



A NOTE ON PHYTODIVERSITY AND PHYTOCHEMISTRY OF IMPORTANT PLANT SPECIES OF VIGNAN UNIVERSITY CAMPUS, VADLAMUDI, ANDHRA PRADESH

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ABSTRACT

Vignan University (VU) (formerly Vignan's Engineering College, VEC) is a premier institution in Andhra Pradesh, located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14 km from Guntur and 11km from Tenali, the college is a virtual haven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling playgrounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, VEC has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. VU impressive academic credentials stand as testimonial to its commitment to offer quality education & research. It has a campus of good number of plants. It includes landscaping gardens, exotic elements and natural forest elements, includes rare and endemic categories of trees, shrubs, herbaceous members, climbers etc. The present paper deals with a good number of 110 plant species and their medicinal & economic importance. The plant species are mentioned in the text with the latest name followed by relevant synonyms if any, habit, fl. & fr. season, local name, family, conserv. status as per IUCN and phytochemical chemical composition are discussed in this article.

KEYWORDS: Phytodiversity, Phytochemistry, Plant species, Vignan University



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INTRODUCTION

Vignan University (formerly Vignan's Engineering College, VEC) is a premier institution in Andhra Pradesh. It is having the splendid avenue, imposing buildings and sprawling playgrounds, and the verdure in and around the campus. The college is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, VEC has been striving to promote high quality standards in technical education & research for the aspirants of Engineering Studies.

Topography

Vignan University is located in the serene environs of Vadlamudi on the Guntur- Tenali highway, about 14 km from Guntur and 11 km from Tenali. The nearest railway station Tenali is located on Chennai – Kolkata trunk line.

MATERIALS AND METHODS

Vignan University has campus with a good number of plants. It includes landscaping gardens, exotic elements and natural forest elements, includes rare and endemic categories of trees, shrubs, herbaceous members, climbers etc. An inventory floristic study was conducted in the college campus areas for the duration of twelve months by the author and his colleagues, recording the details of the respective flowering & fruiting seasons, medicinal and economic uses of the plant species. The chemical composition of the plant species (Phytochemistry) was checked with the standard literature sources.

Figure 1
SELECTED PLANT SPECIES OF MEDICINAL & ECONOMIC IMPORTANCE



Acacia caesia (L.) Willd.



Aegle marmelos (L.) Correa.



Ailanthus excelsa Roxb.



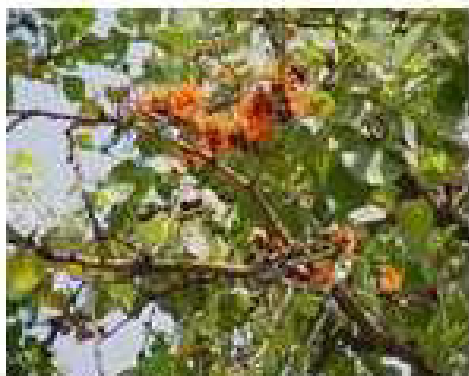
Allamanda cathartica Linn.



Araucaria heterophylla (Salisb.) Franco



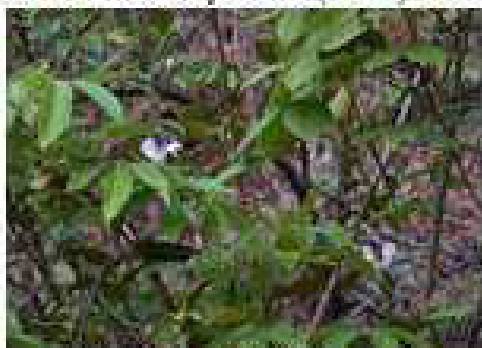
Aristolochia indica L.



Butea monosperma (Lam.) Tsub.



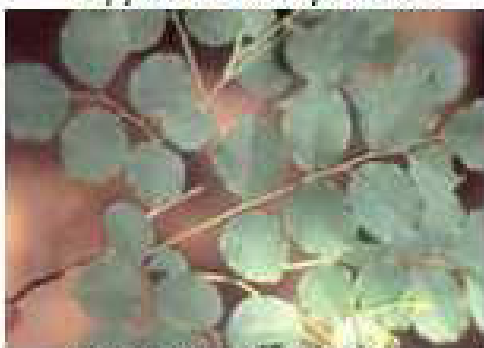
Callistemon lanceolatus DC.



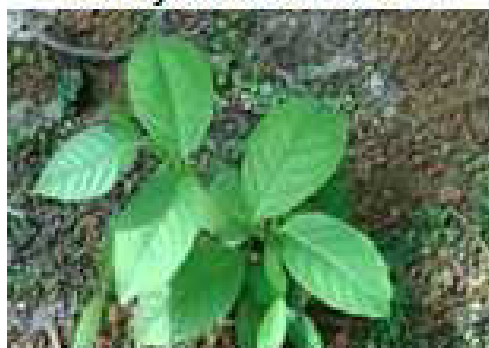
Capparis brevispina DC.



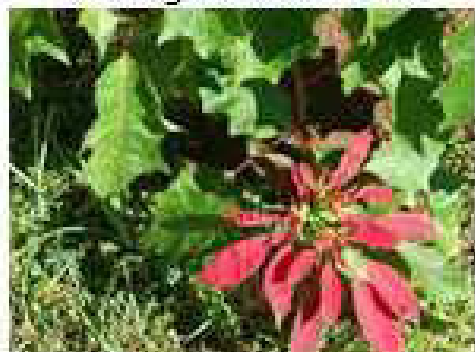
Cassytha filiformis Linn.



Dalbergia latifolia Roxb.



Diospyros melanoxylon Roxb.



Euphorbia pulcherrima Willd.



Evolvulus alsinoides (L.) L.



Gymnema sylvestre
(Retz.) R.Br. ex. Schul.



Hemidesmus indicus (L.) R.Br.



Hybanthus enneaspermus
(Linn.) F. Muell.



Mimosops elangi Linn.



Mitragyna parviflora (Roxb.) Kerth.



Pongamia pinnata (L.) Pierre.



Solidago chinensis Osbeck.



Tecoma stans (L.) H.B. & K.



Tectona grandis L.f.



Tylophora indica Burm.D & Merr.

Table 1
Enumeration of Plant species

S.No.	Scientific Name	Habit	Fl. & Fr.	Family	Common Name/s	IUCN Conserv . Status	Phyto-chemical Composition	Medicinal & other Economic uses
1.	<i>Abrus precatorius</i> L.	Cl	Aug.-Jan.	Fabaceae	Guriginja	--	Abrin, Hypaphorine	Sd.-Contraceptive, Hair tonic & Leucoderma
2.	<i>Abutilon indicum</i> (L.) Sweet.	Sh	Throu. year	Malvaceae	Tutturubenda	--	Asparagin	Lf. -Dysentery, Piles.
3.	<i>Acacia caesia</i> (L.) Willd.	T	Oct.-Dec.	Mimosaceae	Korinda/ Korintha	VU	Tannin, Alkaloid	St.B.-Skin diseases against microorganisms
4.	<i>Acalypha indica</i> L.	H	Throu. year	Euphorbiaceae	Muripinda	--	Acalyphine, Sitosterol	Lf.- Tooth ache, Dental problems
5.	<i>Achyranthus aspera</i> L.	H	Throu. year	Amaranthaceae	Uttareni	--	Achyranthine, betalin	Lf.- paste cuts & wounds Rt. - paste Tooth ache.
6.	<i>Achras zapota</i> Linn.	T	Throu. year	Sapotaceae	Sapota	--	Glucoside, Tannin, Saponin	St.B- Tonic, Febrifuge Fr.-Preventive against Biliousness & Diuretic
7.	<i>Aegle marmelos</i> (L.) Correa.	T	Jan.-Mar.	Rutaceae	Bilva, Maredu	VU	Aegeline, Marelosin	Rt. -powder Dysentery, decoc. Blood pressure. Lf. - Jaundice
8.	<i>Aerva lanata</i> (L.) Juss.ex.Schultes	H	Oct.-Apl.	Amaranthaceae	Pindikura	--	Tannins	Wh. Plant- Juice Leucorrhoea, Urethral stones
9.	<i>Agave cantala</i> Roxb.	Sh	Mar.-Jul.	Agavaceae	Agave	--	Hecogenin	Lf. Juice Venereal diseases
10.	<i>Ailanthus excelsa</i> Roxb.	T	Mar.-Sept.	Simroubaceae	Peddamanu	R	Ailantic acid	St.B. - decoction Contraceptive.
11.	<i>Albizia lebeck</i> (L.)Benth.	T	Throu. year	Mimosaceae	Dirisina	--	Friedlin, Saponin	St.B.- decoction Asthma & Cough
S.No.	Scientific Name	Habit	Fl.& Fr.	Family	Common Name/s	IUCN Conserv . Status	Phyto-chemical Composition	Medicinal & other Economic uses

12.	<i>Allamanda cathartica</i> Linn.	Sh	Throu. year	Apocynaceae	Almندا, golden trumpet vine	--	Alkaloid, Glucoside	St.B.- Hydragogue in ascites Lf.- Cathartic, laxative and emetic
13.	<i>Aloe vera</i> (L.)Burm.	Sh	Oct.- Jan	Liliaceae	Kalabanda	--	Aloin, Isobarbalion	Lf. Pulp- Burns, Dysentery
14.	<i>Anisomelus malabarica</i> (L.) R.Br. ex Sims.	Sh	Throu. year	Lamiaceae	Mogabeera	--	Alkaloid, Volatile oils	Lf.- juice Fever, Rheumatism
15.	<i>Annona squamosa</i> L.	T	Apl.- Nov.	Annonaceae	Seetaphalam	--	Anonine, Corydine	Lf. -paste Toothache, Migraine, Seed paste applied on the head to kill lice, Contraceptive agent, Tooth ache
16.	<i>Aristolochia indica</i> L.	Cl	Nov.- Mar.	Aristolochiaceae	Eswari	--	Aristoline	Rt.- Fevers, Leucoderma & Snake bites (Antivenom)
17.	<i>Artocarpus heterophyllus</i> Lam.	T	Feb.- Aug.	Moraceae	Panasa, Jack fruit	--	Cyanomaclurin Tannin, Artostenone	Rt.,Lf.& Fr.- Aphrodisiac, Diarrhoea, Sedative & Skin diseases
18.	<i>Asparagus racemosus</i> Willd.	Cl	Throu. year	Liliaceae	Satavari	--	Sarsapogenin	Rt.- powder Galactagogue, Vigour
19.	<i>Araucaria heterophylla</i> (Salisb.) Franco	Tree	-	Araucariaceae	Monkeys puzzle	VU	Tannin	Some species use for ornamental purpose and some in paper Industry.
20.	<i>Azadirachta indica</i> A.Juss.	T	Mar.- Jun.	Meliaceae	Vepa, Neem	--	Azadirachtin, Nimbidine	Lf. -decoction Anthelmintic, Antiseptic
21.	<i>Bambusa arundinacea</i> (Retz.)Willd.	T	Oct.- Jan.	Poaceae	Veduru	--	Cyanogenic glucoside, Silica, Benzoic acid	Lf.-Emmenagogue, cold & cough Bamboo manna-Tonic, Fever, Cough & Snake bite
22.	<i>Barleria proinites</i> L.	H	Nov. - Feb.	Acanthaceae	Adavi kanakambaram	--	Glucoside, Potassium	Lf.& Rt.-powder Asthma & Cough
S.No.	Scientific Name	Habit	Fl.& Fr.	Family	Common Name/s	IUCN Conserv . Status	Phyto-chemical Composition	Medicinal & other Economic uses
23.	<i>Bauhinia racemosa</i> Lam.	T	Nov.- Mar.	Caesalpiniaee	Aari chettu, Deva kanchanam	--	Beta-sitosterol, Protein	St. B.& Lf. - decoction Throat pain, Malaria, Antidysenteric, Diarrhoea
24.	<i>Boerhavia diffusa</i> L.	H	Throu. year	Nyctaginaceae	Atikamamidi	--	Punarnavine, Potassium Nitrate	Lf. Paste- Cuts & Wounds, decoction for Fever
25.	<i>Borasuss flabellifer</i> L.	T	Oct.- Jul	Palmae	Thati, Palmyrah	--	Vitamin B Complex	Lf.,Fl. & Stalks - Respiratory & Gastric ailments, wounds, Ulcers and skin problems
26.	<i>Butea monosperma</i> (Lam.) Taub.	T	Feb.- May	Fabaceae	Moduga	VU	Butein, Butrin	Sd.-paste Contraceptive, Fl. - decoction urinary disorders
27.	<i>Callistemon lanceolatus</i> DC.	Sh.	June- Sept.	Myrtaceae	Bottlebrush	--	Leptospermone mesotrione	Ornamental, antibacterial Rt. Herbicidal properties
28.	<i>Calotropis gigantea</i> (L.) R.Br.	Sh	Throu. year	Asclepiadaceae	Jilledu	--	Calotropin, Akundarin	Sd. -Powder Asthma & Cough Lf.-paste for burns
29.	<i>Capparis brevispina</i> DC.	Sh	Jan.- Oct.	Capparaceae	Indian Caper, Aridonda	VU	Bioflavanoid, Rutin.	Hepatic stimulants & improving liver function. Used to treatment for arteriosclerosis, diuretic ,vermifuge & tonic. anaemia, arthritis and gout.
30.	<i>Carissa spinarum</i> L.	Sh	Jul.- Sept.	Apocynaceae	Kalivi	--	Alkaloid, Salicylic acid	Sd.-juice for Tooth ache
31.	<i>Cassia</i>	Sh	Nov.-	Caesalpiniaee	Thangedu	--	B- Sitosterol,	Lf.- paste for Bone

	<i>auriculata</i> L.		Apl.	e			Tannins	fracture, inflammations St.B.-decoction for Stomach ache
32.	<i>Cassia fistula</i> L.	T	Mar.- Dec.	Caesalpiaceae	Rela	--	Sennoside-a, Sennoside-b	St.B.-powder for Skin diseases, Fr.-paste for Constipation (laxative)
S.No.	Scientific Name	Habit	Fl & Fr.	Family	Common Name/s	IUCN Conserv Status	Phyto-chemical Composition	Medicinal & other Economic uses
33.	<i>Cassythia filiformis</i> Linn.	Cl	Jan.- Mar.	Lythraceae	Nulu teega, Akashavalli	--	Laurotetanine (Alkaloid)	Pl. - Tonic, Alterative, Urethritis, Insecticidal, Ulcers
34.	<i>Catharanthus roseus</i> (L.) G. Don.	H	Throu. year	Apocynaceae	Billaganneru	--	Vinblastine, Vincristine	Lf.-paste Skin diseases Rt.- Gonorrhoea
35.	<i>Clerodendrum phlomidis</i> L.f.	Sh	Dec.- Mar.	Verbenaceae	Takkeda, Glory tree	--	Resin	Lf.-paste Emmenagogue Twigs- bug repellent
36.	<i>Cissampelos pariera</i> L.	Cl	June- Sept.	Menispermaceae	Abuta	VU	Hayatine (dl- beberine) grisabine and grisabutine	Antibacterial, antioxidant, diuretic, antispasmodic, uterine relaxant, antiseptic, aphrodisiac, expectorant, hepatoprotective stimulant and tonic.
37.	<i>Cissus quadrangularis</i> L.	Cl	Throu. Year	Vitaceae	Nalleru	--	Vitamin C, Carbohydrates Tartaric acid.	St.- Antiseptic, Anthelmintic Bone fractures, Gen.weakness
38.	<i>Cleome viscosa</i> Linn.	H	Jun.- Dec.	Cleomaceae	Kukkavaminta	--	Alkaloids, Saponins,Tannin	Lf.-juice Tooth pain, Headache
39.	<i>Clitorea ternatea</i> Linn.	Cl. Sh.	Oct.- Jan.	Fabaceae	Shankupushpi	--	Tannin	Rt.& Lf.- Dropsy, Bronchitis & Constipation Pods & Lf. -cooked as vegetable.
40.	<i>Coccinia grandis</i> (L.)J.Voigt. Hort.	Cl	Sept.- Jan.	Cucurbitaceae	Donda	--	Alkaloid, Glucokenin	Lf. -juice Conjunctivitis, Galactogogue
41.	<i>Crossandra infundibuliformis</i> (L.) Nees.		Jun.- Mar.	Acanthaceae	Kanakambaram	--	Flavonoids, Saponins, Terpenoids, Cardiac glyco.	Lf.-Antibacterial, antioxidant activity Plant- as ornamental .fl. decorative
42.	<i>Crotalaria verrucosa</i> Linn.	H	Nov.- Feb.	Fabaceae	Gilakati	--	Flavonoids, steroids,steroidal nucleus.	Lf.- Scabies,Impatigo & Skin diseases
S.No.	Scientific Name	Habit	Fl & Fr.	Family	Common Name/s	IUCN Conserv Status	Phyto-chemical Composition	Medicinal & other Economic uses
43.	<i>Cuscuta reflexa</i> Roxb.	Cl	April - July	Cuscutaceae	Akashavalli	--	Cuscutine, Quercetin	Wh.Plant -juice Gastric troubles, Wounds,Purgative, Astringent
44.	<i>Cynodon dactylon</i> (Linn.) Pers.	H	Throu. Year	Poaceae	Garika,Dharba, Doorva	--	Protein, Fibre, Carbohydrates	Rt.juice-Bleeding wounds, Menorrhagia
45.	<i>Cyperus rotundus</i> L.	H	Jul. - Dec.	Cyperaceae	Thunga musti	--	Copadiene, Copaine	Rt. Decoction for Fevers
46.	<i>Dalbergia latifolia</i> Roxb.	T	Aug.- Dec.	Fabaceae	Jitregi	VU	Tannin	St.B & Sd. -for Asthma, Rheumatic swellings
47.	<i>Datura metel</i> L.	Sh	June - Dec.	Solanaceae	Ummetha	--	Atropine, Daturine	Rt-powder for Asthma Lf-juice applied for hair loss
48.	<i>Delonix regia</i> (Hook.) Raf.	T	Apl.- Jun.	Caesalpiaceae	Turai	--	Leucocyanidin.	Fl.-paste for Dysmenorrhoea Lf.-Rheumatism, Flatulence
49.	<i>Dichrostachys cinerea</i> (L.) Wight & Arn.	Sh	Sept.- Jan.	Mimosaceae	Veluturu	--	Protein, minerals	St.B-powder for Joint pains Rt.-juice for Vigor

								an anthelmintic, purgative and strong diuretic
50.	<i>Diospyros melanoxylon</i> Roxb.	T	Mar.-Jul.	Ebenaceae	Tendu, Beedi leaf	--	Triterpene, Beta-sitosterol	St.B-anti-hyperglycemic activity, anti-plasmodia effects (<i>P.falciparum</i>)
51.	<i>Eclipta prostrata</i> (L.) L. Mant.	H	Throu. year	Asteraceae	Guntagaligeru	--	Wedelolactone	Rt.-paste Cataract Lf.-juice Cuts & Wounds Lf.-juice + gingelly oil-Hair tonic
52.	<i>Emblica officinalis</i> Gaertn.	T	Mar.-July.	Euphorbiaceae	Indian Gooseberry, Amla	--	Vitamin 'C Tannin, Phyllemlin	Anaemia, jaundice, dyspepsia, diabetes, asthma and bronchitis, antacid and antitumor agent.
53.	<i>Eucalyptus globulus</i> Labill.	T	April-Oct.	Myrtaceae	Neelagirithaillam	--	Essential oil Cineole,	Lf.oil-Antiseptic, Burns, Rheumatism, Mosquito repellent, Root-Purgative
S.No.	Scientific Name	Habit	Fl & Fr.	Family	Common Name/s	IUCN Conserv . Status	Phyto-chemical Composition	Medicinal & other Economic uses
54.	<i>Euphorbia hirta</i> Linn.	H	Throu. year	Euphorbiaceae	Palachetta	--	Triterpenes, phytosterols,	Wh.Plant-Cough, Asthma, Boils Dysentery,urino-genital disorders
55.	<i>Euphorbia milii</i> Des Moul.	Sh	Throu. year	Euphorbiaceae	Crown of thorns, Christ plant,	--	Molluscicide, euphorbin. milliamine	Latex prevents Schistosomiasis (disease of the live), Inhibits Aspergillus,cure for cancer & warts
56.	<i>Euphorbia pulcherrima</i> Willd.	Sh	Throu. year	Euphorbiaceae	Poinsetta, Christmas star	--	Anthocyanins	Lf. & Fl.- Skin diseases, Laxative & Lactation
57.	<i>Evolvulus alsinoides</i> (L.)L.	H	Throu. year	Convolvulaceae	Vishnukrantham	--	Alkaloids	Lf.-paste for Jaundice Wh.Plant -decoction Cold & Cough
58.	<i>Feronia elephantum</i> Linn.	T	May-Oct.	Rutaceae	Velaga	--	Citric acid	Lf. & Fr.-Astringent, Tonic, Carminative
59.	<i>Ficus benghalensis</i> L.	T	Feb.-Sept.	Moraceae	Marri	--	Cautochoric, Tannins	Lf.-paste for Cuts, Wounds & Ulcers
60.	<i>Ficus hispida</i> Linn.f.	T	Throu. year	Moraceae	Wild Fig	--	Tannin, glycoside, Caoutchoric,	St.B & Fr.-Emetic, Laxative, Wounds promotes Lactation, Nephroprotector,
61.	<i>Ficus racemosa</i> L.	T	Jun.-Sept.	Moraceae	Atti, Medi	--	Albuminoids, Silica, Phosphorus	St.B.-decoction for Diabetes, Fr.-paste for Diarrhoea
62.	<i>Ficus religiosa</i> L.	T	Jul-Dec.	Moraceae	Raavi	--	Cautochoric, Tannins	St.B.-paste poultice for Ulcers Lf. -paste for skin diseases
63.	<i>Gomphrena decumbens</i> Jacq.	H	Jul-Nov.	Amaranthaceae	Globe Amaranth, Coastal Globe Amaranth	--	Oleuropein glycosides, phytosterols, flavonoids,	Treatment of bronchial asthma, diarrhoea, fever, analgesic, tonic, carminative, antimalaria l & diuretic
64.	<i>Grewia rhamnifolia</i> Heyne ex. Roth	T	May-August	Tiliaceae	Kothi Puduka, Tenechettu	--	Triterpinoids, Tannin	Decoction -emollient, enema, indigestion, eczema. Fr.-edible
S.No.	Scientific Name	Habit	Fl & Fr.	Family	Common Name/s	IUCN Conserv . Status	Phyto-chemical Composition	Medicinal & other Economic uses
65.	<i>Gymnema sylvestre</i> (Retz.)R.Br.ex. Schul.	Cl	Aug.-Dec.	Asclepiadaceae	Podapatri	VU	Gymnemic acid	Lf.-decoction for Diabetes

66.	<i>Gynandropsis pentaphylla</i> (L.)DC.	H	Jun.-Dec.	Cleomaceae	Vaminta	--	B,D-glucoside, B- Sitosterol	Lf.-juice Ear ache, Anthelmintic
67.	<i>Hemidesmus indicus</i> (L.) R.Br.	Cl	Oct.-Feb.	Asclepiadaceae	Sugandhipala	VU	Hemedesmine Coumarine	Rt.-decoction for Gen weakness, tonic.
68.	<i>Hevea brasiliensis</i> (Willd.) Muell.-Arg.	T	July-Nov.	Euphorbiaceae	Rubber tree, Indian rubber	--	Protein ,fats, heveaflavone, vitexin,	Used for all types of rubber products. Kernels oil, used in soap making, paints, varnishes
69.	<i>Hibiscus rosasinensis</i> L.	Sh	Throu. year	Malvaceae	Mandaram	--	Tarxeryl acetate B-sitosterol	Dried Lf. & Fl. oil extract used as Hair tonic.
70.	<i>Hybanthus enneaspermus</i> (Linn.)F.Muell.	H	Nov.-Jan.	Violaceae	Ratnapurusha, Ramya	--	Violacine, Flavonoids, Steroidal nucl.	Wh. Plant- decoction for Cough, improves vitality, Aphrodisiac
71.	<i>Ipomoea aquatica</i> Forsk.	Sh	March-Oct.	Convolvulaceae	Tutikura	--	Ipomocin	Pl. juice –Emetic, Purgative, Gen. debility for ladies
72.	<i>Lanata camara</i> Linn.	Sh		Verbenaceae	Jukamalli	--	Triterpenoids	Wh.Plant- Epilepsy,eczema,wounds Fistula & Antidote for snake venom
73.	<i>Lawsonia inermis</i> L.	T	Sept.-Mar.	Lauraceae	Gorintaku, Henna	--	Glucoside, Tannic acid	Lf.-paste Conjunctivitis, juice-Hair tonic & Spermatorrhoea
74.	<i>Leucas aspera</i> (Willd.)Link.	H	Throu. year	Lamiaceae	Tummi	--	Lignans, Flavonoids,	Lf.-juice for Cough, Cold & Jaundice
75.	<i>Mangifera indica</i> L.	T	Feb.-July.	Anacardiaceae	Mamidi	--	Beta-Carotene Citric acid,K,Mn Ascorbic acid	Potential antioxidant, releaves from indigestion
S.No.	Scientific Name	Habit	Fl & Fr.	Family	Common Name/s	IUCN Conserv . Status	Phyto-chemical Composition	Medicinal & other Economic uses
76.	<i>Melia azadirachta</i> Linn.	T	April-Oct.	Meliaceae	Turakavepa	--	Tetranortriterpenoids, Azadirachtin,	Lf.-diuretic, anthelmintic, antilithic. Leaf and flower-febrifuge, sedative, emmenagogue.St.B.- antileprotic.
77.	<i>Mimosa pudica</i> L.	H	Sept.-March	Sapotaceae	Attipatti, Touch me not	--	B-sitosterol, Tannins, mimosine	Antibacterial, antidepressant, aphrodisiac, urogenital disorders, piles, dysentery, sinus.
78.	<i>Mimosops elangi</i> Linn.	T	April-June	Mimosaceae	Spanish cherry	--	Beta-sitosterol Betulinic acid,Tannin	Extract of flowers used against heart diseases, leucorrhoea, menorrhagia and antidiuretic
79.	<i>Mitragyna parviflora</i> (Roxb.) Kerth.	T	April-June.	Rubiaceae	Nirukadam, Kadamba	--	Alkaloids,Glyosides & Tannin	St.B & Lf.-decoction used for fevers, colic, muscular pains, aphrodisiac & cough
80.	<i>Morinda pubescence</i> J.E. Smith	T	July-Nov.	Rubiaceae	Indian Mulberry, Morind tree, Toguru	--	Mg,Ca, Zn,Cu & Fe, Morindin (Glucoside)	Lf.- digestive, caraminative, febrifuge & tonic
81.	<i>Murraya koenigi</i> L.	T	April.-Sept.	Rutaceae	Curryleaf , sweet neem leaves	--	Koenign, girinimbine Carbazole	Antidiabetic, antioxidant, hepatoprotective, anti-hypercholesterolemic
82.	<i>Nerium oleander</i> L.	Sh	Throu. year	Apocynaceae	Nerium	--	Neriene, Oleandrine, glycosides,	Nausea, vomiting, cardiac arrhythmias, hypotension
83.	<i>Nyctanthus arbor-tristis</i> L.	Sh	Jul-Jan.	Nyctanthaceae	<i>Paarijaata</i>	--	Nyctanthine D-mannitol, β -sitosterol, carotenoids	Immunostimulant, hepatoprotectiveantileishmanial, antiviral and antifungal activity,arthritis,fevers,l

S.No.	Scientific Name	Habit	Fl & Fr.	Family	Common Name/s	IUCN Conserv . Status	Phyto-chemical Composition	axative Medicinal & other Economic uses
84.	<i>Ocimum americanum</i> L.	H	Sept.- March	Lamiaceae	Vana tulasi, Hoary basil	--	Flavonoids Xanthomicrol,	Vata, kapha, helminthiasis, anorexia, dyspepsia, pruritis, leprosy, vomiting, migraine & fever
85.	<i>Opuntia dellinii</i> (Ker-Gawl.) Haw.	Sh.	Feb.- April	Cactaceae	Bonthajemudu Prickley pear,	--	Fatty acid, citric acid, resin	Plant powder contraceptive , cough, Ophthalmia
86.	<i>Pedilanthus tithymalooides</i> (L.) Poit.	H	March-Sept.	Euphorbiaceae	Japanese poinsettia	--	Diterpene esters. β -sitosterol Octacosanol	Root -a powerful emetic. Irritant & caustic properties, used in venereal troubles
87.	<i>Peltoforum pterocarpum</i> (DC.)K. Heyne	T	Nov.- March	Fabaceae	Copper pod, golden flamboyant	--	Proteases (Lepidopterans), Tannin	Grown as an ornamental tree, foliage as fodder crop, bark produces a yellow dye.
88.	<i>Pergularia daemia</i> (Forssk.) Chiov.	Cl	Jun.- Jan.	Asclepiadaceae	Dustapuchettu, Jittupaku, gurtichettu	--	Oaemine (Glucoside) tannins, steroids	Anti-inflammatory, hepatoprotective, anticancer, antidiabetic, antioxidant, antibacterial, antifungal, anti-infertility
89.	<i>Phyllanthus amarus</i> Schum & Thonn	H	Throu. year	Euphorbiaceae	Nelaueri	--	Phyllanthine quercetin, astragaline,	Jaundice, gonorrhoea and diabetes against chronic & acute Hepatitis B
90.	<i>Pithecellobium dulce</i> (Roxb.) Benth	T	Jan.- July	Caesalpiniaceae	Simachinduga, Simachinta.	--	Triterpene saponins (pithedulosides)	Pulpy edible aril, Bark-febrifuge, decoction-for dysentery, Lf.-intestinal disorders, Sd. for ulcer.
91.	<i>Plumeria rubra</i> L.	T	Feb.- Aug.	Apocynaceae	Deva ganneru	--	Apocyanin, amyridin, lupeol, kautscuk, resin	Treatment for sores and made into soothing infusions. Gonorrhoea, edema (swelling), abscess
92.	<i>Polyalthia longifolia</i> (Sonn.) Thw.	T	Mar.- Sept.	Annonaceae	Buddha Tree, Indian mast tree	--	Diterpenoids, kolavenic acid solidagonal acid	Antibacterial & antifungal, trunk & the bark - manufacturing of fiber. Timber is used for making boxes, pencils and long masts
S.No.	Scientific Name	Habit	Fl & Fr.	Family	Common Name/s	IUCN Conserv . Status	Phyto-chemical Composition	Medicinal & other Economic uses
93.	<i>Pongamia pinnata</i> (L.) Pierre.	T	Mar.- Oct.	Fabaceae	Kanuga	--	Karamin, Pongapin kanugin,	Rheumatism, anthelmintic, abdominal enlargement, diseases of the eye, skin, vagina, piles, tumors,
94.	<i>Prosopis chilensis</i> (Molina) Stuntz.	T	Feb.- Sept.	Mimosaceae	Chilean Mesquite Tree	--	Apigenin, quercetin, tannin & tryptamine	Protein supplement to poor grass, benefiting from shelter and agroforestry systems.
95.	<i>Psidium guava</i> L.	Sh.	Throu. year	Myrtaceae	Guava, Jama	--	Vit.- A & C, folic acid, dietary, minerals K, Cu & Mn.	Antioxidant, juice is often used in culinary sauces (hot or cold), as well as artisan candies, dried snacks, fruit bars, desserts
96.	<i>Pupalia lappacea</i> (L.) Juss	H	Sept.- Nov.	Amaranthaceae	Pappaku	--	Stearic acid, stigmasterol, - sitosterol,	Treatment for jaundice, abdominal colics, cephalgias, diarrheas, paralysis, erectile

								dysfunction, vomiting and malaria
97.	<i>Sida cordifolia</i> L.	Sh	Oct.-Mar.	Malvaceae	Bala	--	Ephedrine β-phenethylamine,ephedrine, holine,	Treatment of inflammation of the oral mucosa, blenorrhoea, asthmatic bronchitis, stomatitis, psychostimulant properties
98.	Solidago chinensis Osbeck.	H	Throu. year	Asteraceae	Pitabhrrnga	--	Saponin, tannin, steroid, terpenoids, flavonoids.	Lf.- tonic, alterative, astringent, bitter, acrid, anti-inflammatory, cardiotoxic, vulnerary & dyeing grey hair, promoting hair growth.
99.	<i>Spheranthus indicus</i> L.	H	Jan.-May	Asteraceae	Sravani, Bodatharamu	--	Lactones, eudesmenolides, flavanoid	Whole plant- Antepartum treatment, mumps & chicken pox.
100.	<i>Syzyium cumini</i> (L.) Skeel.	T	Mar.-Aug.	Myrtaceae	Black plum, Neredu	--	Ellagic acid, Gallic acid	Seeds- in diabetics. Lf. & St.B-for control of B.P.,source in Vit. A & C
S.No.	Scientific Name	Habit	Fl & Fr.	Family	Common Name/s	IUCN Conserv . Status	Phyto-chemical Composition	Medicinal & other Economic uses
101.	<i>Tabernaemontana orientalis</i> R.Br.	Sh.	Throu. year	Apocynaceae.	Milkwood, Nandivardhanam	--	Ibogaïne, Conolidine	Used as additives - psychedelic drink- Ayahuasca. -used to treat eye injuries and as an anxiolytic.
102.	<i>Tamarindus indica</i> L.	T	Feb.-Aug.	Caesalpiniaceae	Tamarind tree, Chinthachettu	--	Acetic, Citric, Mallic & Tartaric acid, Carbohydrates	Fr. pulp is edible. often used as a component of savory dishes
103.	<i>Tecoma stans</i> (L.) H.B. & K.	Sh	Dec.-April	Bignoniaceae	Bangarugantalu, Yellow Elder	--	Tecomine, Tecostanine	Lf. -hypoglycaemic properties
104.	<i>Tectona grandis</i> L.f.	T	Aug.-Jan.	Verbenaceae	Teak	--	Tectoquinone, calcium, silica, phosphate	Wood-expectorant, anti-inflammatory hair tonic, anthelmintic. Bark-astringent, used in bronchitis. Wood-furniture.
105.	<i>Tephrocea purpurea</i> (L.) Pers.	H	Throu. year	Fabceae	Wild indigo, Vempali	--	Tephrosin	Plant - anthelmintic, alexiteric, alterative, antipyretic; used in -leprosy, ulcers, asthma, and tumors, gums diseases of liver, spleen, heart & blood.
106.	<i>Terminalia catapa</i> Linn.	T	Oct.-June	Combretaceae	Badam	--	Flavonoids (kaempferol or quercetin), tannin(punicalin, saponin	Lf. & St.B-used to treat liver diseases, dysentery and diarrhoea. Lf.- contains anticarcinogenic properties, antioxidants
S.No.	Scientific Name	Habit	Fl & Fr.	Family	Common Name/s	IUCN Conserv . Status	Phyto-chemical Composition	Medicinal & other Economic uses
107.	<i>Thespesia populnea</i> (Linn.) Soland. ex. Correa	T	Throu. year	Malvaceae	Umbrella tree, Gangaraavi	--	fatty acids- palmitic and stearic acid. Alkaloids, Tannin	Lf. & Bark -skin diseases, hepatitis, jaundice, ulcers, wounds, psoriasis, scabies, urinary tract infections, diabetes, cholera, St.B. & Fl.- cough, asthma and guinea worm infections.

108.	<i>Tridax procumbens</i> L.	H	Throu. year	Asteraceae	Gaddichamanthi, Gayapaku	--	Procumbenetin Flavonoids	Plant- anticoagulant, hair tonic, antifungal and insect repellent, in bronchial catarrh, diarrhoea, dysentery, wound healing, antiviral, anti oxidant antibiotic, insecticidal and anti-inflammatory activity.
109.	<i>Tylophora indica</i> Burm. D & Merr.	Cl	March-Sept.	Asclepiadaceae	Kukkapala	--	Tylophorine, tylophorinine, Flavonoid (Kaempferol)	Lf.-used for bronchial asthma and allergic rhinitis
110.	<i>Ziziphus mauritiana</i> Lam.	L.Sh	Feb.-Oct.	Rhamnaceae	Indian plum, Regu	--	Protein and Carbohydrates	Fruit- eaten as raw, pickled or used in beverages. Nutritious & rich in Vit. C.

CONCLUSION

The present paper deals with a good number of 110 plant species, their Phytodiversity (Habit of the plants), (Bharath Kumar, R. 2002), Phytochemistry (Chemical composition) and medicinal & economic uses (Chopra, R.N., S.L. Nayar and I.C. Chopra 1956). The plant species are mentioned in the text with the latest name followed by relevant synonyms if any, habit, fr. & fl. season local name, family (Pullaiah, T, et.al. 1997 & 2002) and IUCN Conserv. Status of the species is also given in parenthesis (Figure-1). Out of 110 species in total 10% of the species were identified as vulnerable and rare categorization as per IUCN Conservation status, shows that the diversity and niche for the habitation of a variety of plant species provenance in the selected study area/s (Table-2). The present studies aimed at the inventorization of plant species dwelling in the huge campus provides the information about the phytodiversity and its importance towards

their conservation and sustainable utilization, which may also offer the scope for the discovery of potential herbal drugs for their intensive phytochemical and pharmacological screening to understand the molecular basis of their activities with reference to the folklore claims and ancient literature sources.

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