Ponds and lakes	P	sunstroke, vomiting of blood
126	<i>Nerium oleander</i> L.	Apocynaceae	Oleander	LC	S	Road sides	P	Ringwarms, herpis
127	<i>Ocimum kilimandschaicum</i> gurke	Lamiacea ea	Tulasi gida	NA	S	Road sides	P	Cold,cough
128	<i>Ocimum tenuiflorum</i> L.	Lamiacea ea	Tulasi gida	NA	H	Waste lands	P	Cough, Cold
129	<i>Oldenlandia corymbosa</i> L.	Rubiacea ea	Flat-top mille graines	LC	H	Side bars	A	Anti-cancer
130	<i>Opuntia Elatior</i> Mill.	Cactacea e	Shappathi kalli	LC	S	Dry areas	P	Analgesic anticancerous
131	<i>Opuntia monacantha</i> (Willd.)	Cactacea e	Jamudu	VU	T	Low land forest	P	Diabetes
132	<i>Oxalis corniculata</i> L.	Oxalidaceae	Hulli soppu	NA	H	Degraded forest	A	To treat scurvy
133	<i>Panicum repens</i> L.	Poaceae	Torpedo grass	LC	H	Tropical and subtropical	P	Food for animals
134	<i>Parthenium hysterophorus</i> L.	Asteracea e	Congress grass	NA	H	Road sides	A	Leaves and tems used for insectes
135	<i>Pavonia odorata</i> willd.	Malvacea e	Fragrant pavonia	NA	S	Tropical and subtropical	P	Anti-cancer
136	<i>Pavonia zeylonica</i> (L.) cav.	Malvacea e	Pink pavonia	NA	S	Tropical and subtropical	P	Respiratory issues
137	<i>Pedalium murex</i> L.	Pedaaliac eae	Gaint devil's claw	NA	S	Tropical and subtropical	P	Ulcer, asthama
138	<i>Peltophorum pterocarpum</i> (DC.) K.Heyne	Fabaceae	Yellow Poinciana	NA	T	Tropical regions	P	Mucular pain, skin troubles

139	<i>Pentalinon luteum</i> (L.) B. F. Shansen	Apocynaceae	Yellow pentalion	NA	C	Scrubland, shores	P	Ornamental
140	<i>Pergularia daemia</i> (Forssk.) Chiov.	Apocynaceae	Umbrella flower	NA	C	Road sides	p	Medicinal
141	<i>Phyla nodiflora</i> (L.) Greene	Verbenaceae	Frog fruit	NA	H	wet lands	P	Knee pain, liver disorder
142	<i>Phyllanthus maderaspatensis</i> L.	Euphorbiaceae	Madras lilly	LC	H	Dry deciduous forest	P	Liver disorder, headache
143	<i>Phyllanthus reticulatus</i> Poir.	Phyllanthaceae	Yellow phyllanthus	LC	S	River banks	A	Asthma and promote fertility
144	<i>Phyllanthus urinaria</i> L.	Phyllanthaceae	Leaf flower	NA	S	Road sides	P	Bacterial and viral infection
145	<i>Pigea enneasperma</i> (L.) P.I.Forst.	Violaceae	Purusharatahna	NA	H	Dry deciduous forest	P	unspecified medicinal disorder
146	<i>Plumbago auriculata</i> Lam.	Plumbaginaceae	Cape leadwort	NA	S	Wetlands	P	Ornamental
147	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Doctor bush	NA	S	Dry forest	P	Traditional medicine
148	<i>Polygala erioptera</i> DC.	Polygalaceae	Sweet polygala	NA	S	Grasslands	P	Gastrointestinal disorder
149	<i>Pongamia pinnata</i> (L.) Pierre	Fabaceae	Pongam oil tree	NA	T	Moist places	P	Diarrhea and dyspepsia
150	<i>Portulaca grandiflora</i> Hook .	Portulacaceae	Eleven o'clock	NA	H	Dry place	A	swelling and pain
151	<i>Portulaca oleracea</i> L.	Portulacaceae	Purslane	NA	H	Diuretic	A	Antisetic
152	<i>Portulaca quadrifida</i> L.	Portulacaceae	Goni soppu	NA	H	Dry deciduous forest	P	Used for food
153	<i>Psidium guajava</i> L.	Myrtaceae	Apple guava	LC	S	Tropical and subtropical	P	Immunity
154	<i>Rhynchosia minima</i> (L.) DC.	Fabaceae	Ghattaeare	LC	H	Dry deciduous forest	P	Medicinal disorder
155	<i>Ricinus communis</i> L.	Euphorbiaceae	Castor oil plant	NA	S	Tropical regions	P	Liver disorder, headache
156	<i>Rostellularia procumbens</i> (L.) Nees	Acanthaceae	Creeping Roostellularia	NA	S	Tropical and subtropical	P	Backache and asthma
157	<i>Ruelia tuberosa</i> L.	Achanthaceae	Wild pentunais	NA	H	Dry deciduous forest	P	Ayurvedic medicine
158	<i>Ruellia patula</i> Jacq.	acanrhaceae	Loneviolet	LC	H	Dry deciduous forest	P	To treat eye sore
159	<i>Sacrostema acidum</i> (Roxb.)Voigt	Asclepiadaceae	Hambukalli	NA	H	Dry deciduous forest	P	Snake bite
160	<i>Santalum album</i> L.	Santalaceae	Indian sandalwood	LC	T	Dry deciduous forest	P	Used for skin care
161	<i>Saraca asoca</i> (Boj. ex Hook.) Raf.	Fabaceae	Ashoka tree	VU	T	Ever green forest	P	Itching and ulcers
162	<i>Senna alata</i> (L.) Roxb.	Fabaceae	Candle bush	LC	S	Wet lands	P	Anti-fungal and



								ant-bacteria
163	<i>Senna auriculata</i> (L.) Roxb.	Fabaceae	Avaram senna	LC	S	Tropical and subtropical	P	Tumory and urinary discharges
164	<i>Senna occidentalis</i> (L.) Link	Fabaceae	Coffee senna	NA	H	Waste land	P	Anti-bacterial and anti-fungal
165	<i>Senna siamea</i> (Lam.) Irwin et Barneby	Fabaceae	Kasod tree	LC	T	Forest	P	Typhoid fever and jaundice
166	<i>Senna uniflora</i> (Mill.) H.S.Irwin & Barneby	Fabaceae	Single-flowered senna	NA	H	Disturbed areas	P	Constipation
167	<i>Sesamum alatum</i> Thonn.	Pedaliaceae	Sesame bush	NA	H	Tropical and subtropical	P	Fodder
168	<i>Sesamum indicum</i> L.	Pedaliaceae	Sesame	NA	H	Tropical and subtropical	A	Hypertension
169	<i>Setaria verticillata</i> (L.) P.Beauv.	Poaceae	Hooked bristle grass	NA	H	Cultivated fields	A	Fodder
170	<i>Sida acuta</i> Burm.f.	Malvaceae	Common wire weed	NA	H	Road sides	P	Anti-aging
171	<i>Solanum lycopersicum</i> L.	Solanaceae	Tomato	NA	H	Cultivated fields	P	sunburn and cancer
172	<i>Solanum nigrum</i> L.	Solanaceae	Kakky hannu soppu	NA	H	Waste land	A	Antioxidant
173	<i>Spathodea campanulata</i> P.Beauv.	Bignoniaceae	Fountian tree	LC	T	Tropical dry forest	P	Skin and liver disorder
174	<i>Spermacoce hispida</i> L.	Rubiaceae	Buttonweed	NA	S	Forest area	P	Urinary infection
175	<i>Spermacoce verticillata</i> L.	Rubiaceae	Shrubby buttonweed	NA	S	Road sides	P	Diarrhea and skin disorder
176	<i>Sphagnum palustre</i> L.	Sphagnaceae	Marsh Sphagnum	NA	H	Moist wet lands	P	Craft and floral arrangement
177	<i>Sporobolus coromandelianus</i> (Retz.) Kunth	Poaceae	Indian dropseed	NA	H	Grassland	P	Fodder
178	<i>Sporobolus indicus</i> (L.) R.Br.	Poaceae	Rat tail grass	LC	H	Tropical regions	P	Reduce swellings
179	<i>Syzygium cumini</i> (L.)	Myrtaceae	java plum	LC	T	Semi evergreen forest	P	Anti-inflammatory, anti-oxidant
180	<i>Tabebuia aurea</i> (Silva Manso) Benth. & Hook.f. ex S.Moore	Bignoniaceae	Golden trumpet tree	LC	T	Dry forest	P	Snake bites
181	<i>Tagetes erecta</i> L.	Asteraceae	French marigold	LC	H	Crop lands	A	Ulcers and respiratory diseases
182	<i>Tamarindus indica</i> L.	Fabaceae	Imli	LC	T	Tropical and subtropical	P	Stomach pain and through pain
183	<i>Tecoma stans</i> (L.) Juss. ex Kunth	malvaceae	Yellow bells	LC	H	Waste land	P	fever and skin condition
184	<i>Tecomaria capensis</i> (Thunb.) Spach	Bignoniaceae	Yellow bells	LC	S	Moist areas	P	Agriculture
185	<i>Tectona grandis</i> L.f.	Lamiaceae	Burmee teak	VU	T	Tropical and subtropical	P	Fever and malaria
186	<i>Tetrapogon tenellus</i> (Roxb.) Chiov.	Poaceae	Slender four	LC	H	Tropical and	P	Insecticide

			awned grass			subtropical		
187	<i>Thuja occidentalis</i> L.	Cupressaceae	Eastern white cedar	LC	T	Rockyhill side	P	Annalwarts, genital
188	<i>Thunbergia erecta</i> (Benth.) T.Anderson	acanrhaceae	King's mantle	LC	S	Tropical regions	P	Dipression and anxiety
189	<i>Tinospora cordifolia</i> (Thunb.) Miers	Menispermaceae	Heart leaved moon seed	LC	C	Tropical and subtropical	P	Traditional medicine
190	<i>Trachyspermum ammi</i> (L.) Sprague ex Turrill	Apiaceae	Ajwain	LC	H	Cultivated fields	A	Anti-microbial
191	<i>Tragia cannabina</i> L.	Euphorbiaceae	Indian stinging nettle	NA	H	Strem banks	P	Cure male Impotece
192	<i>Tragia involucrata</i> L.	Euporbia caeae	Noseburn	LC	H	Waste lands	P	Urinary tract disorders
193	<i>Tragus roxburghii</i> Panigrahi	Poaceae	Rocksabarg bakri	LC	H	Tropical and subtropical	A	Fodder
194	<i>Tribulus terrestris</i> L.	Zygophylaceae	Puncture wine	LC	H	Road sides	A	Chest pain and heart problems
195	<i>Trichodesma indicum</i> (L.) R. Br.	Boragina ceae	Indian trichodesma	LC	H	Grassland	P	Traditional medicine
196	<i>Trichodesma zeylanicum</i> (Burm.f.) R.Br.	Boragina ceae	Ceylon trichodesma	LC	H	Grassland	P	Traditional medicine
197	<i>Tridax procumbens</i> L.	Asteracea e	Kariballi	NA	H	Road sides	P	Medicine
198	<i>Typha angustifolia</i> L.	Thypacea e	Aapu gida	LC	H	Irrigaion channels	P	To treat hematuria
199	<i>Urena lobata</i> L.	Malvacea e	Caesarweed	LC	S	Road sides	P	Dyssentry
200	<i>Volkameria inermis</i> L.	Lamiacea ea	Smooth volkameria	LC	S	Tropical regions	P	Anti-inflammatory, anti-cancer
201	<i>Wrightia tinctoria</i> (Roxb.) R.Br.	Apocynaceae	Sweet indrajao	LC	T	Dry deciduous forest	P	Anti-diabetes and fertility
202	<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Bare	LC	T	Grasslands	p	Wound healing
203	<i>Ziziphus nummularia</i> (Burm. F.) Wight & Walk	Rhamnaceae	Mulluhannu	LC	S	Hillsides	P	Indigestion inflammation
204	<i>Ziziphus oenopolia</i> (L.) Mill.	Rhamnaceae	Barige	LC	S	Deciduous forest	P	Antihepatotoxic, antiulcer

ABBREVIATION: IUCN Status-NA=Not Applicable, LC=Least Concern, VU=Vulnerable, EN - Endangered, DD - Data Deficient; Habit - H=Herb, S-Shrub, C-Climbers, T-Tree; Life Forms - P=Perennials, A=Annual, B=Biennial.

IV. CONCLUSION

The current study provides the basic information about the medicinal uses of plant species and provides the information about the distribution and description of plant species which is useful for further research and field work in sandur region. It is conducted that, 204 plant species are documented in the study area which belongs to 156 genera 61 families were documented of plant species in nandihalli. Among the plant species the dominant plants are - *Parthenium hysterophorus*, *Lantana camara*, *Rostellularia procumbens*, *Senna uniflora*, *Dactyloctenium aegyptium*. And Among the plant families Fabaceae is dominant one followed by Euphorbiaceae, Poaceae, Apocynaceae, Lamiaceae, Malvaceae, Amaranthaceae, Asteraceae, Convolvulaceae, Rubiaceae, Acanthaceae. And in that field we also documented the pteridophytes plants like - *Spathodia Companualata*, *Adiantum philippense*, *Perkinsonia aculata*,



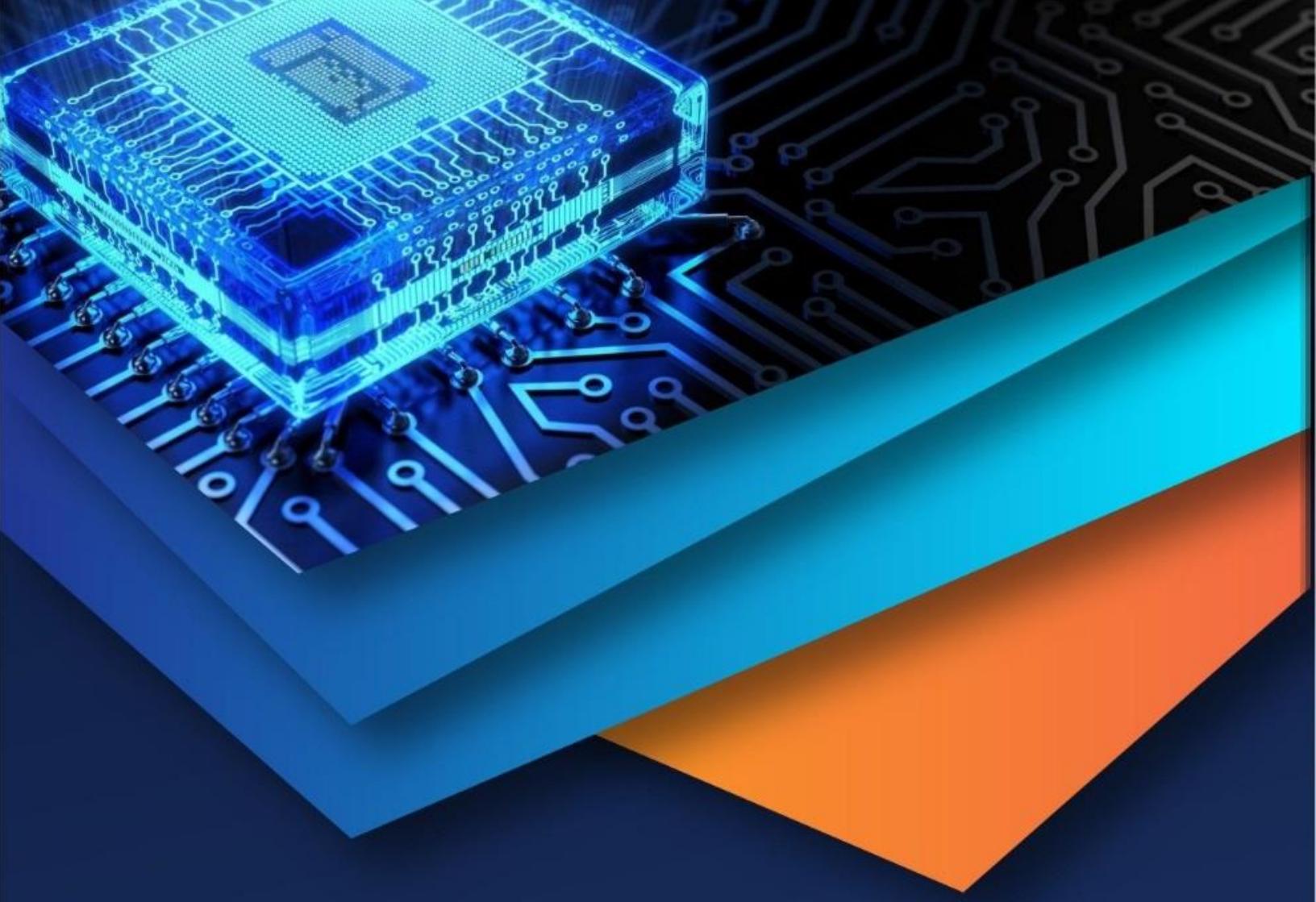
Madhuca Longidolia . These plant species can be used for the various purposes like medicinal uses and can also be used for the cosmetics, fragrances and food. Hence, these plant species could be taken up for further pharmacological and clinical studies useful in the formulation of novel drugs for diabetes, jaundice etc.

V. ACKNOWLEDGMENT

Authors were thankful to P.G Department of Botany and VSKUB University for providing facilities to conduct research.

REFERENCES

- [1] Addo-Fordjour, P., Obeng, S., Anning, A. K., & Addo, M. G. (2009). Floristic composition, structure and natural regeneration in a moist semi-deciduous forest following anthropogenic disturbances and plant invasion.
- [2] Gowramma, B., Kyagavi, G., Karibasamma, H., & Ramanjinaiah, K. M. (2020). Documentation of major medicinal plants in Sandure of Karnataka, India. *Med Aromat Plants*, 9, 348.
- [3] Kolar, A. B., Palanivel, S., Noor Mohamed, M. S., Mohamed, S. S., Khan, M. S., Raj, S. G., ... & Nowshath, A. (2021). Floristic study on angiosperms surrounding the Medavakkam Lake, Chengalpattu District, Tamil Nadu, India. *Plant Archives* (09725210), 21(1).
- [4] Kotresh, K., & Siddeshwari, M. (2020). Alien flora of Ballari district, Karnataka, India. *International Journal of Trend In Scientific Research And Development*, 5(1), 167-173.
- [5] Murthy, S. M., & Vidyasagar, G. M. (2012). Traditional herbal remedies for Jaundice in Bellary district, Karnataka, India. *Medicinal Plants-International Journal of Phytomedicines and Related Industries*, 4(4), 240-243.
- [6] Prasad, B. V. G., & Chakravorty, S. (2015). Effects of climate change on vegetable cultivation-a review. *Nature Environment and Pollution Technology*, 14(4), 923.
- [7] Siddeshwari, M. (2021). FLORISTIC ENUMERATION OF BALLARI FORT KARNATAKA. *Asian Journal of Plant and Soil Sciences*, 18-22.
- [8] Vidyasagar, G. M., & Siddalinga, M. S. (2013). Medicinal plants used in the treatment of Diabetes mellitus in Bellary district, Karnataka.
- [9] Yeshivas, Y., Tadele, E., & Tiruneh, W. (2019). The dynamics of medicinal plants utilization practice nexus its health and economic role in Ethiopia: a review paper. *International Journal of biodiversity and conservation*, 11(1), 31-47.



10.22214/IJRASET



45.98



IMPACT FACTOR:
7.129



IMPACT FACTOR:
7.429



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)