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Ethno botanical study of medicinal plants of Sri Pancha Narasimha Swamy and Sri Matsyagiri Narasimha Swamy

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Abstract

Sacred groves carries its own legend lore, myths, very ancient, rich heritage and repositories of biological wealth of the nation, play an important role in religious and socio-cultural life of the local people. The present study focus on the ethno-medicinal plants of Sri Pancha Narasimha Swamy and Sri Matsyagiri Narasimha Swamy sacred groves, Bhongir area of Nalgonda District. Through questionnaire, personal interviews and conversation with local aged people and medical practitioners know about 131 species, medicinal uses to treat different ailments of human beings. All these plants need to be evaluated through phyto and pharmacochemical investigations to discover their potentiality in developing effective medicines for curing different diseases in human beings.

Keywords: Sacred groves, biodiversity, medicinal value, ailments.

1. Introduction

Sacred groves carries its own legend lore, myths, very ancient rich heritage and repositories of biological wealth of the nation, play an important role in religious and socio-cultural life of the local people. They act as an ideal centre for biodiversity conservation. Several plants and animals that are threatened in the forest are still well conserved in some of sacred groves. It has been observed that several medicinal plants that are not to be found in the forest are abundant in the sacred groves. Further, endangered threatened and endemic species are often concentrated in sacred groves [1, 2]. One of the significant tradition of nature workshop is that of providing protection to patches of forest dedicated to deities or ancestral spirits. These vegetation patches have been designed as sacred groves. Biodiversity of sacred groves are preserved in a mostly undisturbed condition probably due to certain taboos and religious beliefs [8]. Over 50,000/- sacred groves have been reported from different parts of India. According to Gokhala [4] *et al.*, (1998) the total area of sacred groves in India would be about 33,000 hectares or 0.01 percent of the total area of India. Sacred groves may consist of multi species or group of trees [6].

India has a rich diversity of medicinal plants, knowledge of these medicinal plants have been accumulated in the course of many centuries [10] Rigveda, Charaka Samhita provide information on the medicine. The supply base of 90% herbal raw drugs used in the manufacture of Ayurveda, Sidda, Unani, and Homeopathy systems of medicine is largely from the wild. This wild source is speedily shrinking day-by-day. It is important for conservation and sustainable use of medicinal plants. It is hoped that in the future, ethno botany may play an increasingly important role in sustainable development and biodiversity conservation.[11] Different botanists have documented the uses of various medicinal plants from different parts of Telangana [12, 15]

2. Materials & methods

2.1. Study Area

Field study was conducted in and around sacred groves of Sri Pancha Narasimha Swamy and Sri Matsyagiri Narasimha Swamy area of Bhongir, Nalgonda District. These are the most unique, beautiful and pleasant hillock with moderate climate in all seasons.

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2.2 Ethno botanical survey

The entire area of the sacred groves are thoroughly studied by repeated visits in different seasons of the year 2013-14 covering in pre-monsoon, monsoon and post-monsoon seasons. It helps in observing the different developmental stages of plants. The plant specimens were collected, identified with the help of Flora, viz [3, 12]. The medicinal importance of plants are gathered from local aged people in-depth interviews and discussions with medicinal practitioners.

3. Results

The present study includes high value medicinal plant species of Angiosperms belongs to 44 families of 101 genera and 131 species. They are arranged family wise and gives their local names and diseases are furnished with in the table-1 [5, 7, 9]. These medicinal plants exposed varied ethno medicinal implications which are highly recommended by local aged people and ayurvedic medical practitioners.

Table 1: List of Medicinal Plants

| S. No | Name of Taxa | Local Name | Family | Yadagirigutta | Matsyagiri Lakshmi Narasimha Swamy | Disease |
|-------|--|-------------------------|-----------------|---------------|------------------------------------|---|
| 1 | <i>Annona squamosa L</i> | Setha falam | Annonaceae | √ | √ | Fruits - edible, cooling sedative, stimulant, anemia, decrease burning sensation, leaves - insecticidal, bark-diarrhea root - dysentery |
| 2 | <i>Tinospora cordifolia W</i> | Tippa tega | Menispermaceae | √ | √ | Swine flu, Bird flu, throat infection, sneezing, body aches, skin disease |
| 3 | <i>Argemone mexicana L</i> | Nella rakasi | Papaveraceae | √ | √ | Root - skin disease, leaves - urinary troubles, seeds - malaria |
| 4 | <i>Capparis sepiaria L</i> | Nalla uppi | Cappardiaceae | √ | √ | Leaves - eczema, dandruff |
| 5 | <i>Capparis zeylanica L</i> | Aadonda | | √ | √ | Root, bark - ear infection |
| 6 | <i>Cleome gynandra L</i> | Vamita | | √ | √ | Skin disease, leaves - headache, knee pains |
| 7 | <i>Cleome viscosa L</i> | Vamita | | √ | √ | Root-wounds, leaves - ear infection |
| 8 | <i>Polygala arvensis Wild</i> | | Polygalaceae | -- | √ | Roots - anti septic, asthma, chronic bronchitis |
| 9 | <i>Polycarpha corymbosa L</i> | Bomma sari | Caryophyllaceae | -- | √ | Leaves - boils, inflammatory swellings, astringent, demulcent |
| 10 | <i>Abutilon crispum L</i> | Tuttru benda | Malvaceae | √ | √ | Leaves – bronchitis, piles root-pregnancy |
| 11 | <i>Abutilon indicum L</i> | | | √ | √ | Roots are sources of ephedrine |
| 12 | <i>Sida acuta Burm</i> | Bala | | √ | √ | Roots - wounds, rheumatism |
| 13 | <i>Sida cordifolia L</i> | Naga bala | | √ | √ | gonorrhoea |
| 14 | <i>Sida rhombifolia L</i> | Aathibala | | √ | √ | rheumatism |
| 15 | <i>Pterospermum xylocarpum S&W</i> | Dudika | Sterculiaceae | -- | √ | Bark decoction mixed with piper nigrum powder is taken to cure diarrhea |
| 16 | <i>Waltheria indica</i> | Nalla binda | | √ | √ | Febrifuge, purgative, eye bath |
| 17 | <i>Corchorus aestuans L</i> | Nella bera | Tiliaceae | -- | √ | Seeds and aerial parts-stomach ache, pneumonia, inflammatory |
| 18 | <i>Corchorus capsularis L</i> | Goni nara | | -- | √ | Root paste cure dysentery |
| 19 | <i>Corchorus trilocularis L</i> | Banki tuttura | | √ | √ | Anti-inflammatory, cholesterol lowering activity, demulcent |
| 20 | <i>Grewia flavescens Juss</i> | Banka jana | | -- | √ | Anti-inflammatory, diabetes, anti-helminthic anti-malaria |
| 21 | <i>Grewia hisuta Vahl</i> | Chitti jana or jibilika | | -- | √ | Anti- pyretic, Nervine tonic |
| 22 | <i>Triumfetta rotundifolia L</i> | | | √ | √ | Vitality of the brain, demulcent |
| 23 | <i>Triumfetta rhomboidea Jacq</i> | Bankathu thar | Tiliaceae | √ | √ | Leaves - boils |
| 24 | <i>Tribulus terrestris L</i> | Palleru | Zygophyllaceae | √ | √ | Leaves - stones in the bladder |
| 25 | <i>Boswellia serrata Roxb</i> | | Burseraceae | -- | √ | Gum- antiseptic, expectorant, diuretic |
| 26 | <i>Azadirachta indica A</i> | Neam | Meliaceae | √ | √ | Bark - fever, jaundice leucorrhoea, tooth ache, anti-bacterial, insecticidal flowers – jaundice, root- malaria, leaves - chicken pox, skin diseases, helminthiasis, |
| 27 | <i>Soymida febrifuga Roxb</i> | Somi | | -- | -- | Bark-diarrhea, dysentery, fever |

| | | | | | | |
|----|--|--------------------------------------|---------------|-----------------|----|---|
| 28 | <i>Ximenia americana L</i> | | Olacaceae | √ | √ | Leaves - fever ulcers, skin infections |
| 29 | <i>Ziziphus jujuba L</i> | Regu | Rhamnaceae | √ | √ | Fruit – edible, urinary troubles, stomachache, Bone protection |
| 30 | <i>Cissus pallid (W&A) Ste</i> | Adavi gummadi | Vitaceae | √ | -- | Anti- inflammatory |
| 31 | <i>Cissus quadrangularis L</i> | Nalleru | | -- | √ | Bone fractures, asthma gastro protective |
| 32 | <i>Abrus precatorius L</i> | Guravinda | Fabaceae | √ | √ | Root-paralysis, dental problems, Seeds - snake bite |
| 33 | <i>Butea monosperma L</i> | Flame of the forest or moduga chettu | | √ | √ | Seeds – aphrodisiac, contraceptive |
| 34 | <i>Dalbergia lanceolaria L</i> | Illari or Erra pacchari | | √ | √ | Seed oil- rheumatism |
| 35 | <i>Dalbergia paniculata Roxb</i> | Pacchari or chindugu | | √ | √ | Bark with neem oil used as external application of baldness |
| 36 | <i>Indigofera ennaeophyllum L</i> | Yerra palleru | | √ | √ | Skin diseases, diuretic, anti-diarrhea |
| 37 | <i>Indigofera trita L</i> | Jedi vempalli | | √ | √ | Diarrhea, chest and body pains |
| 38 | <i>Indigofera hirsute L</i> | Kolapattitulu | | √ | √ | Liver diseases, Rheumatism, arthritis, tumors |
| 39 | <i>Pterocarpus marsupium Roxb</i> | Yegisa | | -- | √ | Paste prepared from plant gum opium and cinnamom fruit to cure blood dysentery |
| 40 | <i>Tephrosia purpurea (L). pers</i> | Vempali | | √ | √ | Anti – oxidant, anti- viral, Memory in children, root-cough, asthma |
| 41 | <i>Tephrosia villosa (L). pers</i> | Nugu vempalli | | √ | √ | Leaves anti- dote to snake bite, teeth problems, whole plant - memory to children, root - cough |
| 42 | <i>Bauhinia racemosa Lam</i> | Tella arechettu | | Caesalpiniaceae | √ | √ |
| 44 | <i>Cassia auriculata L</i> | Tangadu | √ | | √ | Leaves-bone fractures, burns, diabetes |
| 45 | <i>Cassia fistula L</i> | Rela | √ | | √ | Roots-constipation, bark-leprosy, fruit - jaundice |
| 46 | <i>Cassia occidentalis L</i> | Kasintha | √ | | √ | Leucorrhoea, febrifuge, diuretic, root - filariasis |
| 47 | <i>Cassia tora L</i> | Chakra murdha | √ | | √ | Leaves - skin disease, seeds – laxative, eye disease |
| 48 | <i>Delonix regia Raf</i> | Gulmohur | √ | | √ | Anti – bacterial, anti-inflammatory, diabetes |
| 49 | <i>Tamarindus indica L</i> | Tamarind | √ | | √ | Liver diseases, measles, seeds-antidote, indigestion |
| 50 | <i>Acacia leucophloea Roxb</i> | Tella tumma | -- | | √ | Bark, ulcers and boils |
| 51 | <i>Acacia nilotica L</i> | Nella thumma | Mimosaceae | √ | √ | Charcoal - dental problems, gum – diarrhea, bark - cough, asthma, fractures |
| 52 | <i>Albizia amara R</i> | Cheekireni or narlinga | | √ | √ | Relieve pains and ulcers |
| 53 | <i>Dichrostachys cinerea L</i> | Nella jammi | | √ | √ | Bark - used in headache, toothache, dysentery |
| 54 | <i>Prosopis cineraria (L.)</i> | jammi | | √ | √ | Rheumatism, cough, asthma, scorpion sting |
| 55 | <i>Prosopis juliflora L</i> | Sarkar tumma | | √ | √ | Fire wood |
| 56 | <i>Leucaena leucocephala (Lam).dewit</i> | Subabul or nagari | | √ | √ | Anti-helminthic |
| 57 | <i>Mimosa pudica L</i> | Touch- me- not | | √ | √ | Whole plant - fever, constipation, leprosy, filaria, root-malaria, diarrhea |
| 58 | <i>Largerstroemia parviflora Roxb</i> | chennang | Lythraceae | √ | √ | Anti-pyretic |
| 59 | <i>Opuntia dillenii Ker. Gawl</i> | Naga jammudu | Cactaceae | √ | √ | Leaves-bleeding, flower- boils, fruit-throat pain |
| 60 | <i>Glinus oppositifolius L</i> | Chayuntarashi | Molluginaceae | √ | √ | Skin diseases, piles, leucoderma |
| 61 | <i>Mollugo pentaphylla L</i> | Chetarasi | | √ | √ | Antiseptic, stomach ache, roots - eye diseases |
| 62 | <i>Alangium salvifolium L</i> | Udaga | Alangiaceae | √ | √ | Leaves - bone fracture, swellings, roots - scorpion, dog bites |

| | | | | | | |
|----|---|--------------------------|----------------|----|--|--|
| 63 | <i>Canthium parviflorum L</i> Thunb | Balusu | Rubiaceae | √ | -- | Leaves- fever, root and bark dysentery |
| 64 | <i>Catunaregam spinosa T</i> | Manga | | -- | √ | Insecticidal, expectorant, abortifacient |
| 65 | <i>Ageratum conyzoides L</i> | Goat weed | Asteraceae | √ | √ | Herb- dysentery, diarrhea rheumatism, kidney stones |
| 66 | <i>Bidens biternata Lour</i> | | | -- | √ | Treat eye and ear infection, wounds, pain reliefs |
| 67 | <i>Blainvillea acmella L</i> | | | √ | -- | Tooth ache, rheumatism, itches, diuretic |
| 68 | <i>Blumea mollis Don</i> | Kukka pogaku | | -- | √ | Leaves, skin diseases, whole plant, diarrhea |
| 69 | <i>Dicoma tomentosa cass</i> | | | -- | √ | Healing wounds, skin diseases |
| 70 | <i>Eclipta prostrata L</i> | Gunta guragura | | √ | √ | Whole plant, hair tonic liver tonic, jaundice, hemorrhoids |
| 71 | <i>Lagascea mollis cav</i> | Silk leaf | | -- | √ | Whole plant paste with camphor and mustard oil is applied on chest and throat to cure cold, cough and nasal congestion |
| 72 | <i>Parthenium hysterophorus</i> L | Congress weeds | | √ | √ | Urinary tract infections, rheumatism, pains, dysentery |
| 73 | <i>Pulicaria wightiana (DC).</i> C.B.Clarke | Adavi chamanthi | | √ | √ | -- |
| 74 | <i>Sphaeranthus indicus L</i> | Boddasoram | | -- | √ | Hemorrhoids, epilepsy mental illness, diabetes, leprosy, Whole - plant health tonic |
| 75 | <i>Tridax procumbens L</i> | Gaddi chamanthi | √ | √ | Kidney stones, leprosy, Leaves - wounds, skin diseases, dandruff | |
| 77 | <i>Vernonia cinerea L</i> | Sahadevi | √ | √ | Seeds - digestion, root - rheumatism | |
| 78 | <i>Plumbago zeylanica L</i> | Tella chitramulamu | Plumbaginaceae | √ | √ | Root – anti-helminthic, immunity |
| 79 | <i>Calotropis gigantea L</i> | Jiledi puvvu | Asclepiadaceae | √ | √ | Latex-wounds, root-arthritiis, leaf juice earache |
| 80 | <i>Calotropis procera (Ait.) R</i> | Jilledu chettu | | √ | √ | Ulcers, enlargement of spleen, lever disease, skin disease, Latex - wounds |
| 81 | <i>Caralluma adscendens</i> Roxb | | | √ | √ | Rheumatism, stomach disorders, reduce obesity, suppress hunger, inflammatory |
| 82 | <i>Cryptostegia</i> <i>grandiflora (Roxb.)R.Br</i> | Rubber plant | | √ | √ | Toxic |
| 83 | <i>Hemidesmus indicus L</i> | sugandhapala | | √ | √ | Anti- toxic, diabetes, urinary tract disorders |
| 84 | <i>Leptadenia reticulata</i> W&A | Palateega | | √ | √ | Bronchitis, diuretic constipation, cures bleeding disorders, Leaves- earache |
| 85 | <i>Sarcostemma acidum Roxb</i> | Aaku jemudu | | √ | √ | Mental disease, allergic rhinitis, lactation, emetic, latex - ulcers |
| 86 | <i>Coldenia procumbens L</i> | Hamsapadu | Boraginaceae | √ | √ | Diabetes, rheumatism, inflammation |
| 87 | <i>Ehretia laevis Roxb</i> | | √ | √ | Syphilis, diphtheria, eczema | |
| 88 | <i>Heliotropum indicum L</i> | Nagadhanthi | √ | √ | Wounds, skin - diseases ulcers | |
| 89 | <i>Evolvulus alsinoides L</i> | Vishnukranthi | Convolvulaceae | √ | √ | Anti-stress, depression, cough and cold |
| 90 | <i>Datura stramonium L</i> | Ummetha | Solanaceae | √ | √ | Leaves - earache, whooping cough |
| 91 | <i>Physalis minima L</i> | Budama | | √ | √ | Anti-pyretic, anti- inflammatory |
| 92 | <i>Solaum surattense B</i> | Errinvanga Nelamulaka | | √ | √ | Cough, Cold, Asthma |
| 93 | <i>Adhatoda vasica Nees</i> | Addasaram | | √ | √ | Asthma, bronchitis, |
| 94 | <i>Andrographis paniculata L</i> | Kalmegh | Acanthaceae | √ | √ | Leaves-wounds, roots- anti- inflammatory, malaria, snake bite |
| 95 | <i>Barleria longifolia L</i> | Enugu palleru | | √ | √ | Diabetes, liver problems, aphrodisiac |
| 96 | <i>Lepidagathis cristata Wild</i> | Mulla banthi | | √ | √ | Roots - dental problem |

| | | | | | | |
|-----|---|--------------------------------|---------------|---|--|---|
| | | | | | | dandruff, warts |
| 97 | <i>Vitex negunda L</i> | Vavilli | Verbenaceae | √ | √ | Leaves and seeds-stomach ache, anti-helminthic |
| 98 | <i>Lantana camara L</i> | Puli kampa | | √ | √ | Epilepsy, asthma, Leaves – analgesic, hepato active, antidote |
| 99 | <i>Leucas aspera (Wild) Link</i> | Timmi chettu | Lamiaceae | √ | √ | Leaves- jaundice - menstrual pains, paralysis, asthma, diabetes. |
| 100 | <i>Gmelina asiatica L</i> | Pedda nevli | | √ | √ | Anti-pyretic hepatic diseases, jaundice, Root - dental problems |
| 101 | <i>Ocimum sanctum L</i> | Tulasi | | √ | √ | Arthritis, anti-cancer, skin disease, anti-stress, cough cold, earache, anti- pyretic, diuretic, tumors, diabetes |
| 102 | <i>Boerhavia diffusa L</i> | Aatika mamidi | Nyctaginaceae | √ | √ | Digestion, liver problems, cardiac, spleen, diuretic |
| 103 | <i>Achyranthes aspera L</i> | Uttaraene | Amaranthaceae | √ | √ | Roots-snake bite, teeth infection, cough, asthma |
| 104 | <i>Aerva javanica(Burm.f.)juss.ex sch</i> | Pedda pindikura | | √ | √ | Kidney stones |
| 105 | <i>Aerva lanata L</i> | Pindikura | | √ | √ | Whole plant - kidney stones |
| 106 | <i>Alternanthera pungens kunth</i> | | | √ | √ | Diuretic, gonorrhoea |
| 107 | <i>Alternanthera sessilis (L.) DC</i> | Pamagantskura | | √ | √ | Wounds, cough - bronchitis, diabetes, jaundice |
| 108 | <i>Celosia argentea L</i> | Gunugu | | √ | √ | Gonorrhoea |
| 109 | <i>Pupalia lappacea L</i> | Thella uthareni | | √ | √ | Bone fractures, boils, cough |
| 110 | <i>Gyrocarpus asiaticus Wild</i> | Poliki or helicopter tree | Hernandaceae | √ | √ | Antioxidant, anti-cancer |
| 111 | <i>Acalypha indica L</i> | Muri pindi | Euphorbiaceae | √ | √ | Whole plant - skin diseases |
| 112 | <i>Corton bonplandianum Bail</i> | Galivana | | √ | √ | Control blood pressure |
| 113 | <i>Euphorbia antiquorum L</i> | Peeda jamudu | | √ | √ | Fistula, skin diseases |
| 115 | <i>Euphorbia hirta L</i> | Nanabala | | √ | √ | Whole plant used in jaundice, diabetes, leaves dysentery |
| 116 | <i>Euphorbia ligularia Roxb</i> | | | √ | √ | Leaves and roots are used in asthma, rheumatism, toothache |
| 117 | <i>Euphorbia tirucalli L</i> | Manchi jamudu | √ | √ | Latex - dental problems cough and cold | |
| 118 | <i>Tragia involucrata L</i> | Dulagandi | √ | √ | Whole plant fever, head ache | |
| 119 | <i>Holoptelea integrifolia Roxb</i> | Namli | Ulmaceae | √ | √ | Bark piles, fistula scabies and anti-tumor effect |
| 120 | <i>Ficus hispida L</i> | Bamma madi | Moraceae | √ | √ | Leaves-leuco derma roots-wounds, Latex-diarrhea, ulcers |
| 121 | <i>Ficus religiosa L</i> | Ragi | | √ | √ | Teeth problems, leaves-hair tonic |
| 122 | <i>Ficus benghalensis L</i> | Banyan marri | | √ | √ | Prop roots-memory power, bark- diarrhea, diabetes |
| 123 | <i>Streblus asper L</i> | Barrenka | | √ | √ | Twigs- dental problems, bark-muscle pain |
| 124 | <i>Borassus flabelifer L</i> | Thati chettu | Palmae | √ | √ | Fruit pulp - edible part |
| 125 | <i>Aloe vera L</i> | kalabanda | Liliaceae | √ | √ | Beauty aid, dandruff leaves contains 18 amino acids antiviral, antifungal and anti-bacterial properties |
| 126 | <i>Phoenix sylvestris Roxb</i> | Etha | | √ | √ | Fevers, fruit - cooling, Leaf - juice tongue problems, fruits - cardio tonic |
| 127 | <i>Commelina benghalensis L</i> | | Commelinaceae | √ | √ | Leaves vegetables |
| 128 | <i>Cyperus rotundus L</i> | Nut grass | cyperaceae | | | Dysentery, liver problems, dandruff, cough |
| 129 | <i>Apluda mutica L</i> | | Poaceae | √ | √ | Diuretic, gonorrhoea |
| 130 | <i>Cymbopogan flexuosus Nees ex steud</i> | Nimma gaddi Indian lemon grass | | √ | √ | Wound healing |
| 131 | <i>Cynodon dactylon L</i> | Garicha gaddi | | √ | √ | Whole plant- kidney stones, skin diseases |

4. Discussion

Local aged people and medicinal practitioners have traditional knowledge of plant species used for curing the diseases. This knowledge has been passing from one generation to another generation and played an important role in the conservation and sustainable development of the biodiversity.

Especially Nalgonda district being a backward area with a rural background, people are illiterate and depend on agriculture. Most of the population is not exposed to the modern medicine. The villages are deprived of trained doctors and good infrastructure in the hospitals. People do not know much about the modern medicines and they completely depend upon ayurvedic medicines. In this district some people have taken up Ayurveda as a medicinal practice from their ancestors and its knowledge is passes from one generation to another generation. The main ailments in the study area are cold and cough, would healing, joint and body pains, stomach pains, anti-diabetic, menstrual disorder, ulcers, dysentery, dental problem dandruff, kidney stones, jaundice, leprosy, snake bite, asthma and other diseases. The species which are enriched in medicinal values are required for further study of human welfare.

5. Conclusion

The current study reveals that the native folks have good knowledge on traditional uses of plants. But due to the modernization, this knowledge may be lost in due course. Hence, it is essential to study and document the ethnic knowledge, which can provide valuable information to pharmacologists in screening of individual species and their plants constituents. Therefore, the present study will be useful for researchers in the field of Ethnobotany, ethnomedicinal and pharmacology for further studies. Local people who are residing near and around the sacred groves still depend on the med flora to cure various ailments.

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7. References

- Bhakat RK, Pandit PK. An inventory of medicinal plants of some sacred groves of Purulia District, West Bengal. *Indian Forester* 2004; 130(1):37-44.
- Biswas A, Bari MA, Roy M, Bhadra SK. Inherited folk pharmaceutical knowledge of tribal people in the Chittagong hill tracts Bangladesh, *Ind. J. trad. knowledge* 2010; 9(1):77-89.
- Gamble JS, Fischer CEC. *Flora of the Presidency of Madras (1-3)*, Adlard & Sons Ltd., London, 1967, 1-3.
- Gokhale Y, Velankar R, Subash Chandran MP, Gadgil. Sacred woods, grasslands and water bodies as self-organised systems of conservation, In: Ramakrishnan PS, Saxena KG, and Chandrashekara UM (eds) *conserving the sacred for Biodiversity Management*, Oxford and IBH Publishing co., New Delhi, 1998, 365-398.
- Hemadri K *Shastravettalanum Akashistunna Girijana Vaidyam (Tribal Pharmacopoeia)*. Tribal Cultural Research and Training Institute, Hyderabad, 1994.
- Hughes JD, Subash Chandran MD. Sacred groves around the earth: An overview, In: Ramakrishnan PS, Saxena KG, and Chandrashekara UM (eds) *conserving the sacred for Biodiversity Management*, Oxford and IBH Publishing co New Delhi, 1998, 46-69.
- Jain SK. Observations on Ethnobotany of the tribal of central India. In: Jain, S.K. (ed.), *Glimpses of Indian Ethnobotany*. Oxford & IBH, New Delhi, 1981, 193-198.
- Lakshminarayana K, Venkaiah M. Biodiversity in the Sacred groves of the North Coastal District of Andhra Pradesh, National Symposium on conservation of Eastern Ghats, 1998, 52-58.
- Martin G. *Ethnobotany – A method manual*. Chapman and Hall, London, 1995.
- Nadakarani AK. *Indian Materia Medica*, Popular Prakasam, Bombay 1954; 1:1319.
- Rajasekaran B, Warren DM. Indigenous knowledge for socio-economic development and biodiversity conservation: The Kolli hills, *Indigenous knowledge & Development Monitor* 1994; 2:13-17.
- Rao PN, Raghava Swamy BV, Pullaiah T. *Flora of Nalgonda District, Andhra Pradesh, India*. Shipra Publications, Shakarpur, Delhi, 2001.
- Rao VLN, Bharathi K, Appalanaidu P, Naidu JM, Venkaiah M. Common plants of medicinal values in kolams of Adilabad district, Andhra Pradesh. *Int J Med Biomed Res* 2012; 1(2):111-118.
- Singh RK. Sustainable use of ethno-botanical resources. *Indian Journal of Traditional Knowledge* 2007; 6(3):521-530.
- Venkata Rami Reddy K, Nagalakshmi Devamm M, Prayaga Murthy P. Some folk medicinal plants of Bhirakona hills of Prakasam district, Andhra Pradesh, India. *Current Botany* 2012; 3(5):51-58.