

Ethnomedicine of Primitive Porja Tribe, Alluri Sitaramaraju District, Andhra Pradesh

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Abstract

Original Research Article

An ethnomedicinal survey was carried out in Hukumpeta Mandal, Alluri Sitaramaraju District, Andhra Pradesh, India. For documentation of important ethnomedicinal plants and information from local community about their medicinal uses. The traditional knowledge of primitive Porja tribe 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 55 plants species belong to 52 genera and 40 families were identified by taxonomic description and locally by ethnomedicinal knowledge of people existing in the region.

Keywords: Ethnomedicinal practice, Porja primitive tribal communities, Hukumpeta Mandal, Alluri Sitaramaraju district.

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INTRODUCTION

India has a century's old tradition of using medicinal plants and herbal medicines for the alleviation of various diseases and ailments, as well as for the promotion of health and happiness. Ethnobotanical research can provide a wealth of information regarding both past and present relationships between plants and the traditional societies. It is hoped that, in the future, ethnobotany may play an increasingly important role in sustainable development and biodiversity conservation (Rajasekaran & Warren 1994).

The medicinal plant wealth of Andhra Pradesh by Hemadri *et al.*, (1987, 1994) contains a mere list of medicinal plants. Ramarao *et al.*, (1999) again were the first to brief the phyto-zootherapy of the tribes of Andhra Pradesh. Reddy & Raju (2006) published a paper on Ethnobotanical medicine for rheumatic diseases from Eastern Ghats of Andhra Pradesh, Reddy *et al.*, (2007) published a paper on traditional knowledge on wild food Plants in Andhra Pradesh, India.

Majumdar (1927) had done scrutiny of literature of Indian medicine. Kirtikar and Basu (1935 & 1975) and Chopra *et al.*, (1956, 1958, 1969) published well established documents on Indian medicinal plants, which were worthy of reference till today. Janaki Ammal (1954) stressed the need for seeking the help of the aboriginals in the tribal regions of Assam, the Himalayas,

Andaman and Nicobar Islands and the Western Ghats for ethnobotanical findings. This plant based traditional knowledge has become a recognised tool in search for new sources of drugs and Nutraceuticals (Sharma & Mujumdar, 2003). Some work on medicinal plants in relation to their utilization and conservation has been conducted in many parts of India (Padhye *et al.*, 1992; Bhogaonkar & Devarkar, 2002; Chaudhari & Hutke, 2002 and Khumbangmayum *et al.*, 2005). Ethnomedicinal plants are generally used for curing various ailments like diabetes, dysentery, typhoid, and jaundice. Different parts of the plant, including roots, leaves, fruits, and flowers, are used for the treatment of jaundice. Furthermore, jaundice is not just a disease rather a sign of a disease that occurs in the liver, which indicates impairment of the liver functioning (Abbasi *et al.*, 2009, Janghel *et al.*, 2019).

MATERIAL AND METHODS

Study area

Hukumpeta Mandal of Alluri Sitaramaraju District, Andhra Pradesh, is the higher altitude zone in the hilly tracts of Eastern Ghats of Andhra Pradesh. It has the second highest tribal population in Andhra Pradesh. It lies in between latitudes of 17°-50' and 18° - 35' north and longitude of 82°-17' and 83°-1' East with a total geographical area of 3, 24,965 Hecter (Figure 1). Porja tribes are chiefly residing in the densely wooded hill slopes in the schedules areas of Alluri Sitaramaraju

districts of Andhra Pradesh. They are also known as Samantha, Konda Kodu, Jatapu, Jatapu Dora, Kodi, Kodu, Kondu and Kuinga. These terms are used for Porja in different areas of Hukumpeta Mandal, Alluri Sitaramaraju districts. The Porja's mainly subsist on cultivation. They are experts in Podu cultivation. They grow millets like Ragi, Sama and Korra and Oil seeds like niger, castor and pulses like red gram in podu fields.

Methodology

Information on the use of medicinal plants was collected during year 2023-2024 through field surveys in different interior villages of the Hukumpeta Division, Alluri Sitaramaraju district. The questionnaires were devised to identify the indigenous knowledge of plant-based remedies from primitive Porja people. Information was gathered through semi-structured interviews that were held with selected knowledgeable men and women Porja tribes. At the end of made into herbarium. The voucher specimens were housed in the Botany Department Herbarium (each interview, the plant specimens were collected, dried by using routine botanical collection and herbarium techniques, identified and preserved (Jain & Rao 1997). The representative taxa were collected and identified with the help of floras (Pullaiah & Ramamurthy 2002; Pullaiah *et al.*, 2007) and BDH), Department of Botany, Andhra University, Visakhapatnam.

RESULT AND DISCUSSION

During exploration trips, medicinally useful information have been recorded on 55 plant species

belonging to 52 genera and 40 families were recorded which are exploited by the Porja tribes for their healthcare. The family wise analysis of ethnomedicinal data revealed that out of 40 families the dominant ones are Fabaceae represented by 4 species followed by Asteraceae, Rutaceae with 4 species, Mimosasaceae, Amaranthaceae, Caselpinaceae, Ebeneaceae, Loranthaceae and Sapotaceae with 2 species each and remaining were single species. From the present study it is clearly evident that the local people used trees (19), followed by shrubs (5) climbers (8) and herbs (20) parasites (3) (Table 1). Depending upon the plant part used for medicinal purposes roots constitutes the highest percentage (15) followed by stem bark (9), stem (1), Root bark (2), whole plant (4), tuber (2), seed (3) and rhizome (3), remaining were single species. Intensive survey and repeated personal interviews in different pockets resulted in coming across 32 diseases in the area. A total of 55 species reported in the present study are used in curing 32 different ailments are Abortion(2), Acidity (2), Allergy (1), Anameia (5), antihelminthic (2), Asthma (5), Blood pressure (1), Body pains (1), Boils (2), Burns (1), Cholera (1), cold (2), conjunctivitis (1), cough (1), cuts (1), Diarrhoea (5), Dysentery(2), Dysmnehorrea (1), Ear ache (1), Epilepsy (2), Fever(1), Fractures (1), Gonorrhoea (1), Head ache (2), HIV (1), Leucorrohea (3), Respiratory trouble (1), Rheumatism (1), Rhemutaoid Arthritis (3), Sterility (1), Swellings (1). The most commonly treated disease was dysentery 8 plants were used by local Porja tribal people of Hukumpeta Division, Alluri Sitaramaraju District.

S. No	Family	Plant Name	Habit	Part Used	Disease
1	Amaranthaceae	<i>Achyranthes aspera</i>	Herb	Seed	Abortion
2	Araceae	<i>Acorus calamus</i>	Herb	Rhizome	Abortion
3	Adiantaceae	<i>Adiantum lunulatum</i>	Herb	Fronds	Acidity
4	Rutaceae	<i>Aegle marmelos</i>	Tree	Stem bark	Acidity
5	Amaranthaceae	<i>Aerva lanata</i>	Herb	Root	Allergy
6	Schrophulariaceae	<i>Bacopa monnieri</i>	Herb	Whole plant	Anaemia
7	Barringtoniaceae	<i>Barringtonia acutangula</i>	Tree	Leaf	Anaemia
8	Caesalpiniaceae	<i>Bauhinia racemosa</i>	Tree	Stem bark	Anaemia
9	Caesalpiniaceae	<i>Bauhinia vahlii</i>	Climber	Root	Anthelmintic
10	Nyctaginaceae	<i>Boerhavia diffusa</i>	Herb	Whole plant	Anthelmintic
11	Bombacaceae	<i>Bombax ceiba</i>	Tree	Leaf	Antidote
12	Fabaceae	<i>Canavalia gladiata</i>	Climber	Root	Asthma
13	Capparidaceae	<i>Capparis zeylanica</i>	Shrub	Root	Asthma
14	Sapindaceae	<i>Cardiospermum halicacabum</i>	Climber	Leaf	Asthma
15	Costaceae	<i>Costus speciosus</i>	Herb	Rhizome	Asthma
16	Asclepiadaceae	<i>Cryptolepis buchanani</i>	Climber	Root	Asthma
17	Hypoxidaceae	<i>Curculigo orchoides</i>	Herb	Root	Blood pressure
18	Zingiberaceae	<i>Curcuma longa</i>	Herb	Rhizome	Body pain
19	Cuscutaceae	<i>Cuscuta reflexa</i>	Parasite	Whole plant	Boils
20	Cyperaceae	<i>Cyperus rotundus</i>	Herb	Tuber	Boils
21	Fabaceae	<i>Dalbergia latifolia</i>	Tree	Stem bark	Burns
22	Solanaceae	<i>Datura metal</i>	Shrub	Root	Cholera
23	Loranthaceae	<i>Dendrophthoe falcata</i>	Parasite	Stem bark	Cold
24	Fabaceae	<i>Desmodium gangeticum</i>	Herb	Leaf	Cold
25	Dilleniaceae	<i>Dillenia pentagyna</i>	Tree	Stem bark	Cold

S. No	Family	Plant Name	Habit	Part Used	Disease
26	Dioscoreaceae	<i>Dioscorea bulbifera</i>	Climber	Tuber	Conjunctivitis
27	Ebenaceae	<i>Diospyros chloroxylon</i>	Tree	Leaf	Cough
28	Ebenaceae	<i>Diospyros melanoxylon</i>	Tree	Stem bark	Cuts
29	Asteraceae	<i>Eclipta prostrate</i>	Herb	Whole plant	Diarrhoea
30	Asteraceae	<i>Elephantopus scaber</i>	Herb	Root	Diarrhoea
31	Rutaceae	<i>Limonia acidissima</i>	Tree	Root	Diarrhoea
32	Lauraceae	<i>Litsea glutinosa</i>	Tree	Seed	Diarrhoea
33	Lygodiaceae	<i>Lygodium flexuosum</i>	Herb	Root	Diarrhoea
34	Sapotaceae	<i>Madhuca indica</i>	Tree	Flowers	Dysentery
35	Euphorbiaceae	<i>Mallotus philippensis</i>	Tree	Fruit	Dysentery
36	Anacardiaceae	<i>Mangifera indica</i>	Tree	Gum	Dysmenorrhoea
37	Sapotaceae	<i>Manilkara hexandra</i>	Tree	Stem bark	Earache
38	Melastomataceae	<i>Memecylon umbellatum</i>	Tree	Root bark	Epilepsy
39	Mimosaceae	<i>Mimosa pudica</i>	Herb	Root	Epilepsy
40	Moringaceae	<i>Moring oleifera</i>	Tree	Leaf	Fever
41	Fabaceae	<i>Mucuna pruriense</i>	Climber	Root	Fractures
42	Rutaceae	<i>Murraya paniculata</i>	Shrub	Root	Gonorrhoea
43	Musaceae	<i>Musa paradasiaca</i>	Herb	Leaf	Headache
44	Ranunculaceae	<i>Naravelia zeylanica</i>	Climber	Leaf	Headache
45	Rutaceae	<i>Naringi crenulata</i>	Tree	Stem bark	HIV
46	Nelumbonaceae	<i>Nelumbo nucifera</i>	Herb	Perianth	Leucorrhoea
47	Olacaceae	<i>Olx scandens</i>	Climber	Stem bark	Leucorrhoea
48	Asteraceae	<i>Vernonia cinerea</i>	Herb	Seed	Leucorrhoea
49	Poaceae	<i>Vetiveria zizanioides</i>	Herb	Root	Respiratory trouble
50	Loranthaceae	<i>Viscum articulatum</i>	Parasite	Stem	Rheumatism
51	Verbenaceae	<i>Vitex negundo</i>	Shrub	Leaf	Rheumatoid Arthritis
52	Lythraceae	<i>Woodfordia fruticosa</i>	Shrub	Flowers	Rheumatoid Arthritis
53	Apocynaceae	<i>Wrightia tinctoria</i>	Tree	Latex	Rheumatoid Arthritis
54	Asteraceae	<i>Xanthium strumarium</i>	Herb	Root	Sterility
55	Mimosaceae	<i>Xylia xylocarpa</i>	Tree	Root bark	Swellings

CONCLUSION

The present study was conducted to document the ethnomedicinal plant resources of Hukumpeta Mandal, 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 much concerned about the importance of these herbal plants and their medicinal value. The growing disinterest in the use of folk medicinal plants and their significance among the younger generation of primitive tribals will lead to the disappearance of this practice.

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