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(RESEARCH ARTICLE)

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Studies on Folklore medicine of Rampachodavaram Division, Alluri Sitaramaraju District, Andhra Pradesh, India

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Abstract

An ethnomedicinal survey was carried out from ethnic community of Rampachodavaram, Alluri Sitarama Raju District, Andhra Pradesh, India. The indigenous knowledge of local medical practices was collected through questionnaire and personal interviews during field work. 100 plant species belonging to 92 genera and 55 families were found to be used specifically in the treatment of various diseases by ethnic tribes of Rampachodavaram.

Keywords: Ethnomedicinal plants; Ethnic people; Rampachodavaram; Alluri Sitaram Raju District

1. Introduction

Ethnobotanical study of traditional plant wealth has resulted in many valuable discoveries. New methods for cultivating crops on arid lands to new medicines for the treatment of various diseases. Ethnobotanical research has led to the development of many commercial plant derived drugs. The ethno medico-botanical studies of Paderu and Araku valley in Andhra Pradesh reported [1]. Some ethnomedicinal plants used by the Chenchus, Yerukalas, Yanadis, and Sugalis for fevers and anthrax in cattle in hills of Cuddaph district [2]. Some ethnomedicinal plants used for paralysis by Sugali tribes in Andhra Pradesh [3]. Studied on medicinal plants of Warangal and Srikakulam district [4] and also other significant contribution on ethnomedicine of Northern Andhra Pradesh [5-11]. The main objectives of the present investigation are collection, identification and documentation of the plants used by ethnic tribal community of Rampachodavaram. Taxonomic analysis and systematic evaluation of drug yielding plants used by ethnic tribes.

2. Material and methods

2.1. Study area

Rampachodavaram is a census town in Alluri Sitharamaraju district of the Indian state of Andhra Pradesh. It is located in Rampachodavaram mandal of Rampachodavaram revenue division. Several field trips were undertaken in tribal area of Alluri Sitaramaraju district, Andhra Pradesh during 2021-2022. From centuries the forests of Rampachodavarammandal have been inhabited by a number of tribes who have been maintaining distinct ways of life, beliefs, traditions cultures, customs and myths. In this Mandal the major tribal groups are Koya, Valmiki, Kammara, Konda Dora, Kotia, Kulia, Malis, Manne Dora, Muka dora and Gouds, where as the primitive tribal group (PTG) comprise Khonds, Gadaba and Porja. These tribes depend on local health practioners or Vaidyas called the gurus for their health care).

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2.2. Methodology

The ethnomedicinal uses of plants were collected by using structured questionnaires. Ethnomedicinal data were collected according to the methodology suggested by Jain [12]. The detailed information regarding herbal names, parts used, purpose, and mode medicinal uses were recorded in Table 1. The methods of plant collection and preparations of herbarium have been followed by Jain and Rao [13] and were identified taxonomically (Gamble and Fischer [14]. The voucher specimens were deposited in Andhra University herbarium, Visakhapatnam District.

3. Results and discussion

A total number of 100 plants belonging to 92 genera and 55 families were recorded (Table 1). Fabaceae, Caesalpiniaceae, Asteraceae and Apocynaceae has the highest number of species (5 species) followed by Euphorbiaceae (4 species), Solanaceae, Rutaceae, Myrtaceae, Moraceae, Lythraceae, Liliaceae, Asclepiadaceae, Araceae and Anacardiaceae each one with (3 species) and ten families contain two species each and rest of the thirty families contain single species. Among the total plant species, trees are highest in number (39) followed by herbs (36), Shrubs (13), Climbers (10) and Parasite (2). With regard to the frequency of plant parts used in preparations, roots were mostly often used followed by stem bark, leaf, whole plant, seed, root bark, fruit, tuber, flowers, stem, rhizome, gum and whole plant. The primitive ethnic tribes of Rampachodavaram, Alluri Sitaramaraju district, 100 plants were used for 42 diseases viz. Asthma, Diarrhoea, Dysentery, Abortion, Leucorrhoea, Jaundice, Fever, Anthelmintic, Conjuctivitis, Boils, Blood pressure, Stomachache, Hydrocele, Headache, Gonorrhoea, Dandruf, Cuts, Cold and blisters.

Table 1 Ethnomedicinal plants used by primitive people of Rampachodavaram Division

S. No	Plant Name	Family	Habit	Part Used	Disease
1	*Abrus precatorius*	Fabaceae	Climber	Seed	Abortion
2	*Acorus calamus*	Araceae	Herb	Rhizome	Cold
3	*Adiantum lunulatum*	Adiantaceae	Herb	Fronds	Abortion
4	*Aegle marmelos*	Rutaceae	Tree	Stem bark	Cholera
5	*Aerva lanata*	Amaranthaceae	Herb	Root	Headache
6	*Alangium salvifolium*	Alangiaceae	Tree	Leaf	Arthritis
7	*Alstonia venenata*	Apocynaceae	Shrub	Stem bark	Anthelmintic
8	*Amaranthus spinosus*	Amaranthaceae	Herb	Root	Dyspepsis
9	*Amarphophallus paeoniifolius*	Araceae	Herb	Corm	Bone fractures
10	*Arisaema tortuosum*	Araceae	Herb	Tuber	Headache
11	*Aristolochia indica*	Aristolochiaceae	Climber	Root	Diarrhoea
12	*Artocarpus heterophyllus*	Moraceae	Tree	Leaf	Skin disease
13	*Asparagus racemosus*	Liliaceae	Herb	Tuber	Bronchitis
14	*Bombax ceiba*	Bombacaceae	Tree	Leaf	Leucorrhoea
15	*Bridelia retusa*	Euphorbiaceae	Tree	Stem bark	Chest pain
16	*Buchanania lanzan*	Anacardiaceae	Tree	Stem bark	Boils
17	*Butea monosperma*	Fabaceae	Tree	Stem bark	Antifertility
18	*Caesalpinia bonduc*	Caesalpiniaceae	Shrub	Seed	Abortion
19	*Caryota urens*	Arecaceae	Tree	Inflorescence	Aphrodisiac
20	*Cassia absus*	Caesalpiniaceae	Herb	Flowers	Asthma
21	*Cassia alata*	Caesalpiniaceae	Herb	Flowers	Asthma
22	*Cassia occidentalis*	Caesalpiniaceae	Herb	Root	Anthelmintic

23	*Cassytha filiformis*	Lauraceae	Parasite	Whole plant	Hydrocele
24	*Celastrus paniculatus*	Celastraceae	Climber	Root bark	Leucorrhoea
25	*Centella asiatica*	Apiaceae	Herb	Leaf	Anaemia
26	*Chlorophytum arundinaceum*	Liliaceae	Herb	Tuber	Hydrocele
27	*Chloroxylon swietenia*	Flindersiaceae	Tree	Stem bark	Cold
28	*Cissus quadrangularis*	Vitaceae	Herb	Stem	Fever
29	*Costus speciosus*	Costaceae	Herb	Rhizome	Abortion
30	*Cryptolepis buchanani*	Asclepiadaceae	Climber	Root	Diarrhoea
31	*Dalbergia latifolia*	Fabaceae	Tree	Stem bark	Fever
32	*Datura metal*	Solanaceae	Shrub	Root	Asthma
33	*Dendrophthoe falcata*	Loranthaceae	Parasite	Stem bark	Asthma
34	*Eclipta prostrata*	Asteraceae	Herb	Whole plant	Acidity
35	*Elephantopus scaber*	Asteraceae	Herb	Root	Anthelmintic
36	*Elytraria acaulis*	Acanthaceae	Herb	Tuber	Anasarca
37	*Erythrina suberosa*	Fabaceae	Tree	Root	Dysentery
38	*Eucalyptus globulus*	Myrtaceae	Tree	Leaf	Antiseptic
39	*Eugenia bracteata*	Myrtaceae	Shrub	Root	Dysentery
40	*Ficus racemosa*	Moraceae	Tree	Stem bark	Diarrhoea
41	*Ficus religiosa*	Moraceae	Tree	Stem bark	Diarrhoea
42	*Flacourtia indica*	Flaucortiaceae	Shrub	Root	Bronchial allergy
43	*Garuga pinnata*	Burseraceae	Tree	Stem bark	Stomachache
44	*Gloriosa superba*	Liliaceae	Herb	Leaf	Asthma
45	*Glycosmis pentaphylla*	Rutaceae	Shrub	Fruit	Conjuctivitis
46	*Gmelina asiatica*	Verbenaceae	Tree	Fruit	Dandruf
47	*Grewia tiliifolia*	Tiliaceae	Tree	Leaf	Lice
48	*Hemidesmus indicus*	Asclepiadaceae	Climber	Root	Diarrhoea
49	*Holarrhena pubescens*	Apocynaceae	Shrub	Stem bark	Asthma
50	*Holoptelia integrifolia*	Ulmaceae	Tree	Root	Abortion
51	*Hugonia mystax*	Linaceae	Shrub	Root	Swellings
52	*Hybanthus ennaespermus*	Violaceae	Herb	Whole plant	Impotency
53	*Justicia adathoda*	Acanthaceae	Shrub	Leaf	Cough
54	*Lagerstroemia parviflora*	Lythraceae	Tree	Leaf	Dysentery
55	*Lannea coromandelica*	Anacardiaceae	Tree	Stem bark	Cuts
56	*Lawsonia inermis*	Lythraceae	Shrub	Leaf	Jaundice
57	*Mallotus philippensis*	Euphorbiaceae	Tree	Fruit	Anthelmintic
58	*Mangifera indica*	Anacardiaceae	Tree	Gum	Boils
59	*Manilkara hexandra*	Sapotaceae	Tree	Stem bark	Body pain
60	*Memecylon umbellatum*	Melastomataceae	Tree	Root bark	Leucorrhoea

61	*Mimosa pudica*	Mimosaceae	Herb	Root	Epilepsy
62	*Momordica charantia*	Cucurbitaceae	Climber	Fruit	Diabetes
63	*Moring oleifera*	Moringaceae	Tree	Leaf	Blood pressure
64	*Naringi crenulata*	Rutaceae	Tree	Stem bark	Dysentery
65	*Nelumbo nucifera*	Nelumbonaceae	Herb	Perianth	Conjuctivitis
66	*Nyctanthus arbor-tristis*	Nyctanthaceae	Tree	Seed	Dandruf
67	*Ocimum basilicum*	Lamiaceae	Herb	Seed	Diarrhoea
68	*Ocimum tenuiflorum*	Lamiaceae	Herb	Leaf	Conjuctivitis
69	*Olax scandens*	Olacaceae	Climber	Stem bark	Anaemia
70	*Oroxylum indicum*	Bignoniaceae	Tree	Root bark	Antifertility
71	*Phoenix sylvestris*	Arecaceae	Tree	Root	Asthma
72	*Phyllanthus amarus*	Euphorbiaceae	Herb	Plant	Jaundice
73	*Phyllanthus emblica*	Euphorbiaceae	Tree	Stem	Bone fractures
74	*Piper longum*	Piperaceae	Climber	Flowers	Asthma
75	*Plumbago zeylanica*	Plumbaginaceae	Shrub	Root	Abortion
76	*Polyalthia cerasoides*	Annonaceae	Tree	Gum	Chest pain
77	*Rauvolfia serpentina*	Apocynaceae	Herb	Root	Fever
78	*Rauvolfia tetraphylla*	Apocynaceae	Herb	Root bark	Blood pressure
79	*Rubia cordifolia*	Rubiaceae	Herb	Root	Stomachache
80	*Sapindus emarginatus*	Sapindaceae	Tree	Fruit	Asthma
81	*Scoparia dulcis*	Schrophulariaceae	Herb	Root	Dysentery
82	*Solanum nigrum*	Solanaceae	Herb	Whole plant	Gonorrhoea
83	*Solanum surattense*	Solanaceae	Herb	Root bark	Jaundice
84	*Strychnos potatorum*	Loganiaceae	Tree	Seed	Blood pressure
85	*Strycnos nuxvomica*	Loganiaceae	Tree	Stem bark	Asthma
86	*Syzygium cumini*	Myrtaceae	Tree	Stem bark	Burns
87	*Tamarindus indica*	Caesalpiniaceae	Tree	Stem bark	Asthma
88	*Tarenna asiatica*	Rubiaceae	Shrub	Stem bark	Dysentery
89	*Tephrosia hirta*	Fabaceae	Herb	Root	Fever
90	*Terminalia arjuna*	Combretaceae	Tree	Stem bark	Asthma
91	*Tribulus terrestris*	Zygophyllaceae	Herb	Whole plant	Jaundice
92	*Trichosanthes tricuspidata*	Cucurbitaceae	Climber	Tuber	Dysmenorrhoea
93	*Tridax procumbens*	Asteraceae	Herb	Leaf	Cuts
94	*Tylophora indica*	Asclepiadaceae	Climber	Leaf	Asthma
95	*Vanda tassellata*	Orchidaceae	Herb	Root	Fractures
96	*Vernonia cinerea*	Asteraceae	Herb	Seed	Leucorrhoea
97	*Woodfordia fruticosa*	Lythraceae	Shrub	Flowers	Diarrhoea
98	*Wrightia tinctoria*	Apocynaceae	Tree	Latex	Asthma

99	*Xanthium strumarium*	Asteraceae	Herb	Root	Boils
100	*Xylia xylocarpa*	Mimosaceae	Tree	Root bark	Gonorrhoea

4. Conclusion

The ethnic drug formulations need clinical tests to prove their efficacy and also to develop new herbal drugs for the effective treatment. This data provides basic source for further studies aimed at conservation, cultivation, improvement of ethnic traditional medicine and economic welfare of rural and tribal population of the region. 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.

Compliance with ethical standards

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Disclosure of conflict of interest

The authors declare that they hold no competing interests.

References

[1] Gupta, V. c., S. J. Hussain and S. Imam. Medico ethnobotanical survey at PaderuForest of Araku Valley, Andhra Pradesh, India. Fitoterapia, 1997; 68:45¬-48.

[2] Reddy, R V., N. V. N. Lakshmi, R R Venkata Raju. Folk veterinary medicinalplants in Cuddapah hills of Andhra Pradesh, India. Fitoterapia LXIX .1997; (4): 322¬-328.

[3] Rajasekhar, D., N. S. Balaji Rao and D. Chengal Raju. Folk claims from Sugalis ofAndhra Pradesh for the treatment of paralysis. Ancient Sci. Life, 1997; 17: 107-¬110.

[4] Hemadri, K., and S. S. Rao. Folklore claims of Koraput and Phulbani district of Orissastate.Indian Medicine, 1991; 3: 10-14.

[5] Reddy, K. N., M. R Bhanja and Vatsavaya S. Raju. Plants used in Ethnoveterinary practices in Warangal District, Andhra Pradesh, India. Ethnobotany, 1998; 10: 75-84.

[6] Nazaneen Praveen, S & T. Shali sahib. Plants traditionally used as galactogogue in Nallamalais of Kurnool district of Andhra Pradesh. International Seminar on Medicinal Plants and Herbal products. 7th-9th March.2008; Page. 55.

[7] Satyavathi, K, Sandhyadeepika, D and S. B. Padal.. Ethnomedicinal plants used by Bagata tribe of Paderu forest Division, Andhra Pradesh, India.Int. J. Adv. Res. Sci. Technol.2014a; 3(2): 36-39

[8] Satyavathi, K, D. Sandhya Deepika, S. B. Padal, J. Prakasa Rao. Ethnomedicinal plants used for Leucorrhoea by tribes of Srikakulam District, Andhra Pradesh, India. Malaya Journal of Biosciences, 2015; 2(4):194-197.

[9] Satyavathi K and Padal SB. Folklore medicine of primitive tribals in Dumbriguda Mandal,Visakhapatnam District, Andhra Pradesh, India,Int. J. of Life Sciences, 2018; 6 (2):523-528.

[10] Satyavathi, K., D. Sandhya Deepika, S. B. Padal, J. Prakasa Rao. Ethnomedicinal plants used for Leucorrhoea by tribes of Srikakulam District, Andhra Pradesh, India. Malaya Journal of Biosciences. 2015; 2(4):194-197.

[11] Shyamala, T., Kumar O, Padal S.B. Ethnomedicinal plants used for Rheumatoid arthritis by tribal people in Visakhapatnam District, Andhra Pradesh, India. Int.J. Ethnob. Ethnm. 2016; 3(1):1-5.

[12] Jain S.K. Dictionary of Indian folk medicine and Ethnobotany. Deep publications, New Delhi.1991

[13] Jain S.K and RR. Rao. Hand Book of Field and Herbarium Methods. (Today and Tomorrow Printers and Publishers), 1997, BSI, Calcutta.

[14] Gamble JS and Fischer CEC. Flora of the Presidency of Madras, 1-3 (Adlard & Son, London). 1915-1936