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

N. Madhuri¹, Ch. Vidhyulatha², J. Ramalaxman³ and S.B. Padal⁴

¹Research Scholar, Department of Botany, Andhra University, Visakhapatnam -530003, Andhra Pradesh, India
²Professor, Department of Botany, Andhra University, Visakhapatnam -530003, Andhra Pradesh, India

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*Corresponding author: N. Madhuri Research Scholar, Department of Botany, Andhra University, Visakhapatnam -530003, Andhra Pradesh, India

**Abstract**

An ethnomedicinal survey was conducted among the primitive Gadaba tribal community residing in Narsipatnam Division, Visakhapatnam district, Andhra Pradesh. In the present ethnmedicinal 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

**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 ethnmedicine 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 Mandals 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 Guto, 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 tribes 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, anemia, 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 tribes 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 Papua lappacea in Ranga Reddy district. Shanmukha Rao [26] studied about ethnobotany of Paphatnam 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 salviol | 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     | Argyreia nervosa | Convolvulaceae| Climber     | Leaf      | Boils                    |
| 9     | Arisaeana tortuosum| Araceae     | Herb        | Tuber     | Headache                 |
| 10    | Bombax ceiba     | Bombaceae    | 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| Caesalpinaceae| Shrub      | Seed      | Abortion                 |
| 15    | Calotrops 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    | Chlorophyrum 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    | Cryptopis buchanani| Asclepiadaceae| Climber    | Root      | Diarrhoea                |
| 28    | Curculigo orchioideis| Hypoxiaceae| Herb        | Root      | Cuts                     |
| 29    | Curcuma longa    | Zingiberaeae | Herb        | Rhizome   | Rheumatoid Arthritis     |
| S. No | Plant Name            | Family               | Habit   | Part Used         | Disease               |
|-------|-----------------------|----------------------|---------|-------------------|-----------------------|
| 30    | Cucurbita reflexa     | Cucurbitaceae        | Parasite| Whole plant       | Epilepsy              |
| 31    | Erythrina suberosa    | Fabaceae             | Tree    | Root              | Dysentery             |
| 32    | Eucalyptus globulus   | Myrtaceae            | Tree    | Leaf              | Antiseptic            |
| 33    | Euphorbia hirta       | Euphorbiaceae        | Herb    | Leaf              | Dysentery             |
| 34    | Evolvulus alsinoides  | Convolvulaceae       | Herb    | Leaf              | Jaundice              |
| 35    | Ficus benghalensis    | Moraceae             | Tree    | Latex             | Boils                 |
| 36    | Ficus racemosa        | Moraceae             | Tree    | Stem bark         | Diarrhoea             |
| 37    | Flacourtia indica     | Flaucortiaceae       | Shrub   | Root              | Bronchial allergy     |
| 38    | Garuga pinnata        | Burseraceae          | Tree    | Stem bark         | Stomachache           |
| 39    | Gloriosa superba      | Liliaceae            | Herb    | Leaf              | Asthma                |
| 40    | Glycosmis pentaphylla | Rutaceae             | Shrub   | Fruit             | Conjuctivitis         |
| 41    | Gmelina arborea       | Verbenaceae          | Tree    | Stem bark         | Chest pain            |
| 42    | Ixora pavetta         | Rubiaceae            | Shrub   | Stem bark         | Jaundice              |
| 43    | Jatropha curcas       | Euphorbiaceae        | Shrub   | Latex             | Burns                 |
| 44    | Justicia adathoda     | Acanthaceae          | Shrub   | Leaf              | Cough                 |
| 45    | Lagerstroemia parviflora | Lythraceae         | Tree    | Leaf              | Dysentery             |
| 46    | Lannea coronandecica  | Anacardiaceae        | Tree    | Stem bark         | Cuts                  |
| 47    | Lawsonia inermis      | Lythraceae           | Shrub   | Leaf              | Jaundice              |
| 48    | Leonotis nepetifolia  | Lamiaceae            | Herb    | Inflorescence     | Breast pain           |
| 49    | Limonia acidissima    | Rutaceae             | Tree    | Root              | Rheumatoid Arthritis  |
| 50    | Litsea glutinosa      | Lauraceae            | Tree    | Seed              | Rheumatism            |
| 51    | Lygodium flexuosum    | Lygodiaceae          | Herb    | Root              | Anaemia               |
| 52    | Madhuca indica        | Sapotaceae           | Tree    | Flowers           | Asthma                |
| 53    | Nelumbo nucifera      | Nelumbonaceae        | Herb    | Perianth           | Conjuctivitis         |
| 54    | Nyctanthus arbor-tristis | Nyctanthaceae   | Tree    | Seed              | Dandrf               |
| 55    | Ocimum basilicum      | Lamiaceae            | Herb    | Seed              | Diarrhoea             |
| 56    | Ocimum tenuiflorum    | Lamiaceae            | Herb    | Leaf              | Conjuctivitis         |
| 57    | Olax scandens         | Olaceae              | Climber | Stem bark         | Anaemia               |
| 58    | Oroxyllum indicum     | Bignoniaceae         | Tree    | Root bark         | Antifertility         |
| 59    | Orthosiphon rubicundus | Lamiaceae          | Herb    | Root              | Diarrhoea             |
| 60    | Pavetta indica        | Rubiaceae            | Shrub   | Leaf              | Blisters              |
| 61    | Pedalium murex        | Pedaliaceae          | Herb    | Leaf              | Dysmenorrhoea         |
| 62    | Pergularia daemia     | Asclepiadaceae       | Climber | Leaf              | Bone fractures        |
| 63    | Phoenix sylvestris    | Arecaceae            | Tree    | Root              | Asthma                |
| 64    | Phyllanthus amarus    | Euphorbiaceae        | Herb    | Plant             | Jaundice              |
| 65    | Phyllanthus emblica   | Euphorbiaceae        | Tree    | Stem              | Bone fractures        |
| 66    | Piper longum          | Piperaceae           | Climber | Flowers           | Asthma                |
| 67    | Plumbago zeylanica    | Plumbaginaceae       | Shrub   | Root              | Abortion              |
| 68    | Polyalthia tosoides   | Annonaceae           | Tree    | Gum               | Chest pain            |
| 69    | Tephrosia hirta       | Fabaceae             | Herb    | Root              | Fever                 |
| 70    | Terminalia arjuna     | Combretaceae         | Tree    | Stem bark         | Asthma                |
| 71    | Terminalia bellirica  | Combretaceae         | Tree    | Fruit             | Asthma                |
| 72    | Terminalia chebula    | Combretaceae         | Tree    | Fruit             | Cough                 |
| 73    | Tinospora cordifolia  | Menispermacae        | Climber | Leaf              | Black quarter disease |
| 74    | Toddalia asiatica     | Rutaceae             | Shrub   | Root              | Anaemia               |
| 75    | Tribulus terrestris   | Zygophyllaceae       | Herb    | Whole plant       | Jaundice              |
| 76    | Trichosanthes tricuspidata | Cucurbitaceae         | Climber | Tuber             | Dysmenorrhoea         |
| 77    | Tridax procumbens     | Asteraceae           | Herb    | Leaf              | Cuts                  |
| 78    | Tylophora indica      | Asclepiadaceae       | Climber | Leaf              | Asthma                |
| 79    | Vanda tessellata      | Orchidaceae          | Herb    | Root              | Fractures             |
| 80    | Vernonia cinerea      | Asteraceae           | Herb    | Seed              | Leucorrhoea           |
| 81    | Vetiveria zizanoides  | Poaceae              | Herb    | Root              | Allergy               |
| 82    | Viscum articulatum    | Loranthaceae         | Parasite| Stem            | Fractures             |
| 83    | Vitex negundo         | Verbenaceae          | Shrub   | Leaf              | Species               |
| 84    | Woodfordia fruticosa  | Lythraceae           | Shrub   | Flowers           | Diarrhoea             |
| 85    | Wrightia tinctoria    | Apocynaceae          | Tree    | Latex             | Asthma                |
| 86    | Xanthium strumarium   | Asteraceae           | Herb    | Root              | Boils                 |
| 87    | Xyilia xylolcarpa     | Mimosaceae           | Tree    | Root bark         | Gonorrhoea            |
| 88    | Zingiber officinale   | Zingiberaceae        | Herb    | Rhizome           | Dyspesis              |
| 89    | Zingiber roseum       | Zingiberaceae        | Herb    | Tuber             | Leucoderma            |
| 90    | Ziziphus oenolea      | 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 ethnomedicinal 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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