

## Distribution Pattern and Enumeration of Various Plant Species in Rangareddy District - Telangana State

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### Abstract

Rangareddy is one of the districts of Telangana state which is known for its low nutrient soils supporting growth of some of the inferior plants species 2016 (Feb) - 2017 (Feb). This research have emphasized on dividing the vegetation found in the district in to two categories that is forest vegetation and non- forest vegetation. The vegetation found in the field area was further divided in to various groups depending on morphological characters shown by them. A vast exploration was conducted where in the researcher have visited various niches to observe the versatility seen in the respective regions. It has been found that the field area is inhabited by various types of plants belonging to families like Leguminosae, (109) Poaceae (70), Cyperaceae (56), Euphorbiaceae (33), Asteraceae (32), Acanthaceae (24), Rubiaceae (19), Convolvulaceae (17), Lamiaceae (17) and Asclepiadaceae (14). During the studies the predominant of the plants observed belonged to Leguminosae family. This study can be further preceded by doing a detailed analysis of the soil for its physicochemical characters which specifically supported the growth of Leguminosae members.

**Keywords:** Morphology; Vegetation; Plant collection; Rangareddy; Enumeration; Medicinal plants

### Introduction

Ranga reddy district lies between 160'30'' and 180'20'' of North latitudes and 77'30'' and 79'30'' of East longitudes. The total geographical area of the district is 7493 sq. Km. Taking 20<sup>th</sup> position in the state of Andhra Pradesh. The district has 1055 villages and 5 towns with a population of 25.52 lakhs (15<sup>th</sup> in position in Andhra Pradesh). The district is bounded on the north by Medak district on south by Mahaboobnagar district, on east by Nalgonda district of Andhra Pradesh and on west by Bidar district of Karnataka. The district is divided into 37 revenue mandals and 3 revenue divisions namely Vikarabad, Chevella and Hyderabad East. The main towns of Ranga Reddy district are HayatNagar, Tandur, Ibrahimpatnam, Medchal and Vikarabad. The major soils of the district may be categorised into red earths comprising loamy sands (dubha), sandy loams (chalaka) and sandy clay loams. The red earth cover 70 percent of the area while the red and black soil comprising clay

loams, clays and salty clays cover 20 per cent. The remaining 10 percent of the area is covered by mixed soils. The red loamy sand which occurs on strongly sloping terrain is also found to large extent. Quartz is the principal mineral of this district and its estimated reserve is about 5 million tonnes. Feldspar, clay, amethyst and lateritic is also present. Lime stone is found in plenty in Tandur. The estimated reserve of the cement grade lime stone in the block is 173 million tonnes. Granite (building and road material) is also abundant. The climate of the district is characterized by a hot summer and generally dry weather except during south- west monsoon season. The year may be divided into four seasons i.e., winter (December - February), summer (March - May), south- west monsoon season (June - September) and post- monsoon season (October - November). The average annual rainfall in the district in the district is 802.1 mm, bulk of which comes from south- west monsoon from June to September. May is the hottest month with means daily temperature at 39.6°C. With the onset of monsoon in June there is appreciable drop in temperature. By the beginning of November decrease in day and night temperature is rapid. December is the coldest month with mean daily maximum temperature of 28.6°C and mean daily minimum temperature sometimes drops down to 7°C. The chief river of the district is the Musi which in the Anantagiri hills near Sivareddypet village in Vikarabad Mandal. It flows almost due eastpassing through the middle of Hyderabad city into Nalgonda district where it joins the Krishna river near Vadalpalle. Another river called Kanga rises in Vikarabad taluk and it drains a number of villages in the east while Tandur and Vikarabad taluks.

## Review of Literature

A total of 1945 taxa (including 163 cultivated taxa) [1] spread over 1891 species belonging to 794 genera and 147 families occur in Telangana state. The largest families are Fabaceae (Leguminosae) (273 species; 191+40+42), Poaceae (208 species), Cyperaceae (126 species), Euphorbiaceae (118), Asteraceae (84), Acanthaceae (60), Rubiaceae (50), Malvaceae (47), Lamiaceae (42), Convolvulaceae (39), Asclepiadaceae (36) and Scrophulariaceae (29). Orchidaceae, one of the top ten families in Flora of India is represented by only 12 species in the State of Telangana. Largest genera are *Cyperus* (42 species), *Euphorbia* (29), *Crotalaria* (28), *Fimbristylis* (25 species), *Indigofera* (20), *Ficus* (18), *Ipomoea* (18), *Acacia*, *Eragrostis* and *Phyllanthus* (17 species each).

Medicinal plants which are being used by folklore communities on reproductive disorders in the Vikarabad Mandal of Ranga Reddy District, AP. as reported by Dr. N. Ramkrishna and CH. Saidulu

The field survey was carried out covering different seasons over a period of one year (2008 - 2009) in the Vikarabad Mandal by covering 30 habitation and villages of ranga reddy district. The present study recorded 18 species of medicinal plants belonging to 16 genera under 13 families used in reproductive disorders of human beings. 3 species each was identified by the study belong to the families Moraceae and Ceasalpianaceae. 2 species recorded from Papilionaceae and one species each from the families of Apocynaceae, Burseraceae, Capparidaceae, Cucurbitaceae, Gentianaceae, Hypoxidaceae, Liliaceae, Malvaceae, Menispermaceae and Zygophyllaceae. Out of these total numbers of plant species 9 are trees, 4 herbs, 3 climbers and 2 shrubs.

Geography of Ranga Reddy District in Telangana is determined by its location at the central portion of the Deccan plateau. ([www.indianetzone.com/44/geography\\_ranga\\_red](http://www.indianetzone.com/44/geography_ranga_red))

It is on record that, in 1900s Ranga Reddy District with its low shrubby jungles was the home of leopards, bears, hyenas and occasionally tigers while in the more opened plains the antelope were in plenty. The game reserves for the ruling family in the erstwhile Hyderabad State and were stocked with them for the exclusive enjoyment of the nobles. Now the forests have receded into narrow pockets and so also the game. Blackbuck, Chital or Spotted deer and Sambar can still be seen in Rasanam (Rasanam), Dharur (Gingurthi) Tattepalli, Nagulpalle and Thirumalapur (Thirmapur), Goka feasal war (Rangampally) Naskal Forest blocks, Wild boar is found all over the forests. Jackal and fox are common even now in the open. Also, Peacock and jungle fowl are seen in Ananthagiri block. Partridges and wild pigeons are common. In the cold season, wild duck, geese, teal and snipe can be seen in the small and large tanks of the District.

### **Aim and Objectives**

To identify the total plant species in Rangareddy district and prepare the herbarium for future reference.

1. Identify and collection of plant species.
2. Collection of forest and non- forest plants.
3. Plants were collected in either flowering or fruiting stages.
4. Each collection of individual species was labelled with field numbers in quadruplicate.
5. Collection of medicinally important plants.

### **Material and Methods**

#### **Forests and vegetation**

Rangareddy district cannot boast of any important timber yielding forests because of low rainfall and comparatively inferior soil condition aggravated by the ever increasing biotic interference. The soils have very little plant nutrients and so they support only inferior type of forests. The forest area in the district is 72,795.32 hectares against the geographical area of 7,56,289.33 hectares. The forest area covers about 9.7 per cent of the total geographical area of the district as against the minimum 33.3 percent desirable according to National Forest Policy. The forests of Rangareddy can be classified under Tropical Dry Deciduous forests based on the classification of champion and Seth in 1968. The forests can be categorized into 4 types namely

**Teak forests:** In these forests *Tectona grandis* is predominant constituting 40 percent of tree population. The forest blocks showing these forests include Mohammadabad, Kothapalli, Kanmankalva, Kusumasamudram and Anana sagar beats of Mohammadabad range, Anantagiri, Rudraram and Dharur blocks in Vikarabad range. However, due to illegal and indiscriminate felling of Teak trees these forests are being reduced to mixed and open type at an alarming rate.

**Dry mixed deciduous forests:** These forests are characterized by less proportion of teak with the predominance of other trees like *Anogeissus latifolia*, *Madhuca indica*, *T. Bellairica*, *Dalbergia paniculata*, *Pterocarpus marsupium* etc. These types

of forests are present in Rangammagudem, Kondapur and Gadirayal beats of Mohammadabad range, Pargi, tandur and Vikarabad of Vikarabad range.

This stratum comprises of species like the following (TABLE 1).

TABLE 1. List of large tree members (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Anogeissu slatifolia</i>	Combretaceae	Sirimanu	Bark
2.	<i>Boswellia serrata</i>	Bursaraceae	Guggilam	Whole plant
3.	<i>Bombax ceiba</i>	Malvaceae	Buruga	Bark
4.	<i>Buchnanian lanzan</i>	Anacardiaceae	Morrhi	Bark, fruits
5.	<i>Coreya arborea</i>	Lecythidiaceae	Budatha dadima	Bark
6.	<i>Chloroxylon swietenia</i>	Rutaceae	Billudu	Whole plant
7.	<i>Dalbergia paniculata</i>	Fabaceae	Kondapachari	Leaves, bark
8.	<i>Dalbergia latifolia</i>	Fabaceae	Jittegi	Bark
9.	<i>Diospyros melanoxyton</i>	Ebenaceae	Tuniki	Whole plant
10.	<i>Garuga pinnata</i>	Bursaraceae	Konda vepa	Bark
11.	<i>Gmelina arborea</i>	Verbenaceae	Gummuduteku	Root and bark
12.	<i>Haldina cordifolia</i>	Rubiaceae	Pasupu kadamba	Bark and leaves
13.	<i>Lannea coromandelica</i>	Anacardiaceae	Ajashrunge	Bark and leaves
14.	<i>Miliusato mentosa</i>	Anonaceae	Nalla dadduga	Mature fruits
15.	<i>Pterocarpus marsupium</i>	Santalaceae	Erra chandanam	Heart wood, leaves
16.	<i>Semecarpus anacardium</i>	Anacardiaceae	Jeedi	Whole plant
17.	<i>Sterculi aurens</i>	Sterculiaceae	Kavili	Gum
18.	<i>Strychnos potatorum</i>	Loganiaceae	Chilla ginja	Seeds, roots, fruits
19.	<i>Tectona grandis</i>	Verbenaceae	Teku	Whole plant
20.	<i>Terminalia arjuna</i>	Combretaceae	Tellamaddi	Bark
21.	<i>Terminalia elliptica</i>	Combretaceae	Inumaddi	Bark and fruit

This stratum comprises of species like the following: (TABLE 2).

TABLE 2. List of tree members (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Bauhinia racemosa</i>	Cesalpiniaceae	Tella are chettu	Bark and flower
2.	<i>Dolichandrone falcate</i>	Bignoniaceae	Chittivoddi	Bark, leaves, fruits
3.	<i>Butea monosperma</i>	Fabaceae	Moduga	Bark, flowers
4.	<i>cassia fistula</i>	Cesalpiniaceae	Relachettu	Bark and fruit
5.	<i>Diospyros Montana</i>	Ebenaceae	Kakavulimidi	Fruits
6.	<i>Holarrhenapubescens</i>	Apocyanaceae	Girimallika	Root and bark
7.	<i>Nyctanthesarbortristis</i>	Oleaceae	Parijathamu	Leaves and seeds
8.	<i>Streblus asper</i>	Moraceae	Barrenka	Stem bark, latex
9.	<i>Acacia leucocephala</i>	Mimosaceae	Tellatamma	Bark and pods
10.	<i>Cordia obliqua.</i>	Boraginaceae	Iriki	Fruits

Common shrubs seen in these forests are as follows: (TABLE 3).

TABLE 3. List of shrubs (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Alangium salvifolium</i>	Alangiaceae	Udugu	Ankol root bark
2.	<i>Bridelia retusa</i>	Phyllanthaceae	Kora maddi	Bark
3.	<i>Canthium parviflorum</i>	Rubiaceae	Balusu	Leaves
4.	<i>Catuna regumspinosa</i>	Rubiaceae	Marrga	Fruit and bark
5.	<i>Pavetta indica</i>	Rubiaceae	Papidi	Roots and leaves
6.	<i>Premna latifolia</i>	Verbenaceae	Nelli	Roots
7.	<i>Ziziphus xylopyrus</i>	Rhamnaceae	Kottachettu	Leaves, bark, roots

Common herbs seen in these forests are as follows (TABLE 4).

TABLE 4. List of herbs (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Anisochilu scarnosus</i>	Lamiaceae	Rodda	Whole plant
2.	<i>Abelmoschus ficulneus</i>	Malvaceae	Nallabenda	Leaves
3.	<i>Biophytum sensitivum</i>	Oxalidaceae	Jala pupa	Whole plant
4.	<i>Spermacoce articularis</i>	Rubiaceae	Madanaku	Leaves, aerial parts
5.	<i>Crotalaria</i>	Fabaceae	Janumu	Roots and seeds
6.	<i>Desmodium gangticum</i>	Plantaginaceae	Deyyamjeda	Flowers
7.	<i>Polygala spp.</i>	Polygalaceae	Paruppukikirai	Root, bark, leaves

Plants occurring near water courses include the following: (TABLE 5).

TABLE 5. List of plants near water courses (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Hygrophila auriculata</i>	Acanthaceae	Enugu palleru	Stem, flower, root
2.	<i>Caesulia axillaris</i>	Asteraceae	Tellajiluga	Leaves, stem, seeds
3.	<i>Commelina benghalensis</i>	Commeliniaceae	Ennodulagaddi	Flowering spathe

Climbers and stragglers constitute a rich flora in the district. These include the following (TABLES 6- 8).

TABLE 6. List of climbers (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Ampelocissus latifolia</i>	Vitaceae	Adaviteegadraksha	Leaves
2.	<i>Cissus vitiginea</i>	Vitaceae	Nallatheege	Stem bark
3.	<i>Hemidesmus indicus</i>	Asclepiadiaceae	Sugandipaala	Root
4.	<i>Cayratia trifolia</i>	Vitaceae	Pulimada	Whole plant
5.	<i>Celastrus paniculatus</i>	Celastraceae	Kasaratheega	Stem bark, seeds
6.	<i>Cocculus hirsutus</i>	Menispermaceae	Dusratheega	Stem, leaves
7.	<i>Gymnema sylvestre</i>	Apocyanaceae	Podapatri	Leaves, stem
8.	<i>Pergularia daemia</i>	Asclepiadiaceae	Gutugudu	Leaves
9.	<i>Wattaka volubilis</i>	Asclepiadiaceae	Dudipaala theega	Shoot tip
10.	<i>Derris scandens</i>	Fabaceae	Chiruthali baadu	Stem
11.	<i>Paracalyx scariosus</i>	Fabaceae	Rangevaada	Root
12.	<i>Rivea hypocrateriformis</i>	Convolvulaceae	Neeru boddi	Roots

13.	<i>Bauhinia vahlii</i>	Cesalpiniaceae	Addachettu	Flower buds, bark
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TABLE 7. List of grasses and sedges (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Mnesithea granularis</i>	Poaceae	Naali punuku	Whole plant
2.	<i>Heteropogon contortus</i>	Poaceae	Nalla etegaddi	Leaves
3.	<i>Cymbopogon citratus</i>	Poaceae	Nimma gaddi	Leaves
4.	<i>Cyperus spp.</i>	Poaceae	Tunga gaddi	Tubers

TABLE 8. List of parasites and epiphytes (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Cassytha filiformis</i>	Lauraceae	Akasha valli	Whole plant
2.	<i>Dendrophthoe falcata</i>	Loranthaceae	Jeevakam	Whole plant
3.	<i>striga spp.</i>	Scropulariaceae	Rathi badamika	Aerial parts
4.	<i>Vanda tessellate</i>	Orchidaceae	Chitti veduri	Roots

**Scrub jungle:** Scrub jungle is situated at the foot of the hills where the surface soil is very shallow and layers of sandy or gravely loam which is eroded in exposed regions. The vegetation of the scrubs is characterized by shrubs and sub shrubs like (TABLE 9).

TABLE 9. List of scrub jungle plants (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Capparis zeylanica</i>	Capparidaceae	Adonda	Stem and leaves
2.	<i>Mimosa rubicaulis</i>	Mimosaceae	Kodimudusu	Roots and leaves
3.	<i>Mimosa pudica</i>	Mimosaceae	Attipatti	Leaves
4.	<i>Ziziphus oenoplia</i>	Rhamnaceae	Pariki	Bark and leaves
5.	<i>Opuntia stricta</i>	Cactaceae	Nagajemudu	Fruit
6.	<i>Carissa spinarum</i>	Apocyanaceae	Kavali	Unripe fruit, root
7.	<i>Lantana camara</i>	Verbenaceae	Sisakammari	Roots and flowers
8.	<i>Maytenus emarginata</i>	Celastraceae	Chinni tuppa	Stem, leaves
9.	<i>Dichrostachys cinerea</i>	Mimosaceae	Velthuru	Stem
10.	<i>Dodonaea viscosa</i>	Sapindaceae	Pulcheru	Whole plant

These forests are distributed throughout the district, more so in areas bordering Karnataka.

### Dry savannahs

These forests are characterized by the presence of species like the following (TABLE 10).

TABLE 10. List of dry savannahs (some imp. examples)

S. No	Botanical Name	Family	Vernacular name	Medicinally useful part
1.	<i>Cassia ariculata</i>	Cesalpiniaceae	Tangedu	Bark and roots
2.	<i>Lantana camara</i>	Verbenaceae	Sisakammari	Stem and leaves
3.	<i>Cymbopogon citratus</i>	Poaceae	Nimmagaddi	leaves
4.	<i>Heteropogon contortus</i>	Poaceae	Nalla ete gaddi	Roots and leaves

### Non forest vegetation

The non- forest vegetation includes terrestrial vegetation and aquatic vegetation.

**Terrestrial vegetation:** It includes all waste lands, hedges, roadsides, villages and cultivated lands. i.e., waste lands, roadsides and villages. *Ipomoea carnea* is predominant in waste lands especially along roadsides and hedges of fields. Other plants which are generally distributed in waste lands are as follows: (TABLE 11).

TABLE 11. List of terrestrial vegetation in waste lands (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Ipomoea carnea</i>	Convolvulaceae	Lottapeece	Stem and leaves
2.	<i>Croton bonplandianum</i>	Euphorbiaceae	Alpa bedi soump	Root, latex, stem
3.	<i>Acalypha indica</i>	Euphorbiaceae	Muripenda	Whole plant
4.	<i>Achyranthes aspera</i>	Amaranthaceae	Uttareni	Leaves and spike
5.	<i>Boerhavia diffusa</i>	Nyctaginaceae	Punarnava	Roots
6.	<i>Alternanthera sessilis</i>	Amaranthaceae	Dubbaku tuttura	Whole plant
7.	<i>Tribulus terrestris</i>	Zygophyllaceae	Chinna pallere	Dry fruits
8.	<i>Cassia occidentalis</i>	Ceasolpinaceae	Adavi tangedu	Bark and leaves
9.	<i>Ziziphus mauritiana</i>	Rhamnaceae	Regu chettu	Bark
10.	<i>Calotropis procera</i>	Asclepediaceae	Tella jilledu	Leaves and latex
11.	<i>Amaranthus viridis</i>	Amaranthaceae	Chilaka thotakura	Root and leaves
12.	<i>Martynia annua</i>	Martyniaceae	Deyyam gollu	Fruits
13.	<i>Solanum surrattense</i>	Solanaceae	Ramulka	Whole plant

Along roadsides and villages following trees are generally present. They are as follows (TABLES 12- 14):

TABLE 12. List of terrestrial vegetation in roadsides and villages (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Acacia nilotica</i>	Mimosaceae	Nalla tumma	Bark and pods
2.	<i>Albizia lebeck</i>	Mimosaceae	Dirisena	Bark
3.	<i>Annonas quamosa</i>	Annonaceae	Seethaphal	Bark, leaves
4.	<i>Borassus flabellifer</i>	Arecaceae	Thati chettu	Young root and flower stalk
5.	<i>Cassia siamea</i>	Ceasolpinaceae	Sima tangedu	Leaves
6.	<i>Dalbergia sissoo</i>	Fabaceae	Irugudu chettu	Bark and leaves
7.	<i>Delonix elata</i>	Ceasolpinaceae	Chitti keshwarm	Roots
8.	<i>Delonix regia</i>	Ceasolpinaceae	Erra turai	Seed coat
9.	<i>Millingtonia hortensis</i>	Bignoniaceae	Pedda malle	Roots
10.	<i>Pongamia pinnata</i>	Fabaceae	Kanugu	Bark, leaves, flowers
11.	<i>Peltophorum terocarpum</i>	Ceasolpinaceae	Konda chintha	Bark, fruits
12.	<i>Samanea saman</i>	Mimosaceae	Nidra ganneru	Inner bark
13.	<i>Phoenix sylvestris</i>	Arecaceae	Eetha chettu	Fruits, leaves
14.	<i>Tamarindus indica</i>	Solanaceae	Chintha chettu	Bark, fruits, stem
15.	<i>Azadirachta indica</i>	Meliaceae	Vepa chettu	Whole plant

TABLE 13. List of terrestrial vegetation in hedges (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Abutilon indicum</i>	Malvaceae	Botla benda	Bark and leaves
2.	<i>Caesalpinia pulcherrima</i>	Ceasolpinaceae	Rathna gandhi	Whole plant
3.	<i>Caesalpinia Bonduc</i>	Ceasolpinaceae	Gachakai	Kernel
4.	<i>Caesalpinia decapetala</i>	Ceasolpinaceae	Gadda korinda	Roots, stem, pods
5.	<i>Canthium parviflorum</i>	Rubiaceae	Balusu	Whole plant
6.	<i>Catunaregam spinosa</i>	Rubiaceae	Marrga	Seeds

7.	<i>Euphorbia tirucalli</i>	Euphorbiaceae	Chemudu chettu	Milky juice
8.	<i>Lawsonia inermis</i>	Lythraceae	Mydaku	Seeds and bark
9.	<i>Parkinsonia aculeata</i>	Fabaceae	Seema thumma	Leaf, fruit, stem

TABLE 14. List of terrestrial vegetation in cultivated fields (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Cyperus rotundus</i>	Poaceae	Tunga	Rhizome
2.	<i>Eclipta prostrata</i>	Asteraceae	Gunta galagara	Leaves
3.	<i>Digera muricata</i>	Amaranthaceae	Chenchali chettu	Leaf and root
4.	<i>Echinochloa colona</i>	Poaceae	Othagaddi	Seeds
5.	<i>Cynodon dactylon</i>	Poaceae	Garika gaddi	Whole plant
6.	<i>Eleusine indica</i>	Poaceae	Kuruchodi gaddi	Leaves
7.	<i>Leucas asper</i>	Lamiaceae	Thummi	Leaves
8.	<i>Cleome spp.</i>	Cleomaceae	Kukka vaminta	Stem and leaves
9.	<i>Rothia indica</i>	Fabaceae	Nucha kura	Whole plant

**Aquatic vegetation:** The rivers, tanks, ponds, ditches, streams, canals, stagnant water and moist places are the site of aquatic plants which may be classified as follows (TABLES 15- 17).

TABLE 15. List of submerged hydrophytes (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Hydrilla verticillata</i>	Hydrochritaceae	Poonaachu	Whole plant
2.	<i>Limnophila indica</i>	Scrophulariaceae	Burada bakkena	Leaves
3.	<i>Ottelia alismoides</i>	Hydrochritaceae	Erukula thaamra	Leaves
4.	<i>Aponogeton natans</i>	Aponogetonaceae	Nanna puvvumokka	Whole plant
5.	<i>Monochoria vaginalis</i>	Pantederiaceae	Nirakancha	Leaves

TABLE 16. List of floating hydrophytes (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Nymphaea nouchali</i>	Nympheaceae	Neeli tamara	Rhizome
2.	<i>Nelumbo nucifera</i>	Nympheaceae	Tamara	Leaves and flowers
3.	<i>Pistia stratiotes</i>	Araceae	Antara tamara	Leaves and roots

TABLE 17. List of 3 emergent hydrophytes (some imp. examples)

S. No	Botanical Name	Family	Vernacular Name	Medicinally useful part
1.	<i>Aeschynomene indica</i>	Fabaceae	Tella jeeluga	Whole plant
2.	<i>Ammannia baccifera</i>	Lythraceae	Agni vendrapaaku	Leaves
3.	<i>Bacopa monnieri</i>	Scrophulariaceae	Brahmi	Leaves and stem
4.	<i>Cleome chelidoniil</i>	Cleomaceae	Konda avaal	Whole plant
5.	<i>Echinochloa crusgalli</i>	Poaceae	Othagaddi	Shoot and root
6.	<i>Hygrophila auriculata</i>	Acanthaceae	Enugu palleru	Whole plant
7.	<i>Typha angustata</i>	Typhaceae	Dabbu jambu	Leaves and roots
8.	<i>Sopubia delphinifolia</i>	Scrophulariaceae	Dudhali chettu	Whole plant

Besides these *Terminalia arjuna* is common along river banks. *Eleocharis* spp., *Eriocaulon* spp., *Ischaemum pilosum*, *Oryza rufipogon*, *Sacciolepis interrupta*. *Schoenoplectus* spp. is common in marshy localities.

## Results and Discussion

Intensive explorations were conducted in different parts of the district during different seasons of the year for a period of 2016- 2017. Exploration trips were regularly made in every season and in all the representative localities of the district from floristic point of view covered all topographical zones and noted the seasonal changes of the vegetation [2].

Plants were collected in either flowering or fruiting stages and if available both the stages with good vegetation growth were collected. Each collection of individual species was labelled with field numbers in quadruplicate after noting the details of plant description such as habit, habitat, flower colour, smell, relative abundance of the plant and its distribution on a standard field note book. Details about the altitude, soil and rocks are also entered in the field note book. Care was also taken in collecting the bulbs, corms, rhizomes, tubers etc. In case of plants in vegetative stages in a particular field trip localities of these plants were carefully marked in the field note book [3]. These could be easily spotted in the flowering and fruiting stages at later dates.

## Floristical analysis

A total of 698 wild and naturalized species belonging to 409 genera and 110 families have been enumerated. Of these angiosperms constitute 693 species while Pteridophytes constitute 4 species.

The ratio of Monocotyledons to Dicotyledons is 1:5.23 of families (17:89) 1:4.17 of genera (77:328) and 1:3.2 of species (160:529). The ratio of genera to species in Angiosperma is 1:1.68. In British India it is 1:7. This pattern of distribution of genera and species confirms the general rule that, smaller the area smaller the genus- species ratio.

The family leguminosae with 109 species (comprising Papilionaceae with 74 species, Caesalpiniaceae 23 and Mimosaceae 19) is dominant in Ranga Reddy district.

Cyprus is the largest genus with 16 species, followed by *Fimbristylis* (14), *Cassia* (10), *Eragrostis* (9), *Euphorbia* (9), *Indigofera* (9), *Ipomoea* (9), *Crotalaria* (7), *Grewia* (7) and *Phyllanthus* [4- 6].

TABLE 18. Dominant ten families in Rangareddy District, Telangana State

S. No.	Name of the Family	No. of Species
1	Leguminosae	109
2	Poaceae	70
3	Cyperaceae	56
4	Euphorbiaceae	33
5	Asteraceae	32
6	Acanthaceae	24
7	Rubiaceae	19
8	Convolvulaceae	17
9	Lamiaceae	17
10	Asclepiadaceae	14

## Conclusion

As it is been already mentioned about the nutritive value of the soil supported growth of inferior varieties of plants and it is also been seen that the varieties found were limited when compared with other areas. In this we conclude the flora of Rangareddy district, contains mostly, herbaceous, shrubby and tree members are showing dominant flora [7- 10]. The past work conducted in 2000- 2001 year that results are similar to present work but some plants are in endemic stage and some exotic plants are exhibited they are shown above table (TABLE 18).

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