RESEARCH ARTICLE

Documentation of aboriginal traditional knowledge and use pattern of folk biomedicines of Deolapar Forest Range, Ramtek

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ABSTRACT

India has one of the oldest, richest and most diverse systems of traditional medicine. The use of plants to cure diseases is an ancient practice. The preparation of locally available medicinal plants remains an important part of health care for humans for people living in rural remote areas, where people lack access to modern medicine facilities and are unable to afford synthetic drugs due to its high cost. The present study deals with the survey of medicinal plants utilized by forest dwellers and documentation of 48 medicinal plants belonging to 34 families which are utilized by Gond tribes to cure various ailments in three forest besides villages; Hiwra Bajar, Deolapar and Akola of Deolapar forest range, Ramtek Taluka, Nagpur District, Maharashtra.

Keywords: Traditional Knowledge, Gond Tribe, Deolapar Forest Range, Ramtek

INTRODUCTION

Importance of utilization of forest resource in majority of medicinal plants traditionally occupied an important position in the socio cultural, spiritual and medicinal area of rural and tribal lives of India. Diversity of various medicinal plants comprises approximately 8000 species and account for around 50% of all the higher flowering plant species of India. Millions of rural especially tribal households use medicinal plants in a self-help mode. Over one and a half million practitioners of the Indian system of medicine in the oral and codified streams use medicinal plants in preventive, promotive and curative applications (Ramanathan, 2014). The traditional knowledge of aboriginals primarily inherited from one generation to further and it plays crucial role in the main source of utilization and management of available forest resources. Brokensha (1990) highlighted the traditional knowledge system is essential for development of medico-world and upliftment of aboriginals. Central India is very well flourished by natural vegetation with the wealth of prominent tribal culture. The present study is about documentation of aboriginal traditional knowledge and use pattern of folk biomedicines of Deolapar Forest Range, Ramtek.

MATERIALS AND METHODS

Study Area:

Nagpur district is flourished with the natural wealth having ranges of forest covers. To explore such wealth of India, survey of such medicinal plants utilized by forest dwellers has been carried out in Deolapar forest range. The net forest area of Deolapar forest range is 33,987.88 hectares amongst 14,588.93 hectares is transferred to Wildlife (Singh and Mishra, 2004). The study was based on the field survey conducted to collect information on traditional knowledge in three forest besides villages; Hiwra Bajar (79^0 24" E longitudes and 21^0 32" N latitude), Deolapar (79^0 22" E longitudes and 21^0 35" N latitude) and Akola (79^0 26" E longitudes and 21^0 33" N latitude) of Deolapar forest range, Ramtek Taluka, Nagpur District, Maharashtra. The study was undertaken during the year 2014-2015 by the extensive field survey, collection, group discussion and documentation of indigenous traditional knowledge of folk medicines used within Gond communities of selected villages with questionnaires during each visit. Structured questionnaires, interviews and participatory observation were used to elicit information from the resource persons using standard methods (Martin, 1995; Reyes Garcia et al., 2007). Plant specimens were collected and identified with pertinent literatures like Flora of Nagpur District (Ugemuge, 1986), Flora of Maharashtra State Vol. I (Singh & Karthikeyan 2000), Flora of Maharashtra State Vol. II (Singh et al. 2001)

RESULT AND DISCUSSION

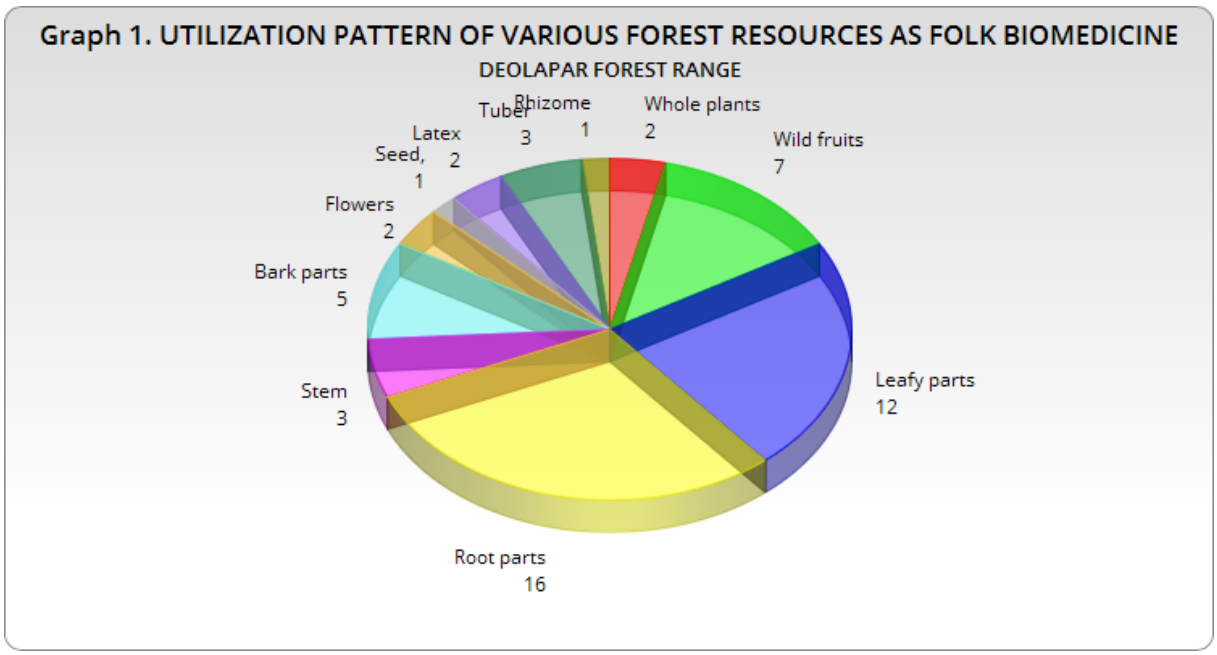
In the present study, documentation of folk biomedicines used by Gond tribe was done in selected 3 villages of Deolapar Forest Division, Ramtek. Data of utilization pattern of 48 wild plants showed that 02 whole plants, 07 wild fruits, 12 leafy parts, 16 root parts, 03 stem, 05 bark parts, 02 flowers, 01 seed, 02 latex, 03 tuber and 01 rhizome were formulated for the preparation of biomedicines (Table No.1;Graph No. 1). Most of the observed plant species are herbaceous and various home remedies are applied for the healing of ailments. It has also been observed that most of the species are used for the general health problems and wound healings besides the treatment of diseases of skin, gastric, cough, etc. The present study is the effort to boost such investigations and make addition to the utilization of some of the folk biomedicines of available forest resources which are not recorded earlier from the study area.

Table No.1: List of various plants used as folk medicines

Sr. No.	Plants used by Local Peoples	Local Name	Family	Parts Used	Uses Documented
1	*Andrographis paniculata* (Burm.f.)	Kalmegh	Acanthaceae	Whole plant	Anti diabetics, Skin Diseases
2	*Achyranthes aspera* L.	Kutri	Amaranthaceae	Root	Acute Toothache
3	*Buchanania lanzan* Spr	Char	Anacardiaceae	Bark	Wound healing
4	*Holarrhena pubescens* Wall.ex G. Don.	Kuda	Apocynaceae	Root, Bark	Anti dysenteric
5	*Phoenix sylvestris* Roxb	Sindhi	Araceae	Leaf	Skin Diseases
6	*Aristolochia indica* L.	Saapsun	Aristolochiaceae	Root, Stem	Snake Bites
7	*Calotropis gigantiana* (L) R Br	Rui	Asclepiadaceae	Latex	Abortifacient
8	*Gymnema sylvestre* (Retz) R.Br. Ex Schlt.	Gulvel	Asclepiadaceae	Leaf	Anti diabetics
9	*Pergularia daemia* (Forsk) Chior	Utran	Asclepiadaceae	Latex	Skin Diseases
10	*Sphaeranthus indica*	Gorakh mundi	Asteraceae	Flower head	Cough
11	*Spilanthes calva* DC.	Akkalkara	Asteraceae	Flower head	Toothache
12	*Tridax procumbens* L.	Kambar modi	Asteraceae	Leaf	Wound healing
13	*Bombax ceiba* L.	Katesavar	Bombacaceae	Bark	Pimples, Skin problems
14	*Cassia fistula* L.	Bahawa	Caesalpiniaceae	Stem & Bark	Pain reliever
15	*Celastrus paniculatus* Willd.	Malkamni	Celastraceae	Seed	Paralysis
16	*Terminalia chebula* Retz.	Hirda	Combretaceae	Fruit	Cough
17	*Dioscorea bulbifera*	Mataru	Dioscoreaceae	Tuber	Antihelminthic
18	*Diospyros melanoxylon* Roxb	Tendu	Ebenaceae	Bark, Leaf	Antidiarrohoea
19	*Cleistanthus collinius* Roxb	Garadi	Euphorbiaceae	Fruit, Leaf	Fish Poisoning, Mosquito repellent
20	*Phyllanthus amarus* Schum. & Thonn.	Bhuiawla	Euphorbiaceae	Whole plant	Jaundice

Table 1: Continued…

Sr. No.	Plants used by Local Peoples	Local Name	Family	Parts Used	Uses Documented
21	*Ricinus communis* L.	Aerandi	Euphorbiaceae	Root	Piles
22	Abrus precatorius L.	Gunj	Fabaceae	Root	Abortifacient
23	Desmodium gangeticum (L.) DC.	Salwan	Fabaceae	Root	Cough and Cold
24	Erythrina indica Lam.	Pangara	Fabaceae	Leaf	Against ringworms
25	Tephrosia purpurea (L.) Pers.	Unhali	Fabaceae	Root	Stomach ache
26	Ocimum sanctum L.	Tulas	Lamiaceae	Leaf	Curing intestinal ulcers
27	Leucas aspera (Willd)	Kumbi	Lamiaceae	Leaf	Scorpion & Snake bites
28	Asparagus racemosus Willd	Marbat	Liliaceae	Tuber	Sex tonic to human
29	Chlorophytum tuberosum (Roxb.) Hook.	Musali	Liliaceae	Tuber	Sex tonic to human
30	Woodfordia fruticosa (L.) Kurz	Dhayti	Lythraceae	Root	Abortifacient
31	Abutilon indicum (L) Sweet	Petari	Malvaceae	Root	Sex problems
32	Sida cordifolia L.	Bala	Malvaceae	Root	Gonorrhea
33	Sida cordata (Burm.f.) Borss.	Chikna	Malvaceae	Root	Piles
34	Tinospora cordifolia (Willd) Hook. Thoms.	Gulvel	Menispermaceae	Leaf	Anti diabetics
35	Psidium guajava L.	Jamb	Myrtaceae	Fruit	Piles
36	Boerhavia diffusa L.	Punarnava	Nyctaginaceae	Leaf	Wound healing
37	Passiflora foetida L.	Kaurav Pandav	Passifloraceae	Leaf	Stomach ache, Digestive
38	Hemidesmus indicus (L.) Schult.	Anantvel	Periplocaceae	Root	Skin diseases, Body pain
39	Aegle marmalos(L) Corr.	Bel	Rutaceae	Fruit	Laxative, Stomachache, Digestive
40	Madhuca indica Gmel	Moha	Sapotaceae	Flowers	Pregnancy tonic
41	Datura metel L.	Dhotra	Solanaceae	Root	Jaundice
42	Solanum surattense Bum. f.	Dorli	Solanaceae	Fruit	Skin diseases
43	Helictres isora L.	Muradsheng	Sterculiaceae	Fruit	Stomach ache
44	Cissus quandrangularis L.	Hadjod	Vitaceae	Leaf, Stem	Bone fractures, injuries
45	Vitex negundo L.	Nirgudi	Verbenaceae	Root	Fever
46	Hybanthus enneaspermus (L.) Muell.	Madanmast	Violaceae	Root	Increase Sperm count in human
47	Costus speciosus (Koenig) Sm	Kadu Kanda	Zingiberaceae	Rhizome	Anti diabetics
48	Tribulus terrestris L.	Kaate Gokhru	Zygophyllaceae	Fruit, Root	Anti dysenteric, Sex tonic



CONCLUSION

Indigenous traditional knowledge is the factual knowledge exists in aboriginal's intellect arena, community, which is more familiar in nature. This sort of knowledge represents the human mind with insight on how a large number of communities manage their livelihoods through an informal knowledge system. In spite of the present modern world the people and knowledge seekers are searching for traditional knowledge to unfold the mystery of such knowledge system and revive the indigenous traditional knowledge scenario. The documentation of traditional knowledge will also help in its conservation in relation to providing pharmacological needs for the betterment of human society.

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