



## Important Medicinal Plants of West Godavari District, A.P.

B. Nageswara RaoNaik<sup>1</sup> & P. Prasanna Kumari<sup>2</sup>

<sup>1</sup>Department of Botany, Acharya Nagarjuna University, Guntur, A.P

<sup>2</sup>Department of Botany, DNR College(A), Bhimavaram, West Godavari District, A.P.

### **Abstract**

The tribal people have been using specific medicinal plants to cure specific ailments over centuries Akerel O(1992). Ethnomedicinal studies played an important role in revealing locally important plants especially for the discovery of crude drugs considering advanced knowledge in pharmacognosy, phytochemistry and Biochemistry modern drugs are prepared and in practice (Pulliah2008). The tribal medicine is very effective because they test the dose and activity directly on their own bodies to conclude its efficacy. The tribes in Andhra Pradesh are nearly 7% of the total population. They are 50,000 in number. These people confine themselves to the deep forest and rely on the forest products for their needs. Hence they are enthusiastic to know the uses of different plants. Though they are utilizing crude drugs that knowledge give us basic knowledge to develop different drugs by isolating different phytochemicals. That is why the present study got importance.

**Key words:** Ethno medical studies; pharmacognocny; crude drugs

### **Introduction:**

Throughout the history of the mankind plants have been a valuable source of natural products for maintaining human health. Many infectious diseases are known to be treated with herbal remedies ethnic people played a key role to retain the ancestral knowledge. They directly applied the plants in crude form on their own bodies. They are daring enough to experiment on themselves because they closely followed the nature of their surroundings. Mainly by observing the animals in the forest, attained medicinal knowledge of

the ethnobotanics. The tribal people are in practice of ethno medicinal practices since several years and standardized the dosage; remedies for the reactions; duration of medicine usage etc. Hence, the traditional medicinal systems evolved only based on the ethnic knowledge, and practice.

### **MATERIALS AND METHODS**

#### **Study Area**

The present study has been confined to ten out of 21 tribal hamlets (Thandas) viz., Chegondapalle, Singanapalle, Kondrukota, Thutugunta, Sivagiri,



Tekuru, Sirivaka, Koruturu, Cheduru and Gaddapalli in the Polavaram Mandal, West Godavari district of A.P state. West Godavari district is one of the 13 districts of Andhra Pradesh with an area of 7780 Sq.kms and 3.8 million population. The district is located between Northern latitude of  $16^{\circ} 15'$  and  $17^{\circ} 30'$  and between the Eastern longitudes of  $80^{\circ} 50'$  and  $81^{\circ} 55'$ . It is bounded by Khammam district on the north, Krishna District and Bay of Bengal on the south, river Godavari on the east and Krishna district on the west. Out of the 46 mandals of West Godavari district, Polavaram is one with 23 villages and located in Scheduled area marked for ST electoral constituency. The ethnomedicinal information has been collected from 10 out of 21 inhabited villages of the Polavaram Mandal. The population of these villages mainly inhabited by two tribal categories viz., Konda reddy and Koyas only. The details of total population and percentage of tribal population in the 10 selected villages in Polavaram Mandal is furnished in Table-1.

### Methodology

Well planned intensive field trips covering three seasons (rainy, winter and summer) in a year

during the study period (2010 - 2012) were conducted. All the tribal habitats of the Konda reddy present right from the foot hills of Papikondalu and to the top of the hill up to Gaddapalli were visited. Detailed information on useful medicinal plant species has been on spot recorded from the tribes. The first field trip of the study area was completely meant to get acquaintance with the locals including mainly medical practitioners and a few knowledgeable elders in the age group of 50 to 70 years. Subsequent field trips were used for collection of ethnomedicinal information from the informants by the method of semi-structured interviews. Each and every medicinal practice was cross checked twice or thrice with medical practitioners and informants separately. This process also helped the investigator to collect more information on different medicinal uses of the same plant species. The plants collected were identified with the help of different Flora (Gamble and Fisher 1935; Rao et al 1986; Pullaiah and Karuppusamy 2008). The plant herbarium specimens of collected plants were deposited in the Department of Botany & Microbiology, Acharya Nagarjuna University, Guntur, A.P., India.



| Plant name & Common name  | Family           | Plant part and its medicinal use   |
|---|------------------|--|
| 1) Abrus precatorius, Guruvinda   | Fabaceae         | Seeds – To avoid pregnancy   |
| 2) Aristolochia indica, Gadidagadapa (or) Nagasaram   | Aristolochiaceae | Root – To avoid pregnancy for 2 months                                   |
| 3) Ricinus communis, Amudam   | Euphorbiaceae    | Seed – to avoid pregnancy for one month                                  |
| 4) Ficus religiosa & Terminalia bellarica, Maeruva oblongifolia, Bhuchakragadda (or) Mekulaku | Capparaceae      | Leaf – Juice cause pregnancy   |
| 5) Butia monosperma,  | Fabaceae         | Young leaves – crushed form – cause pregnancy                            |
| 7) Ficus recemosa, medichettu   | Moraceae         | Bark decoction – To retain pregnancy                                     |
| 8) Mucuna pruriens, dulagondi   | Fabaceae         | Root – To avoid abortion   |
| 9) Soymida febrifuga, somi chettu   | Meliaceae        | Bark – To avoid abortion nature  |
| 10) Acacia Leucophlala, Tella tumma   | Mimosaceae       | Root – To abort 3 months pregnancy                                       |
| 11) Lawsonia inermis, Gorintaku   | Lythraceae       | Root – To cause abortion   |
| 12) Hybanthus enneaspermus, (Ratnapurusha)  | Violaceae        | Leaf powder with milk – to increase sexual energy in male                |
| 13) Hemidesmas indica, sugandhipala   | Periplocaceae    | Root powder with milk – To promote sperm count, and sperm disorders      |
| 14) Curculigo orchioides, nelatadi  | Hypoxidaceae     | Tuber – powder to enhance sperm count                                    |
| 15) Asparagus recemosus, Pillitegalu  | Asparagaceae     | Tube – Powder form – to enhance sperm count                              |
| 16) Clitoria ternatia Sankupushpam  | Fabaceae         | Leaf decoction - to increase sperm count and sexual potency              |
| 17) Dichrostachys cinerae (Yelicturu chettu)  | Mimosaceae       | Root and bark juice – To avoid cold and diseases to the delivered ladies |



|   |                            |   |
|---|----------------------------|---|
| 18) <i>Achyranthus aspera</i> uttareni  | Amaranthaceae              | Root – juice – To promote normal delivery   |
| 19) <i>Achyranthus aspera</i> uttareni  | Amaranthaceae              | Dried leaves – smoke – to kill bacteria in the house  |
| 20) <i>Albigia lebbeck</i>  | Mimosaceae                 | Dried leaves – smoke – to kill bacteria in the house  |
| 21) <i>Syzygium cumini</i><br>Alam neredu                                     | Myrtaceae                  | Stem bark grounded with sugar and the juice 20ml per day  |
| 22) <i>Argemon mexicana</i><br>Mulupuccha                                     | Papaveraceae               | To cure white discharge in women  |
| 23) <i>Bauhenia recemosa</i><br>Arechettu                                     | Aesalpiniaceae             | Leaf with sugar – juice for 3 days – To cure white discharge  |
| 24) <i>Andrographis paniculata</i> (nela vemu) & <i>piper nigrum</i> mireyalu | Apocyanaceae<br>Piperaceae | Bark – Juice to cure red discharge<br>Leaves & seeds – to cure stomach pain during menstrual period |
| 25) <i>Eriolaena hookeriana</i><br>Peddabottuku chettu                        | Sterculiaceae              | Leaf and <i>Allium cepa</i> juice – To relieve menstrual pain and cause pregnancy                   |
| 26) <i>Nyctanthes arboritis</i> parijatam                                     | Nyctanthaceae              | Leaves and pepper – Juice to cure malarial fever  |
| 27) <i>Aerva lanata</i> – Pindikura mokka                                     | Amaranthaceae              | Total plant juice – To relieves fever   |
| 28) <i>Cassia auriculata</i> (Tangedu)  | Caesalpionaceae            | Leaf with <i>Allium sativum</i> – to heal from gum motions  |
| 29) <i>Acalypha indica</i> kuppinta (or) Muripinda                            | Euphorbiaceae              | Flowers with one beetle leaf – To cure Asthama  |
| 30) <i>Coldenia procumbens</i> cheppuottaku                                   | Boraginaceae               | Leaf juice – Topical application cure cracks in feet  |

Now-a-days human society concentrating on allopathic medicine which relieves the disease, it cannot eradicate the pathogen or deficiency but enhances side effects.

Because of these draw backs now people slowly turned back to the phytomedicine. This medicine is safe enough eradicate deficiency, kill pathogens.



Hence, this is the need of hour to examine every medicinal plant for its medicinal efficacy. In this juncture this study got importance of the tribal medicinal plants.

**Discussions:** In this study 30 medicinal plants were enlisted in the given tabular form. Along with the Latin name, vernacular name; family and the part used for medicine off all families Family Fabaceae members are in 04 number followed by Amaranthaceae and mimosaceae 03 each. Caesalpinaceae & Euphorbiaceae 02 species each. The remaining families represent one each.

The numbers of families that represent present study plants are 24. They are Fabaceae; Amaranthaceae, mimosaceae; caesalpinaceae; Euphorbiaceae which are most wide in their distribution. Some of the rare families like violaceae; Aristolochiaceae; Sterculiaceae, Lythraceae etc. 6 plants are used for promote pregnancy, 3 plants are to induce abortions. 5 plants to enhance sperm cells production, to avoid sexual debility; 2 plants for postnatal care; plant to make house bacteria free; 3 plants to avoid discharge problems of women 2 plants to cure menstrual pain and retain pregnancy. For treating asthma; malarial fever, normal fever, gum motions cracks in feet – one plant each.

### Conclusion:

The health problems of the people all around the world has been increasing. The allopathic medicinal system is working its best to address those problems, but it brings so many side effects and post treatment ill health developments. Treatment to one disease bringing another and health recovery is almost not seen. At this juncture the world is looking for total cure without any side effects.

As the tribal people test the efficacy of the plant crude drug on themselves and set the dosage, combination etc. it is very alternative remedy for the chronic diseases without side effects Basha Sk & Sudarsanam G (2010).

Now- a -days infertility both in men and women has been increased due to the changed life styles; food habits etc. The tribal people use the ethno botanics like Hybanthus enneaspermus, Hemidismus indica; curculigo orcheioides and Asperagus recemosa roots to correct sperm problems in men (Lingaiah M & Naga Raja Rao P (2013). At the same time plants like Ficus religiosa, Maeruva oblongifolia, butia monosperma cure infertility problems in women Yugandhar P et.al (2014). Purified environment is essential to keep general health.

The important medicinal plants Argemon mexicana, Bauhenia

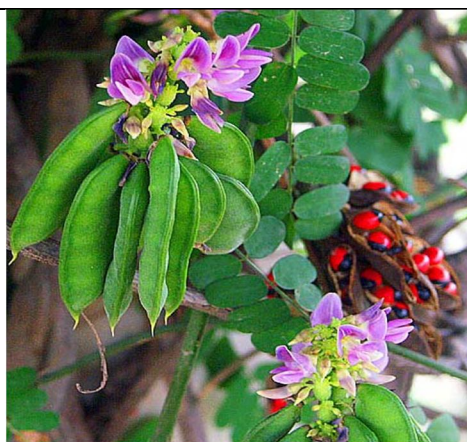
recemosa and Andrographis paniculata plants cure different kinds of discharges in women Ganesh P & Sudarsanam G (2013).

Achyranthus aspera; Albegia lebec leaves has been used to make house interior bacteria free Murthy E N (2012).

All the above mentioned plants were proved to be potent in clearing infertility problems; improving general health and keeping environment bacteria free. Hence, there is necessity to bring all the above plants medicinal properties into utility, available to effected people. That will be useful to the society.



**Mucuna pruriens**



**Abrus precatorius**





**Curculigo orchioides**



**Syzygium cumini**

**Eriolaena hookeriana****Nyctanthes arbor-tristis****References:**

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