

Ethno veterinary survey of five Mandals of Manair River adjacent of Karim Nagar and Warangal Districts, Telangana, India

G. Odelu

*Department of Botany, Government Degree College, Jammikunta, Karim Nagar, Satavahana University
Telangana, India*

ABSTRACT

India has one of the sophisticated medical ethno veterinary systems are ecosystem and ethnic- cultures with a tradition of over 5000 years. Many traditional medicines have been abandoned following the discovery of the modern chemotherapy. Population rise, inadequate supply of drugs, high cost of treatments. Due to the rapid changes in the form of transport, communication and education causes rapid socioeconomic and culture changing. The present study was conducted among the people who inhabit the Manair Rivers adjacent, these five Tehesils. . The total number of species is 68. Ethno veterinary medicine often provides cheaper options than comparable western drugs, and the products are locally available and more easily accessible there is a need of conservation of ethno veterinary plants

Key words: Ethno Veterinary, Dysentery, Warangal, Karimnagar

INTRODUCTION

Herbs are staging a comeback and herbal 'renaissance' is happening all over the Globe. The herbal products today symbolise safety in contrast to the synthetics that are regarded as unsafe to human and environment. Although herbs had been prized for their Medicinal, flavouring and aromatic qualities for centuries, the synthetic products of the Modern age surpassed their importance, for a while [1]. However, the blind dependence on Synthetics are over and people are returning to the naturals with hope of safety and security. Over three-quarters of the world population relies mainly on plants and plant extracts For health care. Traditional systems of medicine continue to be widely practised on many accounts.

Population rise, inadequate supply of drugs, prohibitive cost of treatments, side effects of Several allopathic drugs and development of resistance to currently used drugs for infectious. [2].Diseases has led to increased emphasis on the use of plant materials as a source of medicines for a wide variety of human ailments. The plant comes up well under a wide range of tropical and subtropical climate. Fertile moist sandy loam soils are ideal for its cultivation though it grows in a wide range of soils. Better root development is observed in soils in increased proportion of sand. However, a decline in the yield of the crop is noticed in soils containing previous year's residue of the roots

Many traditional medicines have been abandoned following the discovery of the modern chemotherapy. But for more than a decade now ethno veterinary medicine has experienced a revival and several reports have been published. This growing interest in traditional practices had been encouraged by the recognition of some efficacious ethno veterinary medicinal products. Ethno veterinary medicine often provides cheaper options than comparable western drugs, and the products are locally available and more easily accessible. In the face of these and other factors, Traditional veterinary health care. They use the locally available medicinal plants for treatment of animals.

The India has one of the sophisticated medical ethno veterinary systems are ecosystem and ethnic- cultures with a tradition of over 5000 years. The community specific and therefore, the characteristics, livestock owners in India have been using traditional medication sophistication and intensity of these systems differ based on plant formulations since time greatly among individuals, societies, and regions immemorial. Livestock raisers and healers everywhere However, they are facing the threat of rapid erosion. Have traditional ways of classifying, diagnosing, widespread interest in documenting and preventing and treating common animal diseases

The unique advantage is that India is one of the world's 12 mega diversity practices also made it difficult for the younger countries accounting for 8 % global plant genetic generations to appreciate and use the beliefs and resources and higher share of microorganisms. Practice of they follow on the way of forefathers. Despite recent efforts to promote the use of ethno veterinary knowledge Ethno veterinary practice in India worldwide, much information is only documented in the veterinary science in India can be classified field reports and scientific publications. The codified knowledge exist in the form of texts manuscripts on According to the World Health Organization, at various aspects of veterinary care of the livestock. The least 80% of people in developing countries depend folk health practices largely remain undocumented and largely on indigenous practices for the control and are passed on from one generation to the other by word treatment of various diseases affecting both human of mouth. There are rich and efficient ethno veterinary beings and their animals. These traditional healing traditions exist in the villages of India which form practices are called 'ethno veterinary medicine'. Ethno integral part of the family and plays an important social, veterinary medicine is cost effective and also dynamic religious and economic role. They comprise of belief, (Warren, 1991). Ethno veterinary remedies are knowledge, practices and skills pertaining to health accessible, easy to prepare and administer, at little or care and management of livestock. There are local no cost at all to the farmer. These age-old practice healers who are knowledgeable and experienced in cover every area of veterinary specialization.

MATERIALS AND METHODS

Kapoor & Kapoor (1980) were the first to publish a note on the medicinal plant wealth of Karimnagar district. [3] Later, Hemadri (1990) reported the scientific and common names of 436 medicinal plants of the district, but did not give any other specifics [4]. Rao *et al.* (1998) reported 30-33 plants used in ethno-medicine by the tribes of Mahadevapur, C.S [5]. Reddy et al (2001) made an attempt to study the ethno veterinary medicinal plants used by the *Gonds* of Karim ngar district. [6]

Naqvi (2001) recorded not more than 150 ethno medicinal plants from the Karimnagar district in his Ph.D. thesis. The present study was conducted among the people who inhabit the Manair rivers adjacent, these five Tehsils, two (Srirampoor, Mutharam) Karimnagar district, another three (Mogullapally, Chityal, B Hupaalpally) belong to Warangal district , Telangana, southern India .

The data on medicinal plants had been collected during July to December, 2012to till covering 5 Tehsils (Srirampoor, Mutharam, Mogullapally, Chityal, Bhupaalpally) of two districts. The area under investigation was searched for ethno veterinary medicinal plants carefully in the lambada and naikapodu, other community's habitations of the districts. The field survey was carried out covering different seasons over a period of one year in 2 Tehasils of Karim Nagar district. As first step we conducted a meeting with local educated youth, elders to understand their local medicinal system on animal health. The meeting aim discusses health care management of animals such as buffaloes, cattle, goats and sheep and poultry. Author has taken local veterinary doctor help for identification of animal diseases based on the symptoms recorded in the field notes. This could then be used for future reference, for the description of animal diseases. Data Collection Field trips ranging from 3 days to a week were made in the study area in every month of the year of study (June 2012 to November 2014). The major livelihood of these are agriculture, collection of fuel-wood ,cattle farming, collection of leaves used for Bheedi preparation(one of the tobacco used product as like cigar) and forest resources such as herbal medicines, honey and some edible fruits and tubers from the nearby forests. In the study also some hilly areas, but not more than 400meters above range. These hills were occupied by different types of ethnic communities, with the predominant population of Lambadi. Ethno veterinary data were collected from 10 resource persons (7 belonged to the male and 3 belonged to the female group with average age of 60 years) of the study area who have much knowledge on medicinal plants with semi structured interviews. The interviews were conducted in the local language, i.e. Telugu. But they know two languages. Ethno veterinary information included with the local name of the particular plant, parts utilized, medicinal uses and methods of preparation and administration. The collected ethno veterinary information was recorded on field note books and plants were identified using the Flora of the Presidency of Madras (Gamble, 1935) [7] and Flora of Andhra Pradesh (T. Pullaiah) [8].The collection information in their vernacular names of plants. The survey area people's literacy rate low compared with district literacy rate. Due to the river flow the area greenish and good vegetation. Tahesils of Karim Nagar as under, part of Karim Nagar east reserve forest

division and three thesils of Warangal are western part of Eturu Nagaram Reserve Forest of Warangal district. Forest area majority of desiduous, some are mixed deciduous, a little bit ever green patches and mixed up with trees, climbers, shrubs, herbs.

RESULTS AND DISCUSSION

The people of study area are farmers, and traditional healers used plants in the health care of livestock. Considers the cattle, cow's buffalo and goats, sheep, dogs, poultry. The total number of species are 68, belonging genera 61, of in which the family number 36 are identified in that area. They mainly concentrate with the diseases like, dysentery 06, fever13, cold 5, foot infections 03 jaundice 02, snake and scorpion bite 02, swelling 02, tonsils 02, ulcers02, wounds 09, twitching 02 etc. In other hand positive side of livestock health care improve lactation 03, vitality 02, easy delivery 03etc. Ecto-parasites are also one the problem to livestock, foot and mouth disease, redness of eye .Among all the products some are administered alone and combination of two are more. They using some of wood made apparatus to oral administered with help of (Konkae-made with wood of bamboos').Some are applied in the form of juice, powder, paste. The formulations made from leaves, bark whole plant, tubers and etc. Show in fig. Species used in diarrhoea, injury and wounds, given in fig.

Fig .1. Number of Morphological Forms Used

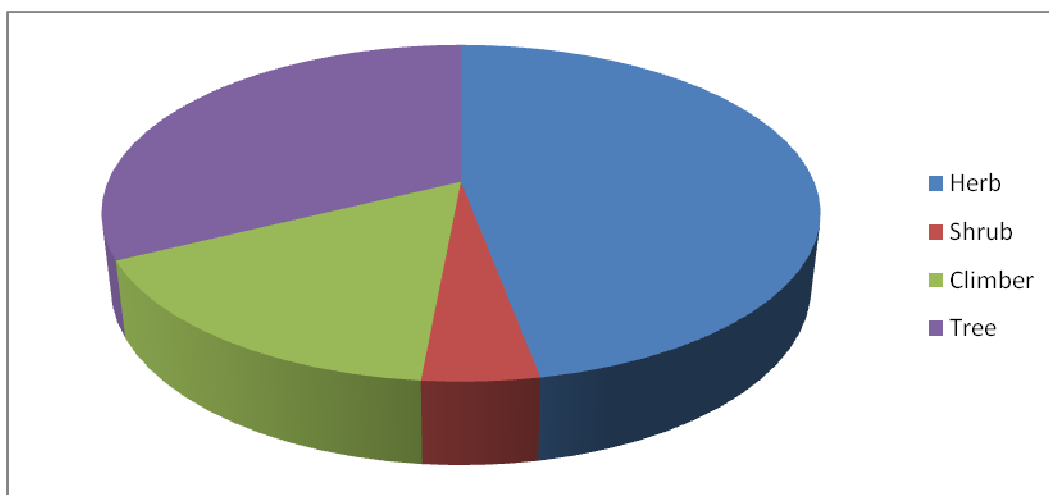
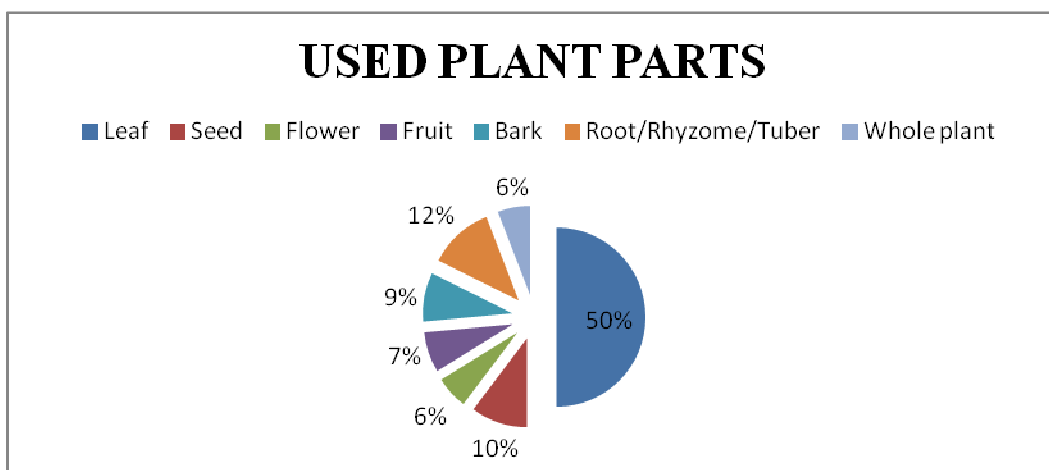


Fig. 2.Using of Plant Parts for Ethno Veterinary Practice



During the survey we find out some plants are use full for both human and livestock, for example. *Oscimum*, *Azadiracta*,etc. always traditional practitioners follow the psychology of livestock's they well-known about the dosage of herbal drug. Some village's people nowadays go through the allopathic medicine, because of the developments of communication, transport, education but elders follow their indigenous knowledge of medicine. Some of allopathic medicines show the negative effect on organism and ecological niche, for instance 90s to till cattle face great problem with foot and mouth disease, using of sodium dichlophenac causes curing of livestock disease, but it causes almost extinct of vultures from India[9],[10]. Another issue on this some of the commercial

persons using of oxytocine one of the lactation improving hormone secreted by livestock. They easily get from market and use of it causes more lactation but decline the life span of livestock. So after that some of the allopathic drugs abandoned by the Govt. of India.

Table.No.1. Enumeration of Plants

| S. NO | BOTANICAL NAME | FAMILY | Useful Parts | USED FOR/TYPE OF USE | HABIT |
|-------|---|------------------|--------------|-------------------------|---------|
| 1 | <i>Abrus precatorius</i> L. | Fabaceae | Seeds | Swelling | Climber |
| 2 | <i>Abutilon indicum</i> | Malvaceae | Fruit | Dysentery | Herb |
| 3 | <i>Acacia arabica</i> (Lam.) Willd. | Mimosaceae | Stem, Bark | Jaundice | Tree |
| 4 | <i>Acalypha indica</i> L. | Euphorbiaceae | Whole, Plant | Wounds | Herb |
| 5 | <i>Achyranthus aspera</i> L. | Amaranthaceae | Whole, Plant | Watering Eyes | Herb |
| 6 | <i>Adhatoda vasica</i> Nees. | Acanthaceae | Bark | Diarrhoea | Tree |
| 7 | <i>Aegle marmelos</i> (L.) Corr. | Rutaceae | Roots | Sun Burn | Tree |
| 8 | <i>Allium cepa</i> Linn. | Liliaceae | Bulb | Ectoparasites | Herb |
| 9 | <i>Aloe vera</i> Burm.f. | Agavaceae | Leaves | Drooping Head | Herb |
| 10 | <i>Andrographis paniculata</i> (L.) Nees | Acanthaceae | Whole Plant | Fever And Cough | Herb |
| 11 | <i>Aristolochia bracteolata</i> Lam. | Aristolochiaceae | Whole Plant | Wounds, Skin Infections | Climber |
| 12 | <i>Aristolochia indica</i> L. | Aristolochiaceae | Roots | Insect Bite | Climber |
| 13 | <i>Argemone mexicana</i> | Papavaceae | Leaf | Rheumatism | Herb |
| 14 | <i>Asparagus racemosus</i> Willd. | Asparagaceae | Tubers | Rheumatism | Climber |
| 15 | <i>Azadiracta indica</i> A.Juss | Meliaceae | Bark | Wounds | Tree |
| 16 | <i>Bambusa aurindianacea</i> (Retz) Wild | Poaceae | Leaf | Diarrhoea | Shrub |
| 17 | <i>Butea monosperma</i> | Fabaceae | Flower | Dysurea, Paralysis | Tree |
| 18 | <i>Calotropis gigantea</i> | Asclepiadaceae | Root | Running Nose | Shrub |
| 19 | <i>Calotropis procera</i> | Asclepiadaceae | Flower | Easy Delivery | Shrub |
| 20 | <i>Cardiospermum halicacabum</i> L. | Sapindaceae | Leaf | Fever | Climber |
| 21 | <i>Cassia auriculata</i> L. | Caesalpiniaceae | Leaf | Dysentery | Herb |
| 22 | <i>Cassia fistula</i> Linn | Caesalpiniaceae | Pod | Indigestion | Herb |
| 23 | <i>Cassia tora</i> L. | Caesalpiniaceae | Seed | Fever | Herb |
| 24 | <i>Cissus quadrangularis</i> L. | Vitaceae | Leaf | Fever | Herb |
| 25 | <i>Citrullus colocynthis</i> L. | Cucurbitaceae | Roos | Cough | Climber |
| 26 | <i>Coccinia grandis</i> (L.) Voigt | Cucurbitaceae | Leaf | Running Nose | Climber |
| 27 | <i>Catharanthus roseus</i> G. Don | Apocynaceae | Leaf | Dog Bite | Herb |
| 28 | <i>Cynodon dactylon</i> | Poaceae | Arialpart | Fever | Herb |
| 29 | <i>Dalbergia sissoo</i> | Fabaceae | Leaf | Wounds | Tree |
| 30 | <i>Datura metal</i> Linn | Solanaceae | Ripen Fruit | Wounds | Herb |
| 31 | <i>Delonix regia</i> | Caesalpiniaceae | Bark | Fever | Tree |
| 32 | <i>Eclipta prostate</i> Linn. | Asteraceae | Leaf | Wounds | Herb |
| 33 | <i>Euphorbia hirta</i> | Euphorbiaceae | Latex | Wounds | Herb |
| 34 | <i>Feroma elephantum</i> | Rutaceae | Leaf | Intestinal Worms | Tree |
| 35 | <i>Ficus bengalensis</i> | Moraceae | Root | Stomach-Ache | Tree |
| 36 | <i>Ficus religiosa</i> | Moraceae | Leaf | Tonsils | Tree |
| 37 | <i>Gymnema sylvestrus</i> (L.) R.Br | Asclepiadaceae | Leaf | Fever | Climber |
| 38 | <i>Holoptelea integrifolia</i> (Roxb.) Planch | Ulmaceae | Leaf | Ectoparasites | Tree |
| 39 | <i>Leonitis nepetifolia</i> (L.) R.Br | Lamiaceae | Fruit | Easy Delivery | Herb |
| 40 | <i>Leucas aspera</i> | Lamiaceae | Leaf | Wounds | Herb |
| 41 | <i>Madhuca indica</i> J.F. Gmel | Sapotaceae | Flower | Fever | Tree |
| 42 | <i>Momordica dioecia</i> | Cucurbitaceae | Fruit | Mouth Ulcer | Climber |
| 43 | <i>Mentha arvensis</i> | Lamiaceae | Leaf | Fever | Herb |
| 44 | <i>Moringa oleifera</i> L | Moringaceae | Leaf | Diarrhoea | Tree |
| 45 | <i>Mimosa pudica</i> L. | Mimosaceae | Leaf | General Fevers | Herb |
| 46 | <i>Ocimum sanctum</i> | Lamiaceae | Leaf | Cough, Cold | Herb |
| 47 | <i>Ocimum gratissimum</i> Linn | Lamiaceae | Leaf | Ecto-Parasites | Herb |
| 48 | <i>Pedaliium murex</i> | Pedaliaceae | Leaf | Fever | Herb |
| 49 | <i>Pergularia daemia</i> | Asclepiadaceae | Leaf | Post-Natal Pains | Climber |
| 50 | <i>Pongamia pinnata</i> (L.) Pierre | Fabaceae | Leaf | Dysentery | Tree |
| 51 | <i>Psidium guava</i> Linn | Myrtaceae | Leaf | Fever | Tree |
| 52 | <i>Ricinus communis</i> Linn. | Euphorbiaceae | Seed | Constipation | Tree |
| 53 | <i>Sesbanium grandiflora</i> | Fabaceae | Seed | Sexual Vigour | Herb |
| 54 | <i>Strychnos nux-vamica</i> | Lopaginaceae | Leaves | Bone Fracture | Tree |
| 55 | <i>Syzigium cumini</i> | Myrtaceae | Bark | Dysentery | Tree |
| 56 | <i>Tamarindus indica</i> Linn | Caesalpiniaceae | Leaf | Swelling | Tree |
| 57 | <i>Tagitius erecta</i> Linn | Asteraceae | Leaf | Hydrophobia | Herb |
| 58 | <i>Tinosora cardifolia</i> Meirs | Menispermaceae | Fruit | Fevers, | Climber |
| 59 | <i>Tribullus terrestris</i> | Zygophyllaceae | Leaf | Cough | Herb |
| 60 | <i>Trigonella foenum-graecum</i> L | Fabaceae | Leaf | Easy Delivery | Herb |
| 61 | <i>Tridax procumbense</i> | Asteraceae | Leaf | Wounds | Herb |
| 62 | <i>Urena lobata</i> L. | Malvaceae | Seed | Mastitis | Herb |
| 63 | <i>Vigna radiata</i> | Fabaceae | Seed | Cough | Herb |
| 64 | <i>Vitex negundo</i> | Verbenaceae | Leaf | Diarrhoea | Tree |
| 65 | <i>Wrightia tinctoria</i> | Apocynaceae | Leaf | Dysentery | Tree |
| 66 | <i>Woodfordia fruticosa</i> (L.) Kurz | Lythraceae | Flower | Dysentery | Tree |
| 67 | <i>Zingiber officinale</i> Rosc. | Zingiberaceae | Rhizome | Potency | Herb |
| 68 | <i>Ziziphus marutiana</i> | Rhamnaceae | Leaf | Sun Burn | Tree |

Some of the Medicinal Plants



Fig.1.Pongamia pinnata



Fig.2.Ricinus communis



Fig.3.Achyranthus aspera



Fig.4.Acalypha indica



Fig.5.Wrihtia tinctoria



Fig.6.Ficus bengalensis

CONCLUSION

Study area mixed up with developing and remote areas .Due to the rapid changes in the form of transport, communication and education causes rapid socioeconomic and culture changing. Documentation of traditional knowledge valuable for future generations and scientific research purpose the usage of ethno veterinary medicine for domestic animals [11]. the ancient people choosing of plants derivate medicine because of their availability ,low cost and no side effects. Some of tribal groups well knowledge on this ,but they did not share to many people .they share this knowledge who are best believable to them .In our India ,the wealth of livestock is compulsory for their routine agriculture and farming .the farmers also some ethno veterinary medicine for domestic animals but as much as the tribal people. The mentioned above plants phytochemical, biological activities and clinical trials already elucidated. . There is a need of conservation of ethno veterinary plants. [12] Traditionally foot and mouth disease controlled by the using of *Syzzigium cummini*. Mastitis is common in dairy cattle, for this curing of it by using of

Azadiracta indica, *Memordica charantia*. for more lactation using by leaf juice of *Adathoda vassica*, leaf paste of *Azadiracta indica*. Herbal drugs always used for primary, healthcare of livestock.

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REFERENCES

- [1]. Jain SK. The role of botanist in folklore research, *Folklore*. **1964**; 5(4): 145–150.
- [2]. 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.
- [3] Kapoor, S.L., Kapoor, L.D. **1980**. *Bull. Medico-Ethnobot. Res.* 2:120-144.
- [4] Hemadri, K. **1990**. *Indian Medicine* 2:16-28.
- [5] Naqvi, A. H., **2001**. Flora of Karimnagar District, Andhra Pradesh, India. Ph.D., Thesis, Kakatiya University, Warangal.
- [6] Rao, J.V.R., Nagulu, V., Srinivasulu, C., Reddy, V.M. & V.V. Rao, **1998**. An ecological frame work for the socio economics of tribal dependence on Natural resources in Mahadevpur, Karimnagar district, pp.223-235. Proc. Nation. Symp. on Conservation of Eastern Ghats, EPTRI, Hyderabad.
- [7] Gamble, J.S. & C. E. C. Fischer. (1915- 1936) *Flora presidency of Madras*, (Repr.ed.1957.Calcutta). Moresdale, London.
- [8]. Pullaiah T, Chennaiah E. (**1997**) *Flora of Andhra Pradesh, India*. Scientific Publishers, Jodhpur; 1997.
- [9] Reddy, C.S., Nagesh, K., Reddy, K.N. & Raju, V.S. **2003**. *J. Econ. Taxa. Bot.* 27:631-634.
- [10] Reddy, V.M. **1996**. Ungulate ecology and tribal dependence on forest ecosystem at Mahadevpur Reserve Forest, Karimnagardistrict, Andhra Pradesh. Ph.D., Thesis. Osmania University, Hyderabad.
- [11]. Reddy KN, Bhanja MR, Raju VS. *Ethnobotany*. **1998**; 10: 75–84.
- [12] Jain SK. *A Manual of Ethnobotany*. Scientific Publishers, Jodhpur; 1987. 15. Jain SK. *Directory of ethnoveterinary plants of India*. Deep publications, New Delhi; **1999**