

# **Plants Used in Ethnoveterinary Practices by Koyas of Pakhal Wildlife Sanctuary, Andhra Pradesh, India**

**E.N. Murthy<sup>1</sup>, Ch. Sudhakar Reddy<sup>2</sup>, K.N. Reddy<sup>3</sup> & Vatsavaya S. Raju<sup>1</sup>**

<sup>1</sup>Plant Systematics Laboratory, Department of Botany, Kakatiya University, Warangal -506 009, India

<sup>2</sup>Forestry & Ecology Division, National Remote Sensing Agency, Balanagar, Hyderabad -500 037, India,

<sup>3</sup>Plant Taxonomy Division, Laila Impex Research Centre, Unit-I, Phase-III, Jawahar Autonagar, Vijayawada - 520 007, India

Corresponding author email: *vatsavayar@hotmail.com*

**Issued 20 January 2007**

## **ABSTRACT**

The paper deals with the 21 medicinal plant species used in ethnoveterinary practices by Koya tribes inhabiting in the Pakhal Wildlife Sanctuary, Warangal district, Andhra Pradesh, India.

**Key words:** Ethnoveterinary, Koyas, Pakhal Wildlife Sanctuary, Andhra Pradesh.

## **INTRODUCTION**

Glimpses of our knowledge in ethno-medicine are available through Vedic texts and commentaries. Yet there is another less exploited source of information in uses which comes from folklore passed on through generations in certain restricted and remote habitations (Jain 1967). Sayeeduddin (1935) recorded some important economic and medicinal plants of erstwhile Hyderabad state. Hemadri (1990) contributed some medicinally important flora of Karimnagar and Warangal districts of Andhra Pradesh. Hemadri (1994) stated some ethnoveterinary plants of Kothaguda agency situated with in the sanctuary. Reddy et al. (1999) enumerated some plants used in ethnoveterinary practices in Warangal district. Reddy (2002) recorded some ethnomedical plants of Warangal in part of his thesis. Reddy et al. (2006) recorded phytotherapy methods of Gonds of Warangal district. During our Biodiversity assessment survey (2004-05) information on medicinal practices for various veterinary ailments was collected from

Koyas of Pakhal Wildlife Sanctuary, Warangal district, Andhra Pradesh.

## **STUDY AREA**

Pakhal Wildlife Sanctuary is situated in Warangal district of Andhra Pradesh, India (70 km away from Warangal). Pakhal Wildlife Sanctuary was declared as a sanctuary in 1952, by G.O.MS.No.2257 as per the provisions under Hyderabad forest Act No.2 of 1355 F and extends over an area of 839 Sq. kms. The Sanctuary is named after Pakhal lake which is source of irrigation in Khanapur and Narsampet mandals. The lake has rich historical importance and was constructed by Pratap Rudra in 1213 A.D. The terrain is undulating and hilly. The sanctuary forms partly the catchment for two drainage systems –one draining into the Godavari river through Laknavaram tank and the other join Krishna river through Munner tributary. The PWD Road from Narsampet-Pakhal-Yellandu almost divides the sanctuary into two halves. This region is situated at a height of 150-300 metres. The major forest type is tropical dry deciduous with predominance of species i.e. *Terminalia alata*, *Anogeissus latifolia*, *Diospyros melanoxylon*, *Xylia xylocarpa* and *Lannea coromandelica*.

The predominant community in study area belongs to ‘Koya’ scheduled tribe. The koyas are one of the few multi-lingual and multi-racial tribal communities living in India. They are also one of the major peasant tribes of Andhra Pradesh numbering 3.60 lakhs in 1981. Physically they are classified as Australoid. The Koyas call themselves as “Koithur”. The land of Koithur or the Koya land includes the Indravati, Godavari, Sabari, Sileru rivers and the forested tracts, covering parts of Bastar, Koraput, Warangal, Khammam, Karimnagar and the East and West Godavari districts. The Koyas speak the language called “Koyi”. It is blended with Telugu in Andhra Pradesh (Sathya Mohan, 2006).

### **DATA COLLECTION:**

Data on ethnoveterinary medicine, collected through frequent interviews with Koya herbal healers. The specimens of plants used in ethnoveterinary practices were collected and kept at Kakatiya University Herbarium, Warangal for further reference.

### **ENUMERATION:**

Data on 21 ethnoveterinary medicinal plant species belonging to 18 families, arranged in

alphabetic order of scientific names of the plants followed by family name (with in the paranthesis), vernacular names in telugu and ethnoveterinary uses.

1. *Alangium salvifolium* (L.f.) Wang. (Alangiaceae)

N.V. Ooduga.

Uses: Root juice of 10 ml given orally for cattle in case of snake bite.

2. *Azima tetraantha* Lam. (Salvadoraceae)

N.V. Uppu chekka.

Uses: Roots grinded and given with rice soaked water for Knee pains.

3. *Bauhinia racemosa* Lam. (Caesalpiniaceae)

N.V. Are.

Uses: Leaf juice is applied over forehead to heal redness of eye.

4. *Careya arborea* Roxb. (Lecythidaceae)

N.V. Buddadharmi.

Uses: Bark crushed with curd and administered orally for debility in cattle.

5. *Casearia elliptica* Willd. (Flacourtiaceae)

N.V. Kannubisiri.

Uses: Bark extract is used for cattles and goats to control dysentery.

6. *Chloroxylon swietenia* DC. (Flindersiacaeae)

N.V. Billudu.

Uses: Wood ash mixed with *coconut* oil, is applied over cattle necks.

7. *Cissus setosa* Roxb. (Vitaceae)

N.V. Barrebatchali teega.

Uses: Leaves used for washing cattle and vessels.

8. *Cissus qudrangularis* L. (Vitaceae)

N.V. Nalleda.

Uses: Succulent stem crushed with onion and mirch powder, given orally a 1 liter of

extract for asthma.

9. *Cocculus hirsutus* (L.) Diels (Menispermaceae)

N.V. Dusary teega.

Uses: Leaves crushed with sugar administered with water to control blood motions.

10. *Dillenia pentagyna* Roxb. (Dilleniaceae)

N.V. Kallinga.

Uses: Bark pounded with tubers of *Pueraria tuberosa*, later fermented with rice soaked water and administered half a liter per day as nervic tonic and anti helminthes.

11. *Diospyros montana* Roxb. (Ebenaceae)

N.V. Illintha.

Uses: Bark grinded with salt and applied over wounds.

12. *Gardenia gummifera* L.f. (Rubiaceae)

N.V. Bikki.

Uses: Bark paste is applied over the body to get relieve from pains.

13. *Garuga pinnata* Roxb. (Anacardiaceae)

N.V. Garugu chettu.

Uses: Bark fermented with water given with red onion and chilli powder for dysentery.

14. *Gmelina arborea* Roxb. (Verbenaceae)

N.V. Gummadi Teku.

Uses: Bark boiled with water applied on tumors.

15. *Lannea coromandelica* (Houtt.) Merr. (Anacardiaceae)

N.V. Dumpidi.

Uses: Crushed bark used as a bandage on wounds and cuts.

16. *Plumbago zeylanica* L. (Plumbaginaceae)

N.V. Chitramulam.

Uses: Root paste is applied on tumors and warts.

17. *Pueraria tuberosa* (Willd.) DC. (Papilionaceae)

N.V. Nelagummadi.

Uses: Tubers grinded with *Cissus quadrangularis*, red onion and Ginger and fermented in water for three days later given with rice soaked water one liter per day for tuberculosis and motions.

18. *Semecarpus anacardium* L.f. (Anacardiaceae)

N.V. Jeedi.

Uses: Young bark grinded with water and a juice of 250 ml is given orally, three times in a day.

19. *Soymida febrifuga* (Roxb.) A.Juss. (Meliaceae)

N.V. Somidi.

Uses: Bark crushed with water and administered for cough and dysentery.

20. *Strychnos potatorum* L.f. (Loganiaceae)

N.V. Chilla.

Uses: Seeds are used as nervic tonic and sexual stimulant.

21. *Terminalia bellirica* (Gaertn.) Roxb. (Combretaceae)

N.V. Tani.

Uses: Paste of bark applied on tumors and warts.

## **ACKNOWLEDGEMENTS**

One of us (E.N. Murthy) is thankful to the Head, Department of Botany, Kakatiya University, Warangal, for facilities, Dr. P.S. Roy, Project Director : Biodiversity Characterisation Project at Landscape level and Deputy Director, NRSA and Dr. M.S.R. Murthy, Head, Ecology and Forestry Division, NRSA, Hyderabad, for financial assistance.

## **REFERENCES:**

Hemadri, K. 1990. Contribution to the medicinal flora of Karimnagar and Warangal disitricts, Andhra Pradesh. *Indian Medicine* 2:16-28.

Hemadri, K. 1994. Shastravettalanu Akarshistunna Girijana Vaidyam (Tribal

Pharmacopoeia) Tribal cultural Research and Training Institute, Hyderabad. ( In Telugu)

Reddy, C.S. 2002. Floristic studies in Warangal district, Andhra Pradesh, India. Ph. D., Thesis. Kakatiya University, Warangal, India.

Reddy, C.S., Gopalakrishna, P. & Raju, V.S. 2006. Phytotherapy from Gonds of Warangal district, Andhra Pradesh, India. *Fitoterapia*. (in press)

Reddy, C.S., Nagesh, K., Reddy, K.N. & Raju, V.S. 2003. Plants used in Ethnoveterinary practice by Gonds of Karimnagar district, Andhra Pradesh. *J. Econ. Taxon. Bot.* 27:631-634.

Reddy, K.N., Bhanja, M.R. & Raju, V.S. 1999. Plants used in ethnoveterinary practices in Warangal district, Andhra Pradesh, India. *Ethnobotany* 10:75-84.

Sayeeduddin, M.1935. Some of the common flowering plants of the Hyderabad state : their distribution, economic and medicinal importance. *J. Asiat. Soc. Bengal Sci.* 1: 9-22.

Sathya Mohan. 2006. The Koya. The Peoples of The World Foundation. Retrieved December 26, 2006, from The Peoples of The World Foundation. <http://www.peoplesoftheworld.org/hosted/koya>.