



CULTURAL AND SOCIAL ASSOCIATION IN ABSTRACT FORM ABOUT THE ETHNOGRAPHY OF SELECTED ANGIOSPERMIC WEEDS IN CHITTOOR DISTRICT OF ANDHRA PRADESH, INDIA.

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Abstract :The present study is the result of ethno botanical studies carried out during 2008 to 2022, to understand the abstract relationship of angiospermic weeds of Chittoor district of Andhra Pradesh with vernacular language, the Telugu language as a tool to study and understand indigenous knowledge of the folklore of the Chittoor district the study area. The Folklore study or Abstract relationship in any region is important in grasping the cultural and social association of plants, in the form of native songs, local proverbs, stories, tales, poetry, and riddles etc. There are frequent direct or indirect references to plants particularly to the flowers and fruits in folk songs folk tales, and folk proverbs. They refer to important characteristics or qualities of the plants, their uses and sometimes to express other association and beliefs. Hence plant authentication is very crucial to decipher the clues hidden in abstract form of the folklore studies of the region. Standard methods of protocol was followed in plant identification authentication and ethnobotanical data documentation. Thus, folklore comprehends all knowledge that is transmitted orally from generations to generations and is preserved consciously or unconsciously in beliefs, and in myths, legends, and tales of common acceptance, which express the temper and genius of group rather than of an individual. Because it is the repository of popular traditions folklore serves as constant source and frame of reference, but it is essentially of the people, by the people, and for the people.

Index Terms- Abstract relationship, cultural and social association of weeds, ethnography, folklore study, Folk Proverbs, Folk riddles, folk tales.

I. INTRODUCTION

Folklore study or Abstract relationship in any region is important in grasping the cultural and social association of plants, which are present in the form of native songs, local proverbs, stories, tales, poetry and riddles etc. There are frequent direct or indirect references to plants particularly to the flowers and fruits in folksongs, folk tales, and folk proverbs. They refer to important characteristics or qualities of the plants, their uses and sometimes to express other associations and beliefs (Jain&Mudgal 1999). Whenever the researcher come across a plant name in folk song, folk tale a folk riddle they should try to fix the correct identity of the of the plant (Jain 1964), to leave for posterity, a permanent and useful record of

their notes and other vernacular name of that plant should be given. This type of research is the domain of sociologist or specialist in human history and culture but correct identification of plant species possible only when botanists are involved in this task. It is now realized that any account of plant folklores become many times more useful if the names of the plants are authenticated by scientific names preferably by voucher specimens (Jain 1964). The Indian subcontinent consists of separate linguistic communities each of which share a common language, tradition and culture. If we want to know the use of plants in any community, we must probe through their local language as a tool. Many ethnic communities believe that “there is a plant in world, for every ailment all you have to do it is to find it”. Folk literature in the form of folk songs, folk proverbs, folk riddles, folk tales etc., are the knowledge acquired and tested through experience. The folk literature is the reflection of folk lifestyle. As reported in Kumaon region of Uttarakhand, *Cannabis sativa* L., commonly known as *Bhangalu* in Kumaoni language (*bhangah* in Sanskrit and hemp in English). If Kumaoni people want to curse someone they say “*Teri kuribhangalujamjo*” which means “May hemp grow in your house”, that is may your house be ruined and damaged to such an extent that *Cannabis* will grow there” (Shah 1987, 2002). In Kumaoni community there is a well-known saying referring to the *Dioscorea bulbifera* L., as “*Khaunhi ne gethikumarbandhipeti*” meaning *Dioscorea* is not available in his house to eat and even then the person poses himself as a big guy and many others were compiled by Pandey and Pandey (1999). Analysis and understanding of cultural and social association plants in abstract form of any region provide hints, remedies and clues to treat many diseases and are the hidden treasures of knowledge about healthcare and culture. To study these aspects in the study area extensive ethnobotanical survey was carried out.

II. RESEARCH METHODOLOGY

2.1. MATERIALS:

2.1.1. Plant Collection

The ethnobotanical exploration was conducted covering all seasons, like pre-monsoon, monsoon, post-monsoon, winter and summer, crisscrossing all the mandalas of Chittoor district of Andhra Pradesh during the years 2008-2022, for collecting angiospermic weed specimens and ethnobotanical data. Field trips were made at frequent intervals specially to collect the plant material to authenticate the ethnic or folk claims. Study area composed of variety of vegetation which covers aquatic, agricultural, waste land, village and urban areas of the Chittoor district. Special attention was given to data relating to habit, habitat, height of the plant, local names, local uses and other characters which cannot be observed in herbarium, such as color of the flower, fruit, presence of aroma and latex were recorded on the spot. Further every attempt was made to study each plant species by its phenology, its abundance and distribution. The voucher specimens were collected in triplicate, processed as per the standard protocol suggested by Botanical Survey of India (BSI) and were deposited in Sri Venkateswara University, Tirupati. A.P.

2.1.2. Tools

The tools required mainly are trowel, Scissors and knife for cutting twigs, field note book, polythene bags, old newspapers, blotting Papers, corrugated sheets, Plant press. Camera and tripod. The plant press consists of a wooden frame (for rigidity), corrugated cardboard ventilators (to allow air flow through the press), Blotting paper (to absorb moisture) and folded newspaper (to contain the plant material).

For photography 1. Olympus FE 330. 2. Nikon Coolpix S6200. 3. Canon Power Shot SX 500 IS., Cameras were used

2.1.3. Chemicals

Ethyl alcohol, Mercuric chloride, Formaldehyde, Acetic acid, Adhesives, etc.

2.2. Methods

2.2.1. Preparation of Herbarium

2.2.1.1. Processing

Plant specimen were collected either with flower or with fruit, preferably both. Whole plant was collected for herbaceous plants species. Care was taken to collect the underground parts of the geophytes. Woody plant twigs of about 20-25 cm length were collected. To avoid damage during transport in special box to prevent wilting, collected specimens must be tagged with a field collection and necessary information should be recorded in a filed book. At least three specimens of each plant species were collected and were given a field collection number. The detailed notes related to it were entered in the field note book. The specimens were either pressed in the field as and when they were collected or they were kept in a vasculum or bag to prevent wilting and brought to the camp to be pressed later. All the fresh specimens were soaked in alcohol with mercuric chloride or in 1% formaldehyde, for one to two minutes before transferring to Plant press and processed in to Herbarium specimens using standard methods prescribed by Botanical Survey of India (BSI). The plant specimens were spread out between the folds of a newspaper and proper care was taken to see that the specimen should also display both sides of its own leaves. The extra leaves/branches, etc. were removed if necessary. The larger specimens were folded in 'N' or 'W' shapes. Since it is difficult to arrange the aquatic plants properly on the sheet special attention was paid. Then the same was kept in blotting sheets to avoid folding, hiding and overlapping of parts and was placed between corrugated cardboards, which serve as ventilators to allow air flow through the press for proper drying. The plant press is tightened using straps with buckles to apply uniform pressure. As the specimens dry, it may be necessary to further tighten the straps on the press to minimize shrinkage and wrinkling.

2.2.1.2. Mounting

Before mounting the specimens were once again poisoned by dipping them in ethyl alcohol saturated with mercuric chloride and allowed to dry under room conditions. The dried specimens were mounted on hand made herbarium sheet of standard size (28.7 x 41.25 cm) and suitable glue mixed with mercuric chloride was used for sticking the specimen. The bulk plant parts like dry fruits, were dried without pressing and were put in small envelops. Succulent plants were collected in 4% formalin or FAA (Formalin Acetic Alcohol).

2.2.1.3. Labeling

A label with 6.5 x 10.5 cm size, pasted or printed on the lower right hand corner of the herbarium sheet, carrying the information about location, altitude, habit, date of collection, name of the collector, vernacular name, accepted scientific name and important synonym if any, family name, field number, phenology and remarks.

2.2.1.4. Identification

Each specimen was carefully examined and identified taxonomically using the available publications like Flora by Gamble and Fisher (1915-36), Henry et al, (1987&1989) Matthew (1982; 1983 and 1991), Saldanha& Nicolson (1976), Pullaiah and others (1997, 2008), various floras, monographs and revisions and e-floras. For identification of weeds Bentham and Hooker classification (1862-83)and for weed enumeration APG III Plant Classification (2009) were followed. In the present study, the most accepted name for a plant is given based on recent botanical references i.e., IPNI (2019), The Plant list version 1.1 (2013).

2.3. Documentation of Ethnobotanical and folklore data

The methods suggested by Goel and Jain (1999) were adopted to survey the ethnobotanical uses of Angiospermic weeds of Chittoor district. Before starting field work necessary information about the distribution of ethnic people in the study area was collected from demographic records. Repeated field visits were undertaken to tribal hamlets to familiarize with the local tribes namely Yerukala, Yaanadi, Sugali, Nakkala, and Irulas and Rural folk in general which paved the way for free discussion about various aspects related to utilization of plant resources, vernacular names, identification of plants, categorization of lifeforms. An attempt was made to gather information regarding their magico-religious beliefs, furthermore, notes on crude drug collection, preparation and dosages were made at the field camps.

III. RESULTS AND DISCUSSION

In rural areas of Chittoor district agriculture is the main occupation and almost all the rural folk practice agriculture as a result they get an opportunity to be part of nature and will have knowledge about topography, vegetation of the locality. The songs of the region or community depict the ritual, devotion, and other practices associated with rural life. In the present study during ethnobotanical survey the Angiospermic weeds in abstract form find mention were identified and documented.

Each song is so specific about every occasion of their life as per the culture of the community. Many folklore songs of the region are rich with hidden remedies, and recipe to cure many of the diseases like eczema, gynecological disorders, sterility, tips for nursing mothers to get ample breast milk to feed the young once.

3.1. Folk songs:

Folk songs are the emotional expressions of the people. Every occasion in the life will be celebrated with songs. The songs are the treasure of knowledge borne out of experiences and almost they hint the herbal therapy for common health problems.

(i). *Chemmachekkacharadesimogga*.....

.....*PaaleeyavachenaapadathiPadmavathi*.

This song narrates three important stages of young women's life namely attaining puberty, pregnancy, and child care as nursing mother with prescription that shows remedies from the weeds that grow in and around their surroundings for 1. Amenorrhea 2. Fertility, 3. Abundant breast milk for nursing mother.

Primary Amenorrhea: The meaning of the first stanza of the song gives recipe to cure primary amenorrhea with clear morphological features for sure identification characters of the plant part used. *Red Chemma*, red legume seeds are identified as *Canavalia africana Dunn* (PNR0179, Fabaceae) with dark brown seeds.

Recipe: Handful of *red chemma* is eaten with *attu* or dosa (Pan cakes) every morning is a cure.

Pregnancy or fertility: the second stanza of the song gives hint to fertility. *White Chemma*, white legume seeds, identified as *Canavalia gladiata* (Jacq.) DC. (PNR 0432, Fabaceae) with shiny white seeds.

Recipe: *White Chemma* is eaten as said above manner. The barren woman will become pregnant.

Abundant milk for nursing mother: The last stanza gives tips to get plenty of breast milk to feed the new born baby. *Padmamu*, Lotus (Eng.), *Nelumbo nucifera* Gaertn. (PNR 0523, Nelumbonaceae).

Recipe: Lotus seeds roasted in cow ghee powdered and taken twice daily with honey.

(ii). *Kallagajjikankallamma, vegulachukkavelgamogga*.....

There are four versions of this songs. This song provides clue to cure Eczema. Some versions give a recipe with a list of a few ingredients, where as other versions give a recipe with long list of ingredients. Primary ingredients for all versions is only three, they are *kachhuraalu* (Gandhasathi-Sanskrit), *bavanchhaalu, velagamogga*, and scientifically *Hedychium spicatum* Sm., *Cullen corylifolium* (L.) Medik (PNR 0491, Fabaceae) and Mercury respectively. If Mercury is not available, the leaf juice of *Cleome gynandra* L. (PNR0012, Cleomaceae) can be used as substitute.

Recipe: The leaf juices of *Cleome gynandra* L. and *Cullen corylifolium* (L.) with mercury are used to treat eczema.

(iii). *Attavarintikikothalludosthenu*.....

.....*Doolagondithodulaparamma*.

This song depicts the tradition and culture of the region, and the role of weeds in their primary healthcare. Some foods have been mentioned in holy books such as the Bhagavad Gita, the Bible and the Koran and as a result most of the traditional or ethnic foods are influenced by religion and taboo. The foods are classified into three different types based on property, quality, and sanctity, these are *saattvika*, *raajasika*, and *taamasika*. The *saattvika* food denotes food for prosperity, longevity, intelligence, strength, health and happiness. This type includes fruits, vegetables, legumes, cereals and sweets. The *raajasika* food signifies passion and restlessness, and this type includes hot, spicy, and salty foods. The *taamasika* food is intoxicating and unhealthy, which causes dullness and inertia (Tamang and Samuel, 2010).

The son-in-law who visits in-law's home for the first time after marriage will be treated with at most care especially in serving the food. The rural folk believe that if *saattvika*, *raajasika*, food is served effectively leads to wellbeing which will be the basis for marital bliss. The plants that are being praised in the song are *Nalleru* (*Cissus quadrangularis* L., PNR 0239, Vitaceae) and *Doolagondi* (*Tragia involucrate* L., PNR 0294, Euphorbiaceae), are abundantly available weed species of the study area, play an important role in balancing the *saattvika*, *raajasika* gunas. Ethnic foods have social importance for celebrations particularly during festivals and other social occasions.

Recipe: *Nalleru*, (*Cissus quadrangularis* L.) shoot tips are made into chutney with garlic, pepper seeds, rock salt and coriander seeds and served along with rice in the lunch as first item to be taken. *Doolagondi*

(*Tragia involucrata* L.) stems are made into paste and boiled with goat milk can be taken at bed time serves as aphrodisiac medicine.

(iv). Pachhabachalikoorthoti.....Namoonarayana.....

This song warns about food allergy. The meaning of the song alerts that if *Pachha Bachalli* (*Basella alba* L., PNR 0425, Basellaceae) is eaten as curry causes allergic symptoms and body pains.

Folk songs consist of many recipes for preparing medicine that cure diseases. The treatment methods in the songs are transmitted from one generation to another generation through oral propagation. As the songs are reaching next generations through oral propagation there is a possibility of modification of words. As songs are not written so lack clarity in word usage and pronunciation which varies from person to person.

3.2. Proverbs:

Many proverbs in native language of this region, which form a rich source hits to ethnomedicine.

(i). Tridosha haram Tippateega

As per this proverb *Tippateega* (*Tinospora sinensis* (Lour.) Merr., PNR0086, Menispermaceae) banishes *tridosha*.

Recipe: *Tippateega*, *Tinospora sinensis* (Lour.) Merr., stems collected during autumn months and are cut into pieces at intermodal regions, and shade dried, powdered, taken with honey at bed times, balances *vaata*, *pitta*, and *kapha*.

There are often rites associated with the gathering and use of different plant parts in medicines, i.e., some plants may be collected only at certain times of the day or season or from specific locations.

(ii). PantijabbulakuUttareni:

The meaning of the proverb is *Uttareni*, (*Achyranthes aspera* L., PNR 0161, Amaranthaceae) cures tooth ache.

Recipe: *Uttareni* (*Achyranthes aspera* L.) stem stocks are made into brushes after chewing the tips and cleaned the tooth twice a day regularly, gives relief from tooth related problems.

3.3. Riddles:

The folklore of the region is luxuriant in riddles for expressing the importance of plants in their lives and in maintaining the secrecy of folk medicine.

Neekuammaanakuummakulakomma, andarikiamma –evaroocheppamma? Inkevaru? Thulasamma.

This riddle illustrates that the plant *Tulasi* (*Ocimum tenuiflorum* L., PNR 0206, Lamiaceae) commands respect and regard as mother in the lives of the people of ethnic region.

3.4. Stories:

The interesting story of the study area, tells about role of herbs which cured the eye injury of Lord Shiva of Srikalahasti temple. His staunch devotee, Bhakta Kannappa also called as Thinnadu, from Boya (hunting community), did not know how to worship, Lord Shiva. He used to offer the Lord animal flesh, which ever animal he hunted. Lord used to accept his offerings because of his devotion. Once Lord Shiva tested the devotion of Kannappa with his divine power. Lord created tremors and roof top of the temple

began to fall, all the devotees ran away except Kannappa and protected Shiva Linga from damage. In spite of his efforts he noticed the oozing of blood from one of the eyes of Linga. As per the story, Kannappa applied fresh *Gaayapaaku* juice to stop the bleeding of the eye of the Lord Shiva. As the story has mentioned about *Gaayapaaku*, but there is no clear evidence whether it is *Sida acuta* Burm.f. (PNR 0005, Malvaceae) or *Tridax procumbens* (L.) L. (PNR 0081, Asteraceae) as both the leaf juices are used to stop bleeding and cure cuts and wounds in that region of ethnic community. Both these plants are vernacularly known as *gaayapaaku*, especially Srikalahasti region of the study area. Which was mentioned clearly in Sri Kalahastiswara Mahatyam by Dhurjati.

3.5. Folk Tales:

Many folk tales were woven around *Tangedu* (*Senna auriculata* (L.) Roxb., PNR 0067 Fabaceae). This weed plant will be treated as symbol of love between brother and sister as rural folk of the region believed that it was the sister after her death developed into the plant *Tangedu*, from the burial ground where her body was cremated on the banks of village tank. The yellow flowers of the plant send the message of prosperity.

From the folk literature in the form of folk songs, folk proverbs, folk riddles, folk tales etc., where angiospermic weeds find mention, were identified, documented from the study area.

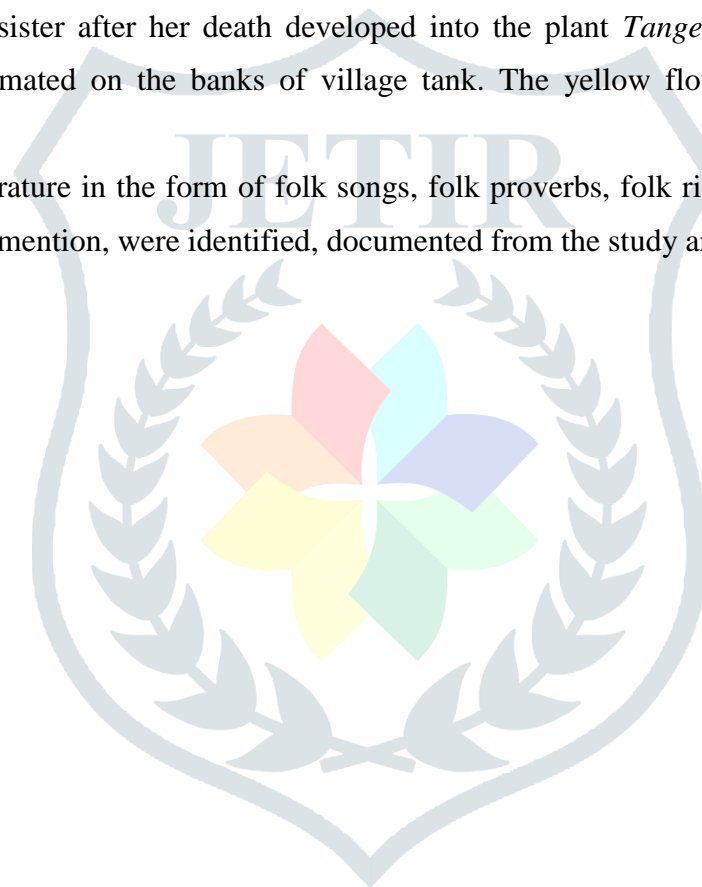
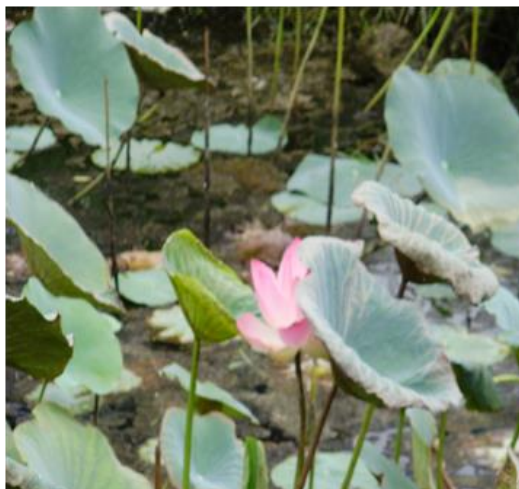


PLATE-1: Abstract Form-1



**a. *Achyranthes aspera* L.
PNR 0161 Jeerakaaku**



**b. *Nelumbo nucifera* Gaertn.
PNR 0523 YerraTaamara**



**c. *Canavalia africana* Dunn
PNR 0179 Adavithamba**



**d. *Canavalia gladiata* (Jacq.)
DC. PNR 0432 Potlathamba**



**e. *Cleome gynandra* L.
PNR 0012 Tellavominta**



**f. *Cullen corylifolium* (L.) Medik.
PNR 0491 Baavanchalu**

PLATE- 2: Abstract Form-2



a. *Basella alba* L.
PNR 0425 Bachalikoora



b. *Cissus quadrangularis* L
PNR 0239 Nalleru



c. *Tridax procumbens* (L.) L.
PNR 0081 Gaayapaaku



d. *Sida acuta* Burm.f.
PNR 0005 Medabirusaaku



e. *Ocimum tenuiflorum* L
PNR 0206 Nallatulasi



f. *Senna auriculata* (L.) Roxb.
PNR 0067 Thangedu

IV. CONCLUSION

The art of herbal healing has very deep roots in Indian culture and folklore. The ethnic communities believe that “God has created medicine through nature in and around where you stay”. The plants find

mention in abstract form in songs, proverbs, riddles, stories, folktales, and poetry etc., as hints, remedies and clues to many diseases. Of course, their knowledge of medicine might not be very scientific and well advanced and their means might be very crude and rough, though not experimentally tested in modern laboratories have proved correct because of long years of trial and error to which they were subjected.

Thus, folklore comprehends all knowledge that is transmitted orally from generations to generations and is preserved consciously or unconsciously in beliefs, and in myths, legends, and tales of common acceptance, which express the temper and genius of group rather than of an individual. Because it is the repository of popular traditions folklore serves as constant source and frame of reference, but it is essentially of the people, by the people, and for the people.

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