

Exploration of some Medicinal Plants used by tribals from Digras region of District - Yavatmal, Maharashtra, India

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Abstract- Digras tahsil is rich in floral biodiversity with tremendous medicinal potential; this is due to certain changes in physical features and soil texture. This tahsil is surrounded by thick forest areas. The forests are tropical dry-deciduous type and existing in the hilly tract of tahsil. The plants in this area made the integral part of the routine health care system of the tribals residing in the small villages and towns. In this area large number of tribal community like Gond, Banjara, Gawali, Andh, etc. these tribal peoples residing in canopy area of forest used different plant and plant parts for food, medicine, fodder, fuel, dye for festivals, rituals and various other functions. The tribal peoples have immense knowledge about the uses of plants and plant parts. India is very rich harbor with reference to diversity of higher plant species and also India is one of the leading countries in Asia with respect to wealth of traditional knowledge system related to the use of plant species. The traditional knowledge of India is mainly used by the local peoples of small towns and villages.

An attempt has been made to explore traditional medicinal knowledge of plant materials belonging to various genera of the plant species which are readily available in this region of Yavatmal district. The ethanobotanical information were gathered through several visits, questionnaire, group discussions with local peoples and Vaidya ,Bhumka, Ojha and traditional herbal healers. During the study 19 plant species belonging to 15 family were identified to cure various diseases. These plant species are frequently used for diseases like snake bite, scorpion bite, diarrhea, mental illness, dysentery, inflammations, urinary infections, venereal diseases and fever and also some other like hair related problems, jaundice, diabetes, night blindness, rheumatism, bone fracture and dislocations, etc. the use and results of these plant species was encouraging but their scientific security is absolutely necessary before being used in unique natural products for development of medicines against various danger diseases and their industrial product development is very easy.

The present study deals with the ethanomedicinal uses of plants by Gond, Gawali, Andh, Banjara, etc. tribes of Digras region of Yavatmal district. We have been conducting the research work in last year in different areas of Digras tahsil with the purpose of contributing to the knowledge and the preservation of a part of the national cultural heritage and finding out new or rare uses of medicinal plants, which could lead to the use of new plant-based medicines; as Etkin (2001) recently claimed a higher degree of interdisciplinary activity is needed in ethnopharmacological studies. This kind of research, much rare in Digras tahsil therefore this region was selected as their tribal's are mainly dependent upon the local flora for their livelihood and

are herbal medicines for curing the ailments and diseases. The study was carried out during January to December 2011. This paper records their botanical names, family, local names and ailments where it is used.

Index Terms- Ethanomedicine, Digras, bhumka, rheumatism

I. INTRODUCTION

Since the beginning of human civilization man has been using many herbs and herbal extracts as medicine. The classical Indian texts Rig-Veda, Athurveda, Charak samhita and Sushruta samhita are the evidence of the use of plants by our ancestors. It indicate that the herbal medicines have been derived from rich traditions of ancient civilization and scientific heritage. Among the ancient civilizations, India has been known to be rich repository of medicinal plants. The forests in India is the principal repository of large number of medicinal and aromatic trees, which are largely collected as a raw materials for manufacture of drugs and perfumery products. There are about 8,000 medicinal plants listed in different classical and modern texts on medicinal plants. About 960 medicinal plants are in active use in all India. Around 2,000 species are documented in Indian systems of medicine like Ayurveda, Unani and Siddha (Dikshit, 1999). The all India ethanobotany survey estimated that over 7,000 plant species are used by 4,539 ethnic communities for human and veterinary care across the country. About 80% of population in developing countries depends directly on plants for medicines according to WHO (Pareek, 1996; Mukhopadhyay, 1998). The knowledge of these indigenous drugs has come through generations verbally is the main subject of ethonobotany (Dhiman and Khanna, 2001).

Ethanobotany can be defined as the total natural and traditional relationship and interactions between man and his surrounding local environment (Martin 2001). The plants which naturally contain certain chemical constituents having therapeutic properties are called medicinal plants.

In order to assess the consumption of traditionally important and indigenous medicinal plants survey was carried out during January to December 2011 in the different areas of Digras tahsil of Yavatmal district. These medicinal plants were used by Gond, Gawali, Andh, Banjara, etc. tribes of this region. The ethanobotanical information were gathered through several visits, questionnaire, group discussions with local peoples and Vaidya ,Bhumka, Ojha and traditional herbal healers. During the study 19 plant species belonging to 15 families were identified to cure various diseases. A large number of empirical studies have focused on accounting for the net accumulation of timber that

arise when forest is cleared or harvested (Van Tongeren et al., 1993; Vincent, 1999; Hassan, 2000)

The local communities substantially depend on their surrounding areas for food, fodder, fuel, fiber, timbers and medicinal use. The local people of the area use maximum number of plant species for medicinal purpose. The medicinal value of these medicinal plants includes curing for many common human diseases and other health problems. This prompted the need to take up medicinal studies in the study area during January to December 2011. The study yielded valuable information on traditional medicinal knowledge system of peoples and medicinal plants having therapeutic values.

II. RESEARCH ELABORATIONS

The floristic surveys were conducted throughout the study period in different area of Digras tahsil of Yavatmal district; among the tribe peoples like Gond, Gawali, Andh, Banjara, etc. The plant specimens were collected during this surveys were identified and preserved. The field data was compared with the literature on the medicinal plants of tribal belt of Madhya Pradesh; some literatures of ethnobotany have also been considered like Yadav and Suresh (2003) Pushpangadan and Kumar (2005). The medicinal application of 19 plants belonging

to 15 families were reported here which are used to cure different diseases and problems of tribe peoples like expectorant, antispasmodic, treatment of dysentery, bone fracture, asthma, rheumatism, skin disease, etc.

The method used to collect the data was:

- 1) The information was collected from the elderly persons of the tribal community in the region.
- 2) Interview were conducted using structured questionnaire prepared for traditional Medicinal Practitioners (TMPs)
- 3) Data was collected for species found to be in use i.e. sold in market by traditional practitioners.
- 4) Plant identification and nomenclature are followed after the Flora of Presidency of Bombay (Cooke).

III. RESULTS

A list of local plants was prepared by enquiring from Vaidya ,Bhumka and tribal man. Which are used by the tribe like Gond, Gawali, Andh, Banjara, etc. Some medicinal angiospermic species which are found in this region of Digras tahsil have been given in table – 1.

Table – 1: List of some medicinal plants of Digras tahsil, dist.- Yavatmal (M.S.)

| Botanical Name | Family | Local Name | Use |
|-------------------------------------|-----------------|--------------|---------------------------------|
| <i>Abrus precatorius L.</i> | Papilionaceae | Gunj | Uterine stimulant |
| <i>Achyranthes aspera L.</i> | Amaranthaceae | Apamaarga | Toothache, astringent |
| <i>Adhatoda vasica Ness.</i> | Acanthaceae | Adulsa | Expectorant, antispasmodic |
| <i>Allium sativum L.</i> | Liliaceae | Lahsun | Antifungal, amoebiasis |
| <i>Annona squamosa L.</i> | Annonaceae | Sita phal | Treatment of dysentery |
| <i>Azadirachta indica A.Juss.</i> | Meliaceae | Neem | Anti microbial, Insecticidal. |
| <i>Bauhinia racemosa L.</i> | Caesalpiniaceae | Apataa | Anti-inflammatory, Skin disease |
| <i>Boerhaavia diffusa Poir.</i> | Nyctaginaceae | Punarnavaa | Tonic in sexual inadequacy. |
| <i>Caesalpinia bonducella Flem.</i> | Caesalpiniaceae | Sagar goti | Anti-rheumatic. |
| <i>Celosia argentic L.</i> | Amaranthaceae | Shveta murga | Anti diarrhoeal |
| <i>Cissus quadrangularis L.</i> | Vitaceae | Hadjodi | Bone fracture |
| <i>Dalbergia sissoo Roxb.</i> | Papilionaceae | Sisam | Anti-helmentic, Emetic. |
| <i>Eucalyptus globulus Labill.</i> | Myrtaceae | Neelgiri | Antiseptic, antifungal |
| <i>Euphorbia hirta L.</i> | Euphorbiaceae | Dudhi | Asthma |

| | | | |
|-------------------------------|-----------------|-------------|----------------------------------|
| <i>Ricinus communis L.</i> | Euphorbiaceae | Arandi | purgative |
| <i>Tribulus terrestris L.</i> | Zyagophyllaceae | Gokshura | Tonic in sexual inadequacy |
| <i>Tridax procumbance L.</i> | Asteraceae | Kambarmodi | Antiseptic, insecticidal |
| <i>Vites negundo L.</i> | Verbenaceae | Nirgundi | Anti-inflammatory, analgesic. |
| <i>Withania somnifera L.</i> | Solanaceae | Ashwagandha | Rheumatism, anti-inflammatory |

Photo Plate – 1: Photographs of some medicinal plants of Digras tahsil, dist.- Yavatmal (M.S.)



Tridax procumbance L.



Ricinus communis L.



Abrus precatorius L.



Tribulus terrestris L.



Withania somnifera L.



Achyranthes aspera L.

IV. CONCLUSION

Now a days it has been realized that the ethnobotanical studies of different are are going to play an important role for future in social health system. The tribal medicine men i.e. Traditional Medical Practitioner (TMPs) and Vaidya or Bhumka of Digras region of Yavatmal district possess considerable knowledge of the therapeutic properties of local plants as compared to younger generation which has poor phototherapeutic knowledge. The way

to diagnose the disease is interesting as they use ear, nose, hands to diagnose the disease, because they live in interior areas and lack the use of modern scientific instruments; therefore they treat the disease by the use of medicinal plants (Santhya et. al, 2006). Generally they use leaf juice, root decoction, root extract, etc. of the plant specimen is administrated by TMPs in a proper dose. Tribal population has good knowledge about the use of many plants. The plant part used various from plant to plant. The traditional use of plants has declined due to scarcity of plant species, because of human activities and also by over grazing by animals. Therefore it is become need of hour to conserve these plant species.

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