ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS USED BY TRIBALS IN ANANTAPUR DISTRICT, ANDHRA PRADESH, INDIA.

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Abstract

The present study deals with the study of some of the medicinal plants were used by sugali tribes of the Anantapur district, Andhra Pradesh, India. These tribes are depending on the medicinal plants for traditional health care. 25 Medicinal plants were identified and botanical name, local name, family, habitat, part of plant used, mode of consumption, disease cured and preparation method are represented.

Key words: Medicinal plants, Anantapur district.

Introduction:-
India is an identified mega diverse country, rich in biodiversity and associated traditional knowledge. In floral diversity, India ranks tenth in the world and fourth in Asia (Sanjay et al., 2015). In India about two lakh villages are in forest area (Aggarwal et al., 2009). India has the second largest tribal population in the world after Africa (Mukherkee et al., 2013). The Anantapur District is a district in the Rayalaseema region of Andhra Pradesh, India. The district headquarters is located at Anantapur city. As of 2011 Census, the district had a population of 4,083,315 of which 28.095 is urban and literacy rate of 64.28%. It is the largest district in terms of area in Andhra Pradesh and 7th largest district in India respectively.

This region has been dominated by nomadic sugali tribes. The forest regions are inhabited by twenty thousand sugali tribal people. The sugalis are inhabiting this place were nature worshippers originally, and they worship Champaka tree (Michelia champaca), called Dodda Sampige in the local language (Ganeshaiah et al., 1998).

Our present aim to 1. Document plant species that were utilized for medicinal purposes among the tribal people of the sugali tribes. 2. Document human diseases, traditional plant remedies, methods of preparation and mode of administration.

Methodology:--
Periodic field studies were carried out in different villages of Anantapur district. Normally tribal peoples are hesitating to talk with strangers and very conservative regarding providing information. They feel if they disclose medicinal property of a plant that plant will be lost forever. However, information gathered from tribal’s, local vaidyas, medicine men and women village elders through personal communication and questionnaire.

Questionnaires were used to collect information from the tribal people. Questionnaires consists name, sex, age, vernacular name of the plant, the parts and properties that were used, mode of preparation, approximate doses and mode of administration.
The collected plant species were identified with the help of different published data and flora.

The medicinal plants are categorized disease wise under each section arranged in the alphabetical order of plant species name followed by family name, local name, part(s) used and mode of administration (i.e. decoction, paste, powder and juice), for reported plant species.

**Discussion:**
The present investigation provides an ethno botanical data of the 25 medicinal plants used by the sugali tribal people of Anantapur district, Andhra Pradesh, India. The medicinal plant botanical name, local name, family, habitat, part of plant used, mode of consumption, disease cured and preparation method are represented in the table (See table). The majority of plants species belong to families Fabaceae, Mimosaceae, Amaranthaceae and Rubiaceae.

The knowledge and usage of herbal medicine for the treatment of various human diseases and disorders in local villages is still a major part of tribal life. Allopathic medicines are expensive and there is no side effect in comparison to the traditional medicine. This indicates the reason for the dependence of tribal peoples on traditional medicine.

The common diseases of this area are Cough, cold, Headache, Dysentery, Fever and Jaundice. These tribes are consuming the highly nutritious forest products such as honey, tubers fruits and etc. They won’t suffer from major diseases like, Diabetes, Tuberculosis, Measles and Mumps. Many of the tribal peoples are using plants for disease cure. There is a need to establish herbal drug centers from newly identified medicinal plants for collecting, processing and preparation of herbal medicine and to improving the life and economy of the local tribal and rural peoples.
### Results:

| S.No | Botanical name                      | Local name       | Family     | Habit | Part of plant used | Mode of consumption | Disease cured          | Preparation method                                                                 |
|------|-------------------------------------|------------------|------------|-------|--------------------|----------------------|------------------------|-----------------------------------------------------------------------------------|
| 1    | *Acampe praemorsa* (ROXB.) BLATT. & MCCANN | Marabale soppu   | Orchidaceae| Shrub | Leaves             | External application | Mouth ulcer           | The leaves are made into paste and mixed with coconut oil and applied                |
| 2    | *Achyranthes aspera* L.             | Uttarani         | Amaranthaceae | Herb  | Roots              | Liquid/tonic         | Piles                  | The root is made into paste and add some water and consumed.                        |
| 3    | *Aegle marmelos* (L.) CORREA EX.SCHULTZ | Bilipatri        | Rutaceae   | Tree  | Leaves             | External application | Headache, Common cold | The leaves are pasted with water and applied on Forehead for headache and consumed for (common cold) |
| 4    | *Albizia amara* (ROXB.) BOIVIN     | Bayibasale       | Fabaceae   | Tree  | Roots, leaves      | Curry                | Ulcers                 | The root or leaves is boiled with pulses (dal) and made into curry.                  |
| 5    | *Albizia odoratissima* (L.F.)BENTH. | Bilvaara         | Mimosaceae | Tree  | Root               | External application | To prevent hair loss  | Paste of root is applied once in a day for fifteen days.                            |
| 6    | *Alternanthera sessilis* (L.) R.BR.EX DC. | Honagon esoppu   | Amaranthaceae | Herb  | Leaves             | Curry                | Jaundice               | A curry or fry is prepared with the leaves and consumed                             |
| 7    | *Anisochilus carnosus* WALL        | Doddipatri       | Lamiaceae  | Shrub | Leaves             | Liquid/tonic         | Common cold, throat infection | leaves are boiled with water and extract is taken as a drink or the leaves are added to tea and consumed. |
| 8    | *Arisaema tortuosum* SCHOTT       | Marigida         | Aracease   | Shrub | Leaves             | External application | Fever                  | Leaves are made into paste with water and applied all over the body.                |
| S.No | Botanical name                        | Local name | Family            | Habit | Part of plant used | Mode of consumption | Disease cured | Preparation method                                                                 |
|------|--------------------------------------|------------|-------------------|-------|--------------------|---------------------|---------------|-------------------------------------------------------------------------------------|
| 9    | Aristolochia indica L.              | Nanjinabaer u | Aristolochiaceae  | Climb er | Roots | External application | Head ache | Leaves are made into paste with water and on forehead.                               |
| 10   | Asparagus racemosus Willd.          | Aheru balli | Liliaceae         | Climb er | Root/tuber | Raw tuber | for pregnancy | The tuber is washed and consumed directly                                             |
| 11   | Bombax ceiba L.                     | Yelelevalada mara | Bombaceae     | Tree | Bark | Liquid/tonic | White and red discharge | The bark along with other ingredients i.e., Dhrakshi, kallunara, karijeerie, gerpappu and kallu uppu are added in equal proportion and crushed thoroughly (without water). Then add this mix into Kellengu (red coconut) and store overnight. Mix well and consume early morning. |
| 12   | Calotropis gigantea (L.) R.BR.      | Aekki gida | Asclepiadaceae | Shrub | Leave s | External application | snake bite | Plant latex is mixed with asafoetida (ingu) grind well and applied on the spot.       |
| 13   | Capparis grandis L.                 | Tottula    | Capparaceae      | Shrub | Leave s | External application | swelling | Half-one kg leaves are boiled in 1 bucket water and bath is taken 3 days to cure swellings |
| 14   | Carissa carandas L.                 | Karavadimar a | Apocynaceae     | Shrub | Bark | External application | Pigmentation | The bark is made into paste and applied                                              |
| 15   | Cassia fistula L                    | Kakke mara | Caesalipiniaceae | Tree | Leave s | Liquid/tonic | Tumors in stomach | Leaves were collecting from the tree and make it past by grinding then intake by oral |
| 16   | Catunaregum spinosa THUNB.          | Maggarekai | Rubiaceae        | Shrub | Fruits | External application | Pimples, acne | The fruits are pasted and applied on face                                              |
| 17   | Cicca acida MERRILL                | Kirumail i | Euphorbiaceae  | Tree | Root | Liquid/tonic | AIDS | The root is mixed with Jajikai, badami, kallusakkare, kallunara and made into paste. This extract is consumed 3 times a day for 3 days |
| S.No | Botanical name | Local name | Family | Part of plant used | Mode of consumption | Disease cured | Preparation method |
|------|----------------|------------|--------|--------------------|--------------------|---------------|-------------------|
| 18   | *Citrullus colocynthis* (L.) SCHRADER | Tumtika yi | Cucurbitaceae | Tree | Oral | Jaundice and scorpion sting | Fruit are used in jaundice. Seed oil is used in scorpion bite. |
| 19   | *Dalbergia sissoo* ROXB | Agurima ra | Fabaceae | Tree | Bark | Liquid/tonic | Dysentery | The bark is pasted and the extract is consumed |
| 20   | *Decalepis hamiltonii* WIGHT & ARN. | Magaliberu | Asclepiadaceae | Root | Pickle | To reduce body heat | A pickle is prepared and stored |
| 21   | *Dendrophthoe falcata* (L.F) ETTING. | Sigare | Loranthaceae | Leaf | External application | Bone fracture | Fresh leaves are tied on fractured bone for 7 days |
| 22   | *Dichrostachys cinerea* WIGHT & ARN. | Odavare | Mimosaceae | Tree | Roots | External application | Body pains | The roots are pasted with water and applied all over the body |
| 23   | *Elettaria cardamomum* MATON | Karilakki | Zingiberacea | Herb | Leaves | External application/ tonic | Anemia | The leaves are boiled in milk and consumed or paste is applied externally |

| S.No | Botanical name | Local name | Family | Part of plant used | Mode of consumption | Disease cured | Preparation method |
|------|----------------|------------|--------|--------------------|--------------------|---------------|-------------------|
| 24   | *Embelia ribes* BURM.F | Vayuvilnga | Myrsinaceae | Shrub | Roots | Liquid/tonic | Indigestion, gastric problems | The roots are pasted and made into a drink along with pepper, garlic, salt and jeer (cumin seeds) and consumed. |
| 25   | *Emblica officinalis* GAER TN. | Nelikai | Euphorbiaceae | Tree | Fruit | Paste | Common cold, cough | The fruit is mixed with ginger and 2 drops of honey, made into paste and consumed |
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