

Ethnomedicinal Investigation on Koya Dora Tribes of Rampa Hills, Alluri Sitarama Raju District, Andhra Pradesh, India

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Abstract

Original Research Article

An ethnomedicinal investigation was carried out in Rampa Hills, Alluri Sitaramaraju District, Andhra Pradesh, India. The indigenous knowledge of local traditional uses was collected through questionnaire and personal interviews during field trips. The identification and nomenclature of the listed plants were based on the flora of Andhra Pradesh. A total of 60 plants species belong to 57 genera and 30 families were identified by taxonomic description and locally by ethnomedicinal knowledge of people existing in the region. Plant specimens collected, identified, preserved and mounted were deposited in the department of botany, Andhra University, Visakhapatnam for future references.

Keywords: Ethnomedicinal plants, Investigation, Koya Dora, Rampa hills, Alluri Sitaramaraju District.

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INTRODUCTION

Ethnobotanical investigations have led to the documentation of a large number of wild plants used by tribals for meeting their multifarious requirements (Anonymous, 1990). From 1960, Jain started intensive field studies among tribal areas of central India (Jain, 1963 a-c; 1964 a-b; 1965 a-b). India is inhabited by over 80 million tribals belonging to about 550 tribal communities. It is estimated that about 17,500 angiosperm species alone are occurring in India (Jain, 2000). The flora of India is very diverse on one hand and rich in endemic taxa on the other. These factors are of significance for the richness of ethnomedicine and also for its uniqueness (Jain, 1997). Singh *et al.*, (1981) published 29 medicinal plants which were commonly used by local tribes of Mannanur forest and also studied their biological activity. Rama Rao *et al.*, (1984) reported 7 unknown or less known medicinal plants which are exclusively used for various ailments by the aboriginals. Hemadri, (1985) studied the medicinal wealth of Chittoor district. Prakasa Rao and Harasreeramulu, (1985) presented authentic data on 52 selected medicinal plants along with their ethnobotanical uses and distribution in Srikakulam district. Rao and Henry, (1996) reported the ethnomedicinal practices of Jatapu and Savara tribal communities of Srikakulam district. Padal *et al.*, (2010) reported ethnomedicinal

plants used by tribal people of Paderu division, Visakhapatnam district.

MATERIAL AND METHODS

Study area

The majority of the people in the Rampa hills are Koya Dora. They are, as a class, more civilized and less excitable than the Konda reddy. They are generally of better status and mix more freely with the low country men than the Konda reddy. At least 80 percent of the total area of the Rampa hills is covered with forests, the rest being under either shifting cultivation on hill sides, or permanent cultivation on low grounds. In the hills, the forest consists of a mixed deciduous type, the predominating species being *Annogeissus* mixed with bamboos, *Cleistanthus* and soft woods. On the hill-tops a few crooked and stunted *Dalbergia latifolia* occur. On the slopes where the soil is shallow and poor, inferior species, such as *Sterculias Cochlospermum*, and *Bombax* occur. There is a good sprinkling of tamarind trees on some of the hills, which seem to yield a fair crop. At the foot of the hills and in the "lankas" the growth consists generally of *Xylia xylocarpa* and *Terminalia* with a few *Pterocarpus marsupium*. On the stream banks are usually found a few large mango trees, *Terminalia arjuna* and *Bambusa arundanacea*.

Methodology

The approaches and methodologies for ethnomedicinal work, suggested by Jones, (1941), Schultes, (1960, 1962), Jain, (1989) were followed. Emphasis was given mainly on intensive field work in selected tribal habitations. The ethnobotanical information was collected through interviews, discussions and own observations (Jain and Rao, 1997; Jain, 1981). The ethnomedicinal data presented here are the outcome of a series of intensive field studies conducted over a period of one and a half years in 34 interior tribal pockets with good forest cover in the study area.

RESULT AND DISSUCUSSION

During exploration trips, medicinally useful information have been recorded on 60 plant species belonging to 57 genera and 30 families were recorded which are exploited by the tribals for their day to day living (Table 1). The family-wise analysis of ethnomedicinal data revealed that of the 30 families the dominant ones are Caesalpiniaceae represented by 5 species followed by Fabaceae, Asteraceae, Asclepiadaceae and Apocynaceae with 4 species,

Rubiaceae, Myrtaceae, Moraceae, Euphorbiaceae and Convolvulaceae with 3species, Solanaceae, Mimosaceae and Araceae with 2 species and remaining 17 families have single species. From the present study it is clearly evident that the local people used trees were 20 species followed by herbs 18, shrubs 11, climbers were 10 and parasites 1 species.

Depending upon the plant part used for medicinal purposes root constitutes the highest 22 species, followed by leaf 12 species, stem bark 8 species, flowers and bark were 3 species each, Seed, Root bark, Whole plant and Latex were each one 2 species and the remaining each one was single species. 60 species reported in the present study are used in curing 29 different ailments/diseases either single or in combination. The following ailments are Acidity, Antifertility, Antiseptic, Aphrodisiac, Bone fracture, Chest pain, Cobra bite, Dysmenorrhoea, Dyspepsia, Earache, Epilepsy, Fever, Headache, Paralysis, Skin diseases, Stomach pain, Abortion, Allergy, Fractures, Gonorrhoea, Leucorrhoea, Anthelmintic, Burns, Jaundice, Rheumatism, Diarrhoea, Dysentery, Boils and Asthma.

Table 1: Ethnomedicinal plants used by Koya Tribes of Rampa Hills, Alluri District

S.No	Name of Taxa	Family	Habit	Parts	Ailments
1	<i>Alangium salvifolium</i>	Alangiaceae	Tree	Leaf	Rheumatism
2	<i>Amaranthus spinosus</i>	Amaranthaceae	Herb	Root	Dyspepsia
3	<i>Buchanania lanzan</i>	Anacardiaceae	Tree	Stem bark	Boils
4	<i>Annona squamosa</i>	Annonaceae	Tree	Root	Abortion
5	<i>Alstonia venenata</i>	Apocynaceae	Shrub	Stem bark	Anthelmintic
6	<i>Holarrhena pubescens</i>	Apocynaceae	Shrub	Bark	Asthma
7	<i>Ichnocarpus frutescens</i>	Apocynaceae	Climber	Root	Epilipsy
8	<i>Wrightia tinctoria</i>	Apocynaceae	Tree	Latex	Asthma
9	<i>Amarphophallus paeoniifolius</i>	Araceae	Herb	Corm	Bone fracture
10	<i>Arisaema tortuosum</i>	Araceae	Herb	Tuber	Headache
11	<i>Caryota urens</i>	Arecaceae	Tree	Inflorescence	Aphrodisiac
12	<i>Aristolochia indica</i>	Aristolochiaceae	Climber	Root	Diarrhoea
13	<i>Calotropis gigantea</i>	Asclepiadaceae	Shrub	Root	Stomach pain
14	<i>Gymnema sylvestre</i>	Asclepiadaceae	Climber	Root	Cobrabite
15	<i>Hemidesmus indicus</i>	Asclepiadaceae	Climber	Root	Diarrhoea
16	<i>Tylophora indica</i>	Asclepiadaceae	Climber	Leaf	Asthma
17	<i>Eclipta prostrata</i>	Asteraceae	Herb	Plant	Acidity
18	<i>Elephantopus scaber</i>	Asteraceae	Herb	Root	Anthelmintic
19	<i>Vernonia cinerea</i>	Asteraceae	Herb	Seed	Leucorrhoea
20	<i>Xanthium strumarium</i>	Asteraceae	Herb	Root	Boils
21	<i>Caesalpinia bonduc</i>	Caesalpiniaceae	Shrub	Seed	Abortion
22	<i>Cassia absus</i>	Caesalpiniaceae	Herb	flower	Asthma
23	<i>Cassia alata</i>	Caesalpiniaceae	Herb	flower	Asthma
24	<i>Cassia occidentalis</i>	Caesalpiniaceae	Herb	Root	Anthelmintic
25	<i>Tamarindus indica</i>	Caesalpiniaceae	Tree	Bark	Asthma
26	<i>Capparis zeylanica</i>	Capparidaceae	Shrub	Root bark	Earache
27	<i>Terminalia arjuna</i>	Combretaceae	Tree	Bark	Asthma
28	<i>Argyreia nervosa</i>	Convolvulaceae	Climber	Leaf	Boils

S.No	Name of Taxa	Family	Habit	Parts	Ailments
29	<i>Evolvulus alsinoides</i>	Convolvulaceae	Herb	Leaf	Jaundice
30	<i>Ipomoea obscura</i>	Convolvulaceae	Climber	Leaf	Rheumatism
31	<i>Bridelia retusa</i>	Euphorbiaceae	Tree	Stem bark	Chest pain
32	<i>Euphorbia hirta</i>	Euphorbiaceae	Herb	Leaf	Dysentery
33	<i>Jatropha curcas</i>	Euphorbiaceae	Shrub	Latex	Burns
34	<i>Butea monosperma</i>	Fabaceae	Tree	Stem bark	Antifertility
35	<i>Canavalia gladiata</i>	Fabaceae	Climber	Root	Diarrhoea
36	<i>Erythrina suberosa</i>	Fabaceae	Tree	Root	Dysentery
37	<i>Tephrosia hirta</i>	Fabaceae	Herb	Root	Fever
38	<i>Aloe vera</i>	Liliaceae	Tree	Leaf	Boils
39	<i>Viscum articulatum</i>	Loranthaceae	Parasite	Stem	Fractures
40	<i>Woodfordia fruticosa</i>	Lythraceae	Shrub	Flower	Diarrhoea
41	<i>Sida acuta</i>	Malvaceae	Herb	Root	Boils
42	<i>Soymida fibrifuga</i>	Meliaceae	Tree	Root	Dysmenorrhoea
43	<i>Azadirachta indica</i>	Mimosaceae	Tree	Leaf	Allergy
44	<i>Xylocarpus xylocarpa</i>	Mimosaceae	Tree	Root	Gonorrhoea
45	<i>Artocarpus heterophyllus</i>	Moraceae	Tree	Leaf	Skin diseases
46	<i>Ficus benghalensis</i>	Moraceae	Tree	Leaf	Boils
47	<i>Streblus asper</i>	Moraceae	Tree	Root	Rheumatism
48	<i>Eucalyptus globulus</i>	Myrtaceae	Tree	Leaf	Antiseptic
49	<i>Eugenia bracteata</i>	Myrtaceae	Shrub	Root	Dysentery
50	<i>Syzygium cumini</i>	Myrtaceae	Tree	Stem bark	Burns
51	<i>Vanda tassellata</i>	Orchidaceae	Herb	Root	Fractures
52	<i>Vetiveria zizanioides</i>	Poaceae	Herb	Root	Allergy
53	<i>Haldinia cordifolia</i>	Rubiaceae	Tree	Stem bark	Leucorrhoea
54	<i>Ixora pavetta</i>	Rubiaceae	Shrub	Stem bark	Jaundice
55	<i>Tarenna asiatica</i>	Rubiaceae	Shrub	Stem bark	Dysentery
56	<i>Cardiospermum halicacabum</i>	Sapindaceae	Climber	Leaf	Burns
57	<i>Smilax zeylanica</i>	Smilacaceae	Climber	Root	Paralysis
58	<i>Solanum nigrum</i>	Solanaceae	Herb	Whole plant	Gonorrhoea
59	<i>Solanum surattense</i>	Solanaceae	Herb	Root bark	Jaundice
60	<i>Helicteris isora</i>	Sterculiaceae	Shrub	fruit	Dysentery

CONCLUSIONS

The present study was conducted to document the ethnomedicinal plant diversity of Rampa Hills, Alluri Sitaramaraju district of Andhra Pradesh, India as well as to explore the traditional knowledge or belief of these plants used by the village people for their primary health care needs. The new generation is not very much interested in the indigenous methods of treating diseases. They are even not very concern about the importance of these herbal plants and its medicinal value. So it is important to study and record the uses of plants by different tribes and sub-tribes for futures study. Such studies may also provide some information to biochemists and pharmacologists in screening of individual species and in rapid assessing of phyto-constituents for the treatment of various diseases.

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