

Traditional Health care Practice by Gadaba Tribes of Narsipatnam Division, Visakhapatnam District, Andhra Pradesh, India

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Abstract

Original Research Article

An ethnomedicinal survey was conducted among the primitive Gadaba tribal community residing in Narsipatnam Division, Visakhapatnam district, Andhra Pradesh. In the present ethnomedicinal survey, it was observed that primitive Gadaba tribal traditional practitioners used medicinal plant parts for treatment of 55 different ailments. A total of 91 plants were used by the Gadaba tribal healers in their medicinal formulations. These plant species were distributed into 53 families.

Keywords: Traditional health care, Ethnomedicinal plants, Gadaba tribes, Narsipatnam Division, Visakhapatnam.

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INTRODUCTION

Vast ethnobotanical knowledge exists in India from ancient times. Written records on the use of plants for curing human and animal diseases in India can be traced back to the earliest scripture of the Hindus (4500-1600 BC), the Rigveda [1]. Ayurveda, the indigenous system of medicine in India, dates back to Vedic ages (1500-800 BC). It has been an integral part of Indian culture [2]. It is not only a science of treatment of illness but covers the whole gamut of happy human life involving the physical, meta-physical and spiritual aspects [3]. Ethnobotanical investigations have led to the documentation of a large number of wild plants used by tribals for meeting their multifarious requirements [4]. From 1960, Jain started intensive field studies among tribal areas of central India [5-11]. These publications in early sixties triggered ethnobotanical activities of many botanists, anthropologists and ayurvedic medical practitioners. Ethnobotanical plants used by tribes of Srikakulam district reported 25 plant species belonging to 18 families for curing dental disorders [12]. Some recent notable contribution on ethnomedicine of north coastal Andhra Pradesh [13-19]. The objectives of the present research are collection, identification and documentation of the plants used by Gadaba tribal community, an extensive exploration studies in the area to record first-hand information from the Gadaba tribal practitioners.

MATERIAL AND METHODS

Study area

Narsipatnam Division agency 3 Mandalas is identified as tribal people. The division comprises three Mandalas i.e. Chintha palli, Gudem kotha veedi and Koyyuru. The tribals in this area belong to Bagata, Kutia, Nooka Dora, Gadaba and Valmiki tribes. The demarcation of reserve forest falls close to the inhabited villages and is a source of conflict between the tribals and the forest department. Tribals use the forests as sources of NWFPs, fuel wood, housing materials, medicinal herbs, water and irrigation, and for grazing their cattle, hunting and charcoal making.

Gadaba are predominantly found in tribal areas of Narsipatnam Division, Visakhapatnam District. The Gadaba tribe is divided into different sub divisions viz, Bodo or Gutob, Katheri, Kolleri etc., each sub division which is endogamous is divided into various exogamous clans. The modes of acquiring mates among Gadabas are marriage by negotiation, by mutual love and elopement, by capture and by service. Family is nuclear. Widow re-marriage and divorce are permitted. At present Gadabas are cultivators and agricultural labourers. Those who inhabit the hilly areas practice shifting cultivation and they cultivate Ragi, Red gram, Niger in their Podu lands. They collect Non-Timber Forest Produce for household consumption and sale.

METHODOLOGY

Intensive field surveys were carried out during 2019–2021, covering all the seasons. Collected specimens were made into herbarium as per the methods suggested by Jain & Rao [20]. The representative taxa were collected and identified with the help of floras [21-23] and made into herbarium. The voucher specimens were housed in the Botany Department Herbarium (BDH), Department of Botany, Andhra University, Visakhapatnam.

RESULT AND DISCUSSION

During exploration trips, medicinally useful information have been recorded on 91 plant species belonging to 84 genera and 53 families were recorded which are exploited by the Gadaba tribals for their healthcare. The family wise analysis of ethnomedicinal data revealed that of the 53 families the dominant ones are Euphorbiaceae represented by 6 species followed by Fabaceae, Asclepiadaceae, Lamiaceae and Rutaceae with 4 species, Zingiberaceae, Moraceae, Lythraceae, Liliaceae, Combretaceae and Asteraceae with 3 species each, Amaranthaceae, Anacardiaceae, Annonaceae, Apocynaceae, Arecaceae, Convolvulaceae, Menispermaceae, Rubiaceae and Verbenaceae with 2 species each remaining families were single species. From the present study it is clearly evident that the local people used herbs (29), followed by trees (33) climbers (12), shrubs (15) and parasites (2), (Table. 1). Depending upon the plant part used for medicinal purposes root

constitutes the highest percentage (22) followed by leaf (20), Stem bark (15), Tube and Whole plant (4), Inflorescence and Root bark (2) and remaining were single. Intensive survey and repeated personal interviews in different pockets resulted in coming across 55 diseases in the area. A total of 91 species reported in the present study are used in curing 55 different ailments are Abdomina swelling, abortion, acidity, anaemia, anasarca, anthelmintic, antifertility, antidote, asthma, blisters, blood pressure, boils, bone fracture, breast pain, Bronchial allergy, Bronchitis, burns, chest pain, cholera, cold, common problems, conception, conjunctivitis, cough, cuts, dandruff, diabetes, diarrhoea, dysentery, dysmenorrhoea, dyspepsia, earache, epilepsy, fertility, fever fractures, gonorrhoea, Headache, HIV, Hydrocele, Impotency, Jaundice, Leucoderma, Leucorrhoea, Lice, Peptic ulcer, Rheumatism, Rheumatoid Arthritis, Snake bite, Sterility, Stomachache, Swellings and wounds. Sudhakar and Vedavathy [24] reported 67 edible plants belonging to 59 genera and 41 families used by the tribals of Chittoor district. Rao and Reddy [25] studied about traditional medicine for the treatment of bone fracture for human beings and cattle with the paste of leaves of *Pupalia lappacea* in Ranga Reddy district. Shanmukha Rao [26] studied about ethnobotany of Pathapatnam Mandal, Srikakulam district. He reported 158 species belonging to 68 genera and 54 families. Sheriff [27] studied about the ethnobotany of Gudemkotta Veedhi Mandal, Visakhapatnam District. He reported 189 species belonging to 67 families.

Table-1: Ethnomedicinal plants used by Gadaba tribes of Narsipatnam Division.

S. No	Plant Name	Family	Habit	Part Used	Disease
1	Aegle marmelos	Rutaceae	Tree	Stem bark	Cholera
2	Aerva lanata	Amaranthaceae	Herb	Root	Headache
3	Alangium salvifolium	Alangiaceae	Tree	Leaf	Rheumatoid Arthritis
4	Aloe vera	Liliaceae	Tree	Leaf	Boils
5	Alstonia venenata	Apocynaceae	Shrub	Stem bark	Anthelmintic
6	Amaranthus spinosus	Amaranthaceae	Herb	Root	Dyspepsis
7	Annona squamosa	Annonaceae	Tree	Root	Abortion
8	Argyrea nervosa	Convolvulaceae	Climber	Leaf	Boils
9	Arisaema tortuosum	Araceae	Herb	Tuber	Headache
10	Bombax ceiba	Bombacaceae	Tree	Leaf	Leucorrhoea
11	Bridelia retusa	Euphorbiaceae	Tree	Stem bark	Chest pain
12	Buchanania lanzan	Anacardiaceae	Tree	Stem bark	Boils
13	Butea monosperma	Fabaceae	Tree	Stem bark	Antifertility
14	Caesalpinia bonduc	Caesalpiniaceae	Shrub	Seed	Abortion
15	Calotropis gigantea	Asclepiadaceae	Shrub	Root	Epilepsy
16	Canavalia gladiata	Fabaceae	Climber	Root	Diarrhoea
17	Capparis zeylanica	Capparidaceae	Shrub	Root	Earache
18	Cardiospermum halicacabum	Sapindaceae	Climber	Leaf	Burns
19	Caryota urens	Arecaceae	Tree	Inflorescence	Aphrodisiac
20	Chlorophytum arundinaceum	Liliaceae	Herb	Tuber	Hydrocele
21	Chloroxylon swietenia	Flindersiaceae	Tree	Stem bark	Cold
22	Cissus quadrangularis	Vitaceae	Herb	Stem	Fever
23	Cleistanthus collinus	Euphorbiaceae	Tree	Stem bark	Leucorrhoea
24	Cocculus hirsutus	Menispermaceae	Climber	Root	Rheumatoid Arthritis
25	Coldenia procumbens	Boraginaceae	Herb	Whole plant	Cuts
26	Costus speciosus	Costaceae	Herb	Rhizome	Abortion
27	Cryptolepis buchanani	Asclepiadaceae	Climber	Root	Diarrhoea
28	Curculigo orchoides	Hypoxidaceae	Herb	Root	Cuts
29	Curcuma longa	Zingiberaceae	Herb	Rhizome	Rheumatoid Arthritis

S. No	Plant Name	Family	Habit	Part Used	Disease
30	<i>Cuscuta reflexa</i>	Cuscutaceae	Parasite	Whole plant	Epilepsy
31	<i>Erythrina suberosa</i>	Fabaceae	Tree	Root	Dysentery
32	<i>Eucalyptus globulus</i>	Myrtaceae	Tree	Leaf	Antiseptic
33	<i>Euphorbia hirta</i>	Euphorbiaceae	Herb	Leaf	Dysentery
34	<i>Evolvulus alsinoides</i>	Convolvulaceae	Herb	Leaf	Jaundice
35	<i>Ficus benghalensis</i>	Moraceae	Tree	Latex	Boils
36	<i>Ficus racemosa</i>	Moraceae	Tree	Stem bark	Diarrhoea
37	<i>Ficus religiosa</i>	Moraceae	Tree	Stem bark	Diarrhoea
38	<i>Flacourtia indica</i>	Flacourtiaceae	Shrub	Root	Bronchial allergy
39	<i>Garuga pinnata</i>	Burseraceae	Tree	Stem bark	Stomachache
40	<i>Gloriosa superba</i>	Liliaceae	Herb	Leaf	Asthma
41	<i>Glycosmis pentaphylla</i>	Rutaceae	Shrub	Fruit	Conjunctivitis
42	<i>Gmelina arborea</i>	Verbenaceae	Tree	Stem bark	Chest pain
43	<i>Ixora pavetta</i>	Rubiaceae	Shrub	Stem bark	Jaundice
44	<i>Jatropha curcas</i>	Euphorbiaceae	Shrub	Latex	Burns
45	<i>Justicia adathoda</i>	Acanthaceae	Shrub	Leaf	Cough
46	<i>Lagerstroemia parviflora</i>	Lythraceae	Tree	Leaf	Dysentery
47	<i>Lannea coromandelica</i>	Anacardiaceae	Tree	Stem bark	Cuts
48	<i>Lawsonia inermis</i>	Lythraceae	Shrub	Leaf	Jaundice
49	<i>Leonotis nepetifolia</i>	Lamiaceae	Herb	Inflorescence	Breast pain
50	<i>Limonia acidissima</i>	Rutaceae	Tree	Root	Rheumatoid Arthritis
51	<i>Litsea glutinosa</i>	Lauraceae	Tree	Seed	Rheumatism
52	<i>Lygodium flexuosum</i>	Lygodiaceae	Herb	Root	Anaemia
53	<i>Madhuca indica</i>	Sapotaceae	Tree	Flowers	Asthma
54	<i>Nelumbo nucifera</i>	Nelumbonaceae	Herb	Perianth	Conjunctivitis
55	<i>Nyctanthus arbor-tristis</i>	Nyctanthaceae	Tree	Seed	Dandruf
56	<i>Ocimum basilicum</i>	Lamiaceae	Herb	Seed	Diarrhoea
57	<i>Ocimum tenuiflorum</i>	Lamiaceae	Herb	Leaf	Conjunctivitis
58	<i>Olax scandens</i>	Olacaceae	Climber	Stem bark	Anaemia
59	<i>Oroxylum indicum</i>	Bignoniaceae	Tree	Root bark	Antifertility
60	<i>Orthosiphon rubicundus</i>	Lamiaceae	Herb	Root	Diarrhoea
61	<i>Pavetta indica</i>	Rubiaceae	Shrub	Leaf	Blisters
62	<i>Pedaliium murex</i>	Pedaliaceae	Herb	Leaf	Dysmenorrhoea
63	<i>Pergularia daemia</i>	Asclepiadaceae	Climber	Leaf	Bone fractures
64	<i>Phoenix sylvestris</i>	Arecaceae	Tree	Root	Asthma
65	<i>Phyllanthus amarus</i>	Euphorbiaceae	Herb	Plant	Jaundice
66	<i>Phyllanthus emblica</i>	Euphorbiaceae	Tree	Stem	Bone fractures
67	<i>Piper longum</i>	Piperaceae	Climber	Flowers	Asthma
68	<i>Plumbago zeylanica</i>	Plumbaginaceae	Shrub	Root	Abortion
69	<i>Polyalthia cerasoides</i>	Annonaceae	Tree	Gum	Chest pain
70	<i>Tephrosia hirta</i>	Fabaceae	Herb	Root	Fever
71	<i>Terminalia arjuna</i>	Combretaceae	Tree	Stem bark	Asthma
72	<i>Terminalia bellirica</i>	Combretaceae	Tree	Fruit	Asthma
73	<i>Terminalia chebula</i>	Combretaceae	Tree	Fruit	Cough
74	<i>Tinospora cordifolia</i>	Menispermaceae	Climber	Leaf	Black quarter disease
75	<i>Toddalia asiatica</i>	Rutaceae	Shrub	Root	Anaemia
76	<i>Tribulus terrestris</i>	Zygophyllaceae	Herb	Whole plant	Jaundice
77	<i>Trichosanthes tricuspidata</i>	Cucurbitaceae	Climber	Tuber	Dysmenorrhoea
78	<i>Tridax procumbens</i>	Asteraceae	Herb	Leaf	Cuts
79	<i>Tylophora indica</i>	Asclepiadaceae	Climber	Leaf	Asthma
80	<i>Vanda tassellata</i>	Orchidaceae	Herb	Root	Fractures
81	<i>Vernonia cinerea</i>	Asteraceae	Herb	Seed	Leucorrhoea
82	<i>Vetiveria zizanioides</i>	Poaceae	Herb	Root	Allergy
83	<i>Viscum articulatum</i>	Loranthaceae	Parasite	Stem	Fractures
84	<i>Vitex negundo</i>	Verbenaceae	Shrub	Leaf	Swellings
85	<i>Woodfordia fruticosa</i>	Lythraceae	Shrub	Flowers	Diarrhoea
86	<i>Wrightia tinctoria</i>	Apocynaceae	Tree	Latex	Asthma
87	<i>Xanthium strumarium</i>	Asteraceae	Herb	Root	Boils
88	<i>Xylia xylocarpa</i>	Mimosaceae	Tree	Root bark	Gonorrhoea
89	<i>Zingiber officinale</i>	Zingiberaceae	Herb	Rhizome	Dyspepsis
90	<i>Zingiber roseum</i>	Zingiberaceae	Herb	Tuber	Leucoderma
91	<i>Ziziphus oenoplea</i>	Rhamnaceae	Climber	Root	Chest pain

CONCLUSION

Industrialization, urbanization, modernization and the consequent developmental activities on one side and acculturation of the ethnic societies on the other have set in motion causing destruction of forests and devastation of ethnobotanical knowledge. It is high time now, that all the Governmental and Non-Governmental Organizations should redouble their efforts to conserve plants of potential economic value, particularly ethnomedicinal plants and the ecosystems they inhabit.

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