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Medicinal Plants Biodiversity Of Anantagiri Hills In Vikarabad, Ranga Reddy District, Telangana State, India

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ABSTRACT
India, a mega diverse nation, is one of the richest nations in terms of biological diversity. India owes this to its position in the tropical and subtropical latitudes. Forest is a natural ecosystem constituting an important, non-renewable living resource. Forest ecosystems of the world make up the Forest Biome, a vital terrestrial biomass producer and repository of biological diversity. Forest is a natural ecosystem constituting an important, non-renewable living resource. Forest ecosystems of the world make up the Forest Biome, a vital terrestrial biomass producer and repository of biological diversity. The major families which occupied first and second position were Mimosaceae-12sp Euphorbiaceae-9sp, and all 149 plant species belonging to 57 families were documented and authentically identified. The main aim of the survey is to prepare a ready check-list of medicinal plants present at and around Ananthagiri hills used by local herbalists and village folklore to cure various human and cattle ailments.
Keywords: *Biodiversity of Anantagiri Hills, Rangareddy District, Human medicine, Telangana.*

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INTRODUCTION

India, a mega diverse nation, is one of the richest nations in terms of biological diversity. India owes this to its position in the tropical and subtropical latitudes. India has a great diversity of natural ecosystems ranging from the cold and high Himalayan regions to the sea coasts; from the wet north-eastern green forests to the dry northwestern arid deserts; with different types of forests, wetlands, islands and the oceans. India consists of fertile river plains and high plateaus and several major rivers, including the Ganges, Brahmaputra and Indus. The diverse physical features and climatic situations have formed ecological habitats like forests, grasslands, wetlands, coastal and marine ecosystems and desert ecosystems, which harbor and sustain immense biodiversity. The country is also one of the 12 primary centers of origin of cultivated plants and domesticated animals. The largest number of the medicinal plants is known to occur in these tropical dry deciduous forests only. It is necessary that we should have full knowledge about the occurrence, frequency, distribution and phenology of various medicinal plants for their proper utilization. Jain (1978) emphasized the importance of survey of plant resources including medicinal plants, and opines that 'After independence our planners realized that in an agricultural country like India, where the flora is so varied and rich a proper consensus of the flora of the country and its evaluation for economic exploitation is very important.

Forest is a natural ecosystem constituting an important, non-renewable living resource. Forest ecosystems of the world make up the Forest Biome, a vital terrestrial biomass producer and repository of biological diversity. Forests have the potential for improving human well-being through supplementing income while functioning as safety nets (Angelsen & Wunder, 2003). Since forests play an important role in the sustainability of life on land, humans rightly resorted to reserve one third of the natural terrestrial plant cover. In view of the global forest decline, the UN has named 2011 as the 'International Year of Forests' in the 'Decade for Biodiversity'. Therefore, there is a need to study the local forests from the standpoints of nature and extent of their resource utilization. India is the seventh largest country in the world though it owns 1.8% of the global forests on the 2.5% of the global land area. To serve Gross

Domestic Product (GDP) as a measure of nation's wealth, not as mere measure of economic growth, India has initiated green accounting (Gundimeda, *et al*., 2007). Three parameters are used to value the environmental resource wealth, namely (i) Timber, Non-Timber Forest Products (NTFPs) and carbon, (ii) Biodiversity, and (iii) Ecological services. With changing political economy of forest resources around the world, the benefits of NTFPs are increasingly discussed in valuing tropical forests (Tewari, 2000). In this regard, the diversity of NTFPs and their role in the sustenance of local people constitutes a prime concern. All biological materials that are found in the forests, excluding the timber, are called NTFPs. These include consumptive category of goods like wild food plants, spices, honey, oils, fodder, etc. on one hand and the non-consumptive items like gums, resins, gum-resins, dyes, wax, lac, brooms, fibers, fuel wood, charcoal, fencing, wildlife products, raw materials like bamboo, cane, etc. The forests in India, once known for their valuable timbers, are now looked at for their NTFPs, with a clear shift in the paradigm. The rural people (largely the scheduled tribe category) inhabiting the forests areas carry a very long history of extraction of NTFPs, for subsistence and/or sale. NTFPs have been identified as one of key income sources for rural households, with live examples indicating an income share greater than that from cash crops or informal cash incomes (Dovie, 2003). Forest is a living resource while extraction of its produce is a dynamic aspect, with spatial and temporal implications. Forest management policies are increasingly spatial while making the forest land towards resource protection (reserves, sanctuaries, parks, etc.) and extraction (buffer zones), recreation (ecotourism) opportunities, etc. (Robinson, *et al*., 2008).

The present paper is aimed and planned to fulfill the lacuna of this information with regard to medicinal plants in this area the survey of the potentiality of the medicinal plants at and around Ananthagiri is beautiful hill are 6 km away from Vikarabad town of Ranga Reddy District of Telangana, which is 75 km from the Metropolitan city of Hyderabad.

Study area

The present surveyed area for medicinal plants at Ananthagiri Hills and its environs falls under Rangareddy District of T.S. which lies between 16^0.30' and 18^0.20' of North latitudes and 77^0 .30' of East longitudes. The total geographical area of the District is 7493 sq. kms with 1055 villages and 14 towns with a population of 25.52 lacks, and is most urbanized districts of T.S. The district has 37 mandals and 3 Revenue divisions. The district has a poor forest cover and consists of Ananthagiri, Mahammadabad, Gungurthy, Adikcherla, Mothkupally, Nagupalli, Raskam, Pashapur and Dharur reserve forests.

Hill range

The district is mostly hilly with poor forest cover (only 0.7% of the total area). The general slope of the land is from West to East and South-East. There are two major hill ranges viz., Ananthagiri hill range and Rajkonda hill range. The average elevation of the hills is 509.91m.

Types of soils and minerals

There are three mojor soil types in this region and comprises of red earths, loamy sands (Dubba), Sandy loams (chalka), and sanyd-clay loam and black soils comprising clay loams, clays, siliting clays etc., and the third type of soils of mixed nature, consisting of Quartz deposits followed by Felspar clay, amephyrat and laterite, at Tandur which is 36 kms. Away from study area and composes of rich lime stone deposits (containing 173 million tons) of high quality cement grade lime stone.

Climate

The climate is characterized by a hot summer of long duration and generally a dry weather, except during south-west monsoon season. The average annual rain fall is about 802mm. Which is comes from south-west monsoon during June to September. May is the hottest month with mean daily temperature at 40^0 C, however the temperature will come down during monsoon period. Decrease in temperature in day and night is seen during the month of December is the coldest month (13^0 C).

Flora

The flora of the district exhibits and xerophytic adaptations 42.5% of the land is under cultivation of various crops. The hills and the slopes are generally covered by dry deciduous forests. The forests are not of much value commercially the forest area comes about only 10% of the total land area. The high density of population resulted in stress, as the area is nearer to the capital city Hyderabad.

Rivers

The Musi is the chief river of the Rangareddy district and is also called as Muchikunda, which arise at near Ananthagiri hills at a place called as Bugga which is 2 kms. Away from Lord Anantha Padmanabha temple, the river flows Eastward via Vikarabad Mandal and passing though the Hyderabad metropolitan city, and enters into Nalgonda District and joins the River Krishna at Vadapally Village. Another small river is Kagna River, also rises in the hill range of Ananthagiri and flows to North-West wards and floods the entire Tandur Mandal.



Some traditional medicinal plants in Ananthari reserve forest area at Ananthari Giri Hills at Vikarabad



Tylophora indiaca | *Andrographis paniculata* | *Hemidesmus indicus*

Healers showing some medicinal plants from forest of Ananthari Giri Hills at Vikarabad

MATERIALS AND METHODS

The work was undertaken for about a period two years starting from June' 2010 to the end of May' 2012. The work is mainly confined to Ananthagiri Hills and its environs covering about a radious of 35 kms, which comes under Vikarabad reserved forest. The main aim of the survey is to prepare a ready check-list of medicinal plants present at and around Ananthagiri hills used by local herbalists and village folklore to cure various human and cattle ailments. The areas covered are Ananthagiri hills particularly at Ananthapadmanabha temple and its surroundings, followed by villages of Ananthagiripalle, Godhumaguda, Kerelli, Dharur, Durgamchervu, Nagasanipalle Tanda, Mohammadanpalle, Velichala, Mothukupalle, (Reserved forest), Narsimhuni gutta, Gattukesaram, Kondapur and Ramaiahguda.

The data presented here is collected by frequent field visits by the author to these areas once in two months for about a period of two years. The information's on medicinal properties of plants is gathered from various sources such as consulting the local village heads, elderly people, Vaidyas, and other herbal practitioners. Help from Forest department personnel including DFO-Vikarabad and his associates were taken during the survey.

ENUMERATIONS

In the enumeration, the family and taxons are arranged alphabetically. Ethno botanical uses of some medicinal plant parts used by tribes for some disease

	Acanthaceae	
1.	*Adhatoda vasica* Nees	Leaves are ground with the flowers of *Hibiscus rosa-sinensis* and taken orally to treat asthma.
2.	*Andrographis paniculata* (Burm.f.)	Wallich ex Leaf paste is applied topically at the bitten site of snake; beetle and sorpion.Powdered leaf is mixed with cow or goat's milk and taken orally to treat diabetes.
3.	*Asystasia gangetica* (L.) T.Anderson	Leaf powder is mixed with coconut oil and applied topically to healwounds (burns).
4.	*Lepidagathis cristata* Willd	Presence of one plant in home in every sunday is good for health.
	Aizoaceae	
1.	*Trianthema portulacastrum* L.	Decoction of roots is taken internally to treat Constipation and asthma.
	Alangiaceae	
1.	*Alangium salvifolium* (L.f.) Wang	Fruits are eaten for loss of appetite for Anorexia. Stem bark extract and leaf paste are applied as plaster for bone fracture.
	Amaranthaceae	

1.	*Achyranthes aspera* L	Leaf paste is applied topically to treat cuts and Wounds.
2.	*Aerva lanata* (L.) Juss. Ex Schult	Juice of whole plant is taken orally to treat cough, sore throat and wounds. Leaf juice is instilled in ears.
	Anacardiaceae	
1.	*Buchanania lanzan* Spreng.	Gum and rice are pounded and the powder is administered for 3 or 4 days for chest pain.
2.	*Lannea coromandelica* (Houtt.) Merr.	Stem bark pounded with turmeric are bandaged over the affected part.
3.	*Mangifera indica* L.	The latex from leaf and stem bark is used to treat heel cracks.
4.	*Odina wodier* Roxb. Fl.	Juice of leaves is taken orally to prevent white discharge in women.
5.	*Semecarpus anacardium* L.	Seed resin is applied over dogbite.
	Annonaceae	
1.	*Polyalthia longifolia* (Sonn.) Thwaites.	Juice extracted from the fresh stem bark is taken orally to treat indigestion.
	Apocynaceae	
1.	*Anodendron paniculatum* (Roxb.) DC.	Bark extract is bandaged for bone fracture.
2.	*Catharanthus roseus* G. Don.	Whole plant is powdered and mixed with cow's milk and taken orallyto treat diabetes.
3.	*Nerium oleander* Sol.	Juice prepared from the stem bark is boiled with gingelly oil and two drops are poured into ear to treat ear pain.
4.	*Rauwolfia tetraphylla* Linn.	Paste of the whole plant is mixed with castor oil and applied pically to treat skin diseases.
5.	*Wrightia tinctoria* (Roxb.) R.Br.	Juice of seeds taken orally to treat indigestion.
	Araceae	
1.	*Acorus calamus* L.	Dried rhizome is ground in water and the paste is given orally to children for clarity of speech.
	Asclepiadaceae	
1.	*Caralluma umbellate* Roxb.	Pulp of the young plants is applied over the burned parts.
2.	*Calotropis gigantean* (L.) R. Br.	Latex drops (3 or 5) mixed with sesame oil (2 spoons) are instilled in ears (2 or 3 drops).
3.	*Gymnema sylvestre* R. Br.	Leaf powder is mixed with cow's milk and taken rally to treat diabetes. The root powder is taken orally and also applied on the bittenspot to treat snake bite.
4.	*Hemidesmus indicus* Linn. R. Br.Muell.	Juice extracted from the whole plant is taken internally to keep thebody cool. Root juice is given orally for blood purifier.
5.	*Holarrhena pubescens* (Buch. Ham.) Wall. Ex Don	A pinch of bark is placed in the mouth to relieve cough.
6.	*Tylophora indica* (Burm.f.) Merr	Root juice is given orally for Asthma
7.	*Wattakaka volubilis* Cooke.	Leaf paste is applied topically to treat rheumatic pain, cough and fever severe cold.
	Asteraceae	
1.	*Blumea mollis* (D.Don) Merr.	Leaf smoke is inhaled for cough.
2.	*Eclipta prostrata* L	Leaf powder is mixed with coconut oil & applied on the hair regularly for healthy and black hair.
3.	*Sphaeranthus indicus* L.	Leaf, flower and seeds are ground into paste and applied topically to treat skin diseases and piles.
4.	*Tridax procumbens* L.	Leaf paste is applied topically on cuts and wounds
5.	*Xanthium strumarium* L.	Roots tied to get rid of the baneful (noxious) influence, as that of an evil eye.
	Bombacaceae	
1.	*Bombax ceiba* L.	Bark extract is given orally to increase sperm count.
	Boraginaceae	
1.	*Coldenia procumbens* L.	Juice of leaf is taken orally to prevent white discharge in women.
2.	*Heliotropium indicum* L.	Paste of whole plant is applied topically to treat wounds and skin affections.
	Burseraceae	
1.	*Boswellia serrata* Coleb.	Gum is applied over the bitten area for dog bite.
	Caesalpiniaceae	
1.	*Cassia absus* L.	Seeds are ground into paste and applied topically to treat skin diseases and headache.
2.	*Cassia auriculata* L.	Flowers are crushed and mixed with goat's milk and taken orally to prevent white discharge in women and seed powder with honey is taken orally for diabetes.
3.	*Cassia occidentalis* L.	Leaf paste is applied topically to treat scabies and to heal bone

		fractures.
4.	*Tamarindus indica* L.	Dried fruits are taken orally to treat eye infections and fruit pulp is applied externally on affected part once daily till cured for cracked sole.
	Capparaceae	
1.	*Capparis sepiaria* L.	Bark and neem bark (1:4) are crushed and the extract is given orally for 2 days after menstruation for contraceptive.
2.	*Capparis zeylanica* L.	Root bark is ground with water, boiled and taken orally to treat indigestion and also roots made into an amulet; it is believed to infuse occult powers (Evil spirit).
3.	*Cleome viscosa* L.	Leaf paste is applied topically to heal wounds.
	Celastraceae	
1.	*Cassine glauca* (Roxb.) O. Kuntze	Roots tied to wrist to keep-off evil spirits.
	Combretaceae	
1.	*Anogeissus latifolia* (Roxb. Ex DC.) Wall. Ex Guill. & Perr.	Bark extract (4 tea spoons) along with pepper (2 tea spoons) is given twice a day for 10 to 15 days for asthma.
2.	*Terminalia arjuna* Roxb.Ex. Dc Wight & Arn.	Fruit paste is applied topically on wounds. Bark powder is boiled with water and inhaled to cure headache to kill worms in teeth. One tea spoon powder is given with one glass of water or cow/goat milk for three months for anaemic. Stem bark extract is given daily to strengthening the heart functions as a cardiac tonic.
3.	*Terminalia bellerica* (Gaertn) Roxb.	One tea spoonful seed powder is given with sugar or honey thrice a day for two days for Stomach pain.
	Convolvulaceae	
1.	*Canavalia virosa* (Roxb.) Wt. & Arn.	Leaves extract is applied on the affected part once daily for three days for ring worm.
2.	*Merremia emarginata* (Burm.f.) Hall.f.	Decoction of the whole plant is taken internally to treat stomach problems.
	Cucurbitaceae	
1.	*Coccinia grandis* (L.) J. Voigt	Leaf Juice is mixed with butter and applied topically to treat skindiseases. Leaf paste is applied to cuts and wounds.
2.	*Mukia maderaspatana* (L.) M. Roemer	Leaf powder is mixed with boiled rice and taken orally to treat cold and cough.
	Cyperaceae	
1.	*Cyperus rotundus* L.	Paste of dried tuber is applied on breast of women to secrete more milk and applied topically on bitten site of scorpion.
2.	*Scleria corymbosa* Roxb.	Root juice is given orally for blood purifier.
	Dilleniaceae	
1.	*Dillenia pentagyna* Roxb	Stem bark pounded with ginger and peppers are applied as bandage.
	Ebenaceae	
1.	*Diospyros peregrine* (Gaertn.)	Barke extract is taken orally for asthma
	Euphorbiaceae	
1.	*Acalypha indica* L.	Leaves with salt and turmeric are ground to powder and mixed with sesame oil, applied on the patches of ring worm infection. Leaf paste is applied topically to treat skin diseases.
2.	*Chamaesyce hirta* (L.) Small	Whole plant is pounded with salt and turmeric and applied as cream for boils, blisters & cuts.
3.	*Drypetes roxburghi* (Wall.) Hurusawa	Bark extract is given orally for cough.
4.	*Euphorbia antiquorum* Linn	Dried latex is taken internally in low dose to help free motion.
5.	*Euphorbia hirta* L.	The milky latex is applied topically to treat wounds and lip cracks.
6.	*Euphorbia tirucalli* L.	The stem is boiled with water and given to children to treat skin diseases.
7.	*Phyllanthus amarus* Schum. & Thnn.	Fresh leaves are ground and mixed with a cup of cow or goat's milk and taken internally to cure jaundice.
8.	*Phyllanthus emblica* L.	Fruit powder is mixed with cow's or goat's milk and taken orally to treat cold and cough.
9.	*Ricinus communis* L.	The leaf juice is taken orally or washed leaves are tied on the breast to increase secretion of milk in women. The oil prepared from the seeds is applied on lower stomach to get relief from stomachache.
	Fabaceae	
1.	*Abrus precatorius* Linn.	Root powder is taken orally along with cow's milk to treat scorpion sting and snakebite.
2.	*Abutilon indium* (L.) Sweet.	Leaf paste is applied over the spot of scorpion sting.
3.	*Acacia catechu* (L.f.) Willd.	The stem bark of *Acacia catechu* and tips of *Holoptela integriafolia* are

		ground to paste and applied on the wounds for eight days.
4.	*Acacia nilotica* (L.) Del	Dried stem bark powder mixed with camphor and ghee applied on wounds.
5.	*Clitoria ternatea* L.	Root powder is mixed with water and taken orally to treat indigestion, eye diseases and headache.
6.	*Pongamia pinnata* (L.) Pierre.	Juice of root is mixed with equal amount of coconut milk, boiled and applied topically to cure wound and gastric trouble.
7.	*Trigonella foenum-graecum* L.	Five gram of seeds is chewed to cure diarrhoea twice daily for two days.
	Flacourtiaceae	
1.	*Flacourtia indica* (Burm.f.) Merr.	Bark juice is boiled in gingelly oil and the worm extract is applied to cuts.
	Gentianaceae	
1.	*Enicostemma axillare* (Lam.) Royle	Whole plant is pounded and applied to boils.
	Hypoxidaceae	
1.	*Curculigo orchioides* Gaertn	Tubers are dried and powdered and one teaspoonful is taken orally with milk one every day for aphrodisiac.
	Lamiaceae	
1.	*Coleus aromaticus* Benth.	Leaf juice is taken orally by children to treat indigestion and cough.
2.	*Leucas aspera* (Willd.) Link.	A bunch of leaves is boiled and the vapour is inhaled to cure head ache and fever.
3.	*Ocimum sanctum* L.	Tulsi Leaves are crushed with onion bulbs and the juice is taken orally to treat cough, cold and headache.
	Lauraceae	
1.	*Cinnamomum verum* Presl.	Decoction of stem bark is taken internally to treat cough, dysentery and to keep the body cool.
2.	*Litsea glutinosa* (Lour.) C.B. Robins	Bark juice is taken orally for maternal pain.
	Lecythidaceae	
1.	*Careya arborea* Roxb.	Infusion of flowers is given after childbirth to heal ruptures.
	Liliaceae	
1.	*Aloe vera* L.	Sap mixed with oil is heated and the mixture is applied on hair for hair growth and good sleep.
2.	*Asparagus gonoclados* Baker	Tuber is eaten for fertility.
3.	*Gloriosa superb* L.	Bulbare pounded with garlicin goat milk given in early pregnancy
4.	*Smilaxperfoliata* Lour	One tea spoonful juice of tubersis taken orally before sleeping.
5.	*Sanservieria roxburghiana* Schult.	Juice of warmed leaf is poured into ear to treat ear pain.
	Loganiaceae	
1.	*Strychnos nux-vomica* L.	One table spoon **(**Bark extract) is given along with honey and ginger for dysentery.
	Lythraceae	
1.	*Lawsonia inermis* L.	Leaf powder is mixed with coconut oil and applied topically to treat cuts and wounds.
2.	*Woodfordia fruticosa* (L.) Kurz.	Flowers are pounded in cow milk for blood purifier.
	Malvaceae	
1.	*Abutilon indicum* L.	Leaf juice and root are taken orally to treat dental problems.
2.	*Hibiscus rosa-sinensis* L.	Paste of fresh leaves is applied on the hair for healthy and black hair.
3.	*Sida acuta* Burn.	Arival manai poondu Leaf paste is applied topically to heal cuts, wounds and to get relief from headache.
	Meliaceae	
1.	*Azadirachta indica* A. Juss.	Leaf paste is applied topically on the body to treat small pox, rheumatism and skin diseases. The young twigs are used as toothbrush to develop strong teeth.
	Menispermaceae	
1.	*Tinospora cordifolia* Miers.	Leaf paste is applied topically to treat wounds.
	Mimosaceae	
1.	*Acacia chundra* (Roxb. Ex Rottl.) Willd.	Stem bark extract (1 tablespoonful) is administered with goat milk for 4 days, with a day gap after every dose for asthma. Bark is kept in the home for get rid of fear (Evil spirit).
2.	*Acacia farnesiana* (L.) Willd.	Fruit powder is given orally with milk for dogbite.
3.	*Acacia leucophloea* (Roxb.) Willd	Paste of fresh stem bark is applied topically to treat cuts and wounds.
4.	*Acacia nilotica* (L.) Willd. Ex Del.	Bark powder is applied along with oil for burns.
5.	*Acacia pennata* (L) Willd.	Stem bark along with that of *Semecarpus anacardium* (each 100 g)

		are pound and the extract is given orally for 3 days for fits (Somma, Murcha)
6.	*Dichrostachys cinerea* Wight & Arn.	Leaf paste is applied to cuts.
7.	*Mimosa hamata* Willd.	Bark extract pound in cows' milks along with garlic is advised to men thrice a day for 3 days for increase in potency.
8.	*Mimosa pudica L*.	Leaf paste is applied topically to treat cuts and wounds. Root extract (2 spoons) given once a day for two days for diarrhoea.
9.	*Ficus benghalensis* L.	Stem latex is applied topically on heel cracks. Young stem is used as tooth brush.
10.	*Ficus racemosa* L.	Stem latex is applied topically to treat heel cracks.
11.	*Ficus religiosa* L.	Leaf powder is mixed with water and takenorally to get relief from body pain.
12.	*Xylia xylocarpa* (Roxb.) Taub	With roots tied to hand, one can move in the forests, even at night, without the fear of evil spirits.
	Moringaceae	
1.	*Moringa concanensis* Nimmo ex Dalz. & Gibs.	Stem bark extract (2 spoonfuls) is administered with sugar for 4 days for cough.
2.	*Moringa oleifera* Lam.	The leaf is taken as food and it reduces body heat and to treat indigestion and eye diseases. Flower is taken as food and it gives chillness to eyes and increases sperm production in men.
	Myrtaceae	
1.	*Syzygium cumini* (L.)	Paste of stem bark is applied topically to treat swellings. The ripe fresh fruits are taken orally to reduce body heat.
	Nyctaginaceae	
1.	*Boerhaavia diffusa* L.	Root paste is applied topically to treat hydrocele.
	Orchidaceae	
1.	*Vanda tessellate* (Roxb.) Hook. Ex G.Don.	Extract of white (velamen) roots (1 spoon) given once a day for 3 days for dysentery.
	Periplocaceae	
1.	*Sarcostemma acidum* (Roxb.) Voigt.	Columns grounded in goat milk and put as band for bone fracture.
	Plumbaginaceae	
1.	*Plumbago zeylanica* L.	Root pound with garlic in milk is given to children for fits (Somma, Murcha).
	Poaceae	
1.	*Cynodon dactylon* L. Pers.	Decoction of whole plant is taken orally to keep the body cool.
	Rhamnaceae	
1.	*Zizyphus mauritiana* Lam.	Leaf and bark decoction is boiled and it is used to take bath to treat severe body pain. Dried bark powder is applied topically to treat wounds.
2.	*Zizyphus rugosa* Lam.	Leaf paste is bandaged for bone fracture.
	Rubiaceae	
1.	*Ceriscoides turgid* (Roxb.) Tirveng.	Bark juice is administered for diarrhoea.
2.	*Chomelia asiatica* (L.) Kuntze.	Root juice along with garlic is instilled in nose for fits (Somma, Murcha).
3.	*Hymenodictyon orixense* (Roxb.) Mabb.	Bark juice is bandaged for bone fracture.
4.	*Morinda tinctoria* Roxb.	Leaf juice is given orally to children before food for easy digestion.
5.	*Oldenlandia umbellata* L.	The root paste is applied topically to arrest bleeding.
6.	*Spermacoce hispida* L	The seeds are crushed into paste and taken orally to treat stomach problems.
	Rutaceae	
1.	*Aegle marmelos* Corr.ex.Roxb	Leaf paste is applied topically to heal wounds. The pulp of fruit is given with water to children suffering with dysentery.
2.	*Citrus aurantifolia* (Christm.) Swingle. L.	Decoction of leaves is inhaled to get relief from fever, headache and cold.
3.	*Murraya koenigii (*L.) Sprengel	Juice of tender leaves is taken orally to arrest vomiting.
4.	*Toddalia asiatica* (L.) Lam.	Leaf paste is applied along with pepper for boils, blisters & cuts.
	Sapindaceae	
1.	*Cardiospermum halicacabum* L.	Root is boiled with oil and applied on head before bath to treat throat infection and headache.
2.	*Dodonoea viscose* (L.) Jacq.	Leaves pounded with turmeric are bandaged over the affected part of bone fracture.

3.	*Schlelichera oleosa* (Lour.) Oken:	Stem bark extract is applied over the chest twice a day till relieved of pain.
	Solanaceae	
1.	*Datura metel* L.	Few drops of leaf juice is poured into ear to treat earache.
2.	*Solanum nigrum* L	Whole plant parts are taken as food to treat cough.
3.	*Solanum surattense* Burm.f	Root extract (1 tablespoon) is given orally after 3 days of menstruation for 5 or 6 days for fertility.
4.	*Solanum torvum* Sw.	Leaf juice is taken orally to reduce body heat.
5.	*Solanum trilobatum* L.	Unripe fruits are prepared as curry or roasted in gingelly oil and taken orally along with food to strengthen the body. The leaf juice is taken orally to treat cough and itching.
6.	*Withania somnifera* (L.) Dunal	Juice of tuber and milk is advised for females with no children.
	Sterculiaceae	
1.	*Melochia corchorifolia* L.	Boiled leaf is taken as food to help in free motion.
	Tiliaceae	
1.	*Grewia hirsute* Vahl	Roots are pounded and applied over for boils, blisters & cuts.
	Ulmaceae	
1.	*Holoptelia integrifolia* (Roxb.) planch	Bark juice (1/2 glass) is given twice a day for a week.
	Verbenaceae	
1.	*Clerodendrum inerme (*L.)	Leaf is ground in water and the juice is taken orally to treat fever.
2.	*Lantana camara* L.	A handful of flower is ground with coconut oil and applied topically on the head to get relief from headache.
3.	*Lippia nodiflora* Mich.:	Paste of leaves is applied topically to treat swellings and wounds.
4.	*Stachytarpheta jamaicensis* Vahl.	Paste of stem and root bark is applied topically to treat dysentery.
5.	*Tectona grandis* L.f	Leaf juice (200 g) and honey (100 g) are mixed and taken every day with milk for 40 days for elephantiasis**.**
6.	*Vitex negundo* L.	Leaves are boiled in water and the vapour is inhaled twice a day to get relief from headache, fever, cold, and cough.
	Violaceae	
1.	*Hybanthus enneaspermus (*L) Muell	Paste of whole plant is applied topically to treat cough. Whole plant dried and powdered. One teaspoonful is taken orally with milk every day twice for Aphrodisiac.
	Vitaceae	
1.	*Cissus quadrangularis* L	Paste of stem is taken orally for easy digestion. Tender internodes and leaves are pickled and eaten for Anorexia.
2.	*Ampelocissus latifolia* (Roxb.) Planch	200 ml of stem juice is administered orally once a day for 2 days for Anorexia
	Zingiberaceae	
1.	*Costus speciosus* (Koenig) Smith	Rhizomes are pound and 1 teaspoonful of juice is taken orally by tribals for abortion.
2.	*Zingiber officinalis* Rosc.	5ml extract of fresh rhizome is given internally in the early morning for 3 days for cough. One gram rhizome is decocted along with 2 g of *Piper nigrum* 10g root bark of *Plumbago zeylanica,* 1 seed of *Semecarpus* anacardium in half litre water, 20 ml decoction is given internally by adding tea spoonful of cow ghee once daily for 3 days for Sexually transmitted disease.
	Zygophyllaceae	
1.	*Tribulus terrestris* L.	The fruit and root are mixed with boiled raw rice, taken orally to prevent white discharge in women and to treat urinary troubles. Ground 10 g seeds with 10 g dry roots of *Withania somnifera* to make powder. One tea spoonful powder is given internally daily with milk during bed time for 30 days for impotency.

DISCUSSION

As we all know by now, biodiversity is essential for maintaining the ecological functions, including stabilizing of the water cycle, maintenance and replenishment of soil fertility, pollination and cross-fertilization of crops and other vegetation, protection against soil erosion and stability of food producing and other ecosystems. Conservation of biological diversity leads to conservation of essential ecological diversity to preserve the continuity of food chains. Biodiversity provides the base for the livelihoods, cultures and economies of several hundred millions of people, including farmers, fisher folk, forest dwellers and artisans. It provides raw material for a diverse medicinal and health care systems. It also provides the genetic base for the continuous up-gradation of agriculture, fisheries, and for critical discoveries in scientific, industrial and other sectors. The rapid erosion of biodiversity in the last few

decades has impacted on the health of the land, water bodies and people. Biodiversity is a wealth to which no value can be put. In the final analysis, the very survival of the human race is dependent on conservation of biodiversity. It is evident that this invaluable heritage is being destroyed at an alarming rate due to several reasons. Measures are being taken up at national and international levels to address this issue. The Earth Summit produced a plan of action on a number of issues including conservation of biodiversity during the 21st century. Conservation and sustainable use of biological resources based on local knowledge systems and practices is ingrained in Indian ethos.

The major families which occupied first and second position were Mimosaceae-12sp Euphorbiaceae-9sp, and all 149 plant species belonging to 57 families were documented and authentically identified. The tribal for their health care, of these 4species are recorded from Acanthaceae, Aizoaceae-1sp, Alangiaceae-1sp, Amaranthaceae-2sp, Anacardiaceae-5p, Annonaceae-1sp, Apocynaceae-5sp, Araceae-1sp, Asclepiadaceae-7sp, Asteraceae – 5sp, Bombacaceae -1sp, Boraginaceae -2sp, Burseraceae -1sp, Caesalpiniaceae-4sp, Capparaceae-3sp, Celastraceae-1sp, Combretaceae-3sp, Convolvulaceae-2sp, Cucurbitaceae-2sp, Cyperaceae-2sp, Dilleniaceae-1sp, Ebenaceae-1sp, Euphorbiaceae-9sp, Fabaceae-7sp, Flacourtiaceae-1sp, Gentianaceae-1sp, Hypoxidaceae-1sp, Lamiaceae-3sp, Lauraceae-2sp, Lecythidaceae-1sp, Liliaceae-5sp, Loganiaceae-1sp, Lythraceae-2sp, Malvaceae-3sp, Meliaceae-1sp, Menispermaceae-1sp, Mimosaceae-12sp, Moringaceae-2sp, Myrtaceae-1sp, Nyctaginaceae-1sp, Orchidaceae-1sp, Periplocaceae-1sp, Plumbaginaceae-1sp, Poaceae-1sp, Rhamnaceae-2sp, Rubiaceae-6sp, Rutaceae-4sp, Sapindaceae-3sp, Solanaceae-6sp, Sterculiaceae-1sp, Tiliaceae-1sp, Ulmaceae-1sp, Verbenaceae-6sp, Violaceae-1sp, Vitaceae-2sp, Zingiberaceae-2sp, Zygophyllaceae-1sp. According to a report of the World Health Organization (WHO), three forth of the World population cannot afford the products of the modern medicine and have to rely on the use of traditional medicine of plant origin (Rai *et al,* 2000).

The herbal remedies mentioned are of certain general and specific ailments, such as snake bite, cough, and scorpion sting, head ache, back pain body pains, cold, dandruff, dog bite, fever, hair loss, jaundice, inflammation, joint pains, lice killer, skin ailments, ear pains, eye problems, red and white discharge in women, loss of semen in urine in men, tooth ache and gum problems, stomach ache, bone fractures, conception and menstrual problems and wound healing. The resource persons are mostly lambadas, chenchus and some elderly people of local villages. The people practice and cure almost all ailments or diseases or wounds very effectively with simple locally available plants with out involving much financial commitment, in majority of the cases they treat freely. It revealed valuable information about the ethno medicine of the local tribals of Vikarabad in Rangareddy District.

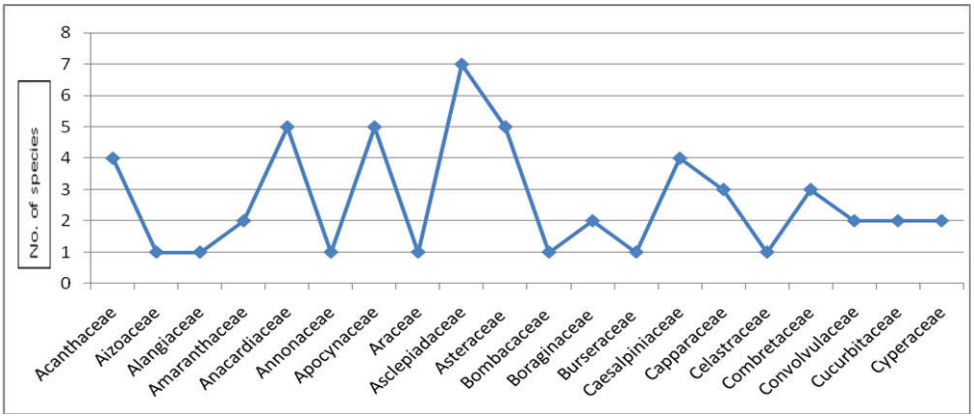

Fig 1. Graph showing No. of species from some families

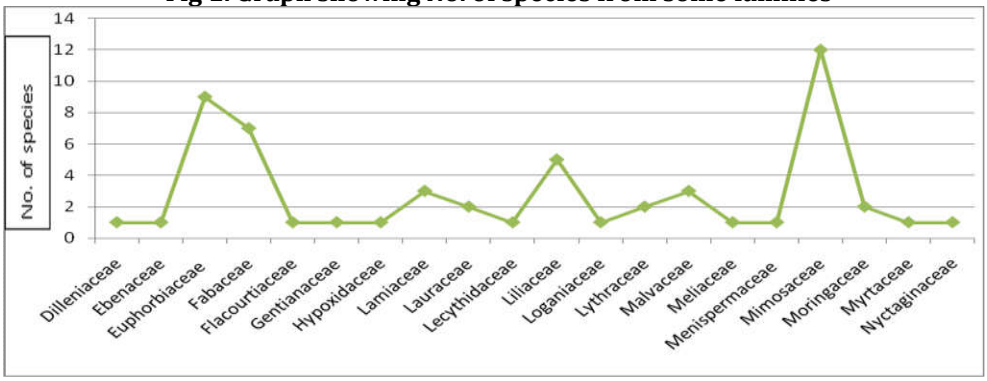

Fig 2. Graph showing No. of species from some families

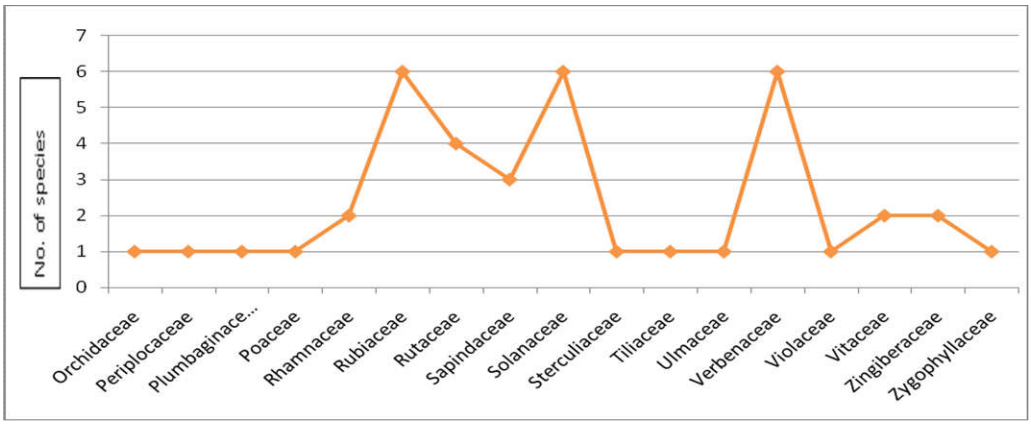

Fig 3. Graph showing No. of species from some families

CONCLUSION

The country has a number of alternative medicines, like Ayurveda, Unani, Siddha and Homeopathic systems which are predominantly based on plant based raw materials in most of their preparations and formulations. Herbal preparations for various purposes including pharmaceutical and cosmetic form part of traditional biodiversity uses in India. India is one of the twelve mega biodiversity countries in the world representing 6.5 percent of world's know wildlife and 12 percent of plant life. Of this ten percent of flora is on the verge of extinction, and many more are on the threatened list while some of them are already rare of disappeared due to in hospitable atmosphere created by man to the plants.

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