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STUDIES ON THE MEDICINAL USES OF WILD TREES OF NAGPUR DISTRICT

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ABSTRACT

Medicinal trees have been used both in the prevention and cure of various diseases of humans and their pets with the advent of human civilization many system of therapy have been developed primarily based on plants. Ayurveda, Homeopathy, Siddha, Unani, are our traditional system of medicines. During the survey 64 plants taxa belonged to 57 genera under 32 families were mentioned by them having medicinal potential. Different plants parts of different species are used as medicine for treating various diseases. For each species the following information is provided: Family, Common name, Medicinal uses. Most of the reported medicinal plants are effective in antihelmintic, antiseptic, antidysenteric, skin diseases, hypertension, antiviral, stomachic, piles, jaundice and antiseptic activities.

Key Words: Medicinal trees, anthelmintic, Nagpur.

INTRODUCTION

For centuries, plants and plant products have been used for treating various ailments. Several medicinal trees and their products are still in home remedies and they represent a substantial proportion of the global drug – market. These medicinal plant gain further importance in the region where modern medical health facilities are either not available or not easily accessible**.**

Medicinal properties of these plant parts are due to presence of certain chemicals with some definite physiological action on the human body-system. Very little work has been done on the medicinal tree flora of this region and yet no record of any ethnobotanical survey on tree species of Nagpur region is available. Hence, a preliminary survey of this region was carried out for 2008-2011; the present communication is based on the material and information collected by author, by interviewing personally with local people and Vaidyas (Medicine-Men) of the study area. The collected information was compared with some important references on medicinal plant of India such as Kirtikar and Basu (1918), Nadkarni (1954), Chopra et al (1956), Chatterrjee and Prakashi (1994), Ambasta (1999) and Joshi 2000.

MATERIALS AND METHODS

An extensive survey was undertaken in rural area and interior villages, adjoining forest areas of the Nagpur district to collect the information from local people and Vaidyas regarding use of medicinal plants to ascertain the uses of these medicinal plants. The earlier published scientific literature sources where referred. In the following enumeration Family, common name and their medicinal uses are given.

RESULTS AND DISCUSSION

Plant based drugs have been in use against various disease since the time immemorial. The primitive man used plant as therapeutic agent and medicament, which they were able to procure easily. The nature has provided abundant plant wealth for all living creatures, which possess medicinal virtues. The essential values of some plants have long been published but a large number of them remained unexplored as yet. Before carrying out plant pharmacokinetic and pharmacological activity, there is need to record medicinal uses of plants of an area to establish their therapeutic properties.

The present investigation is a further step in this coordinates efforts, which has brought to light many tree species having promising medicinal properties,. It was noticed that the local people take medicine advised by elderly person or medicine men. The various diseases treated include asthma, wound, Stomachic, small-pox, sore-throat, heart diseases, cough, vomiting, fever, diarrhoea, snakebite, jaundice, headache, diabetes, malaria, piles, ulcer, blood-disease, leucoderma and inflammation etc.

In the present study, medicinal uses of some tree species used by local people of Nagpur District and most of the medicinal uses recorded of each tree species. The preference is given to drug prepared from fresh plants collected from forest, most preparations are used internally or applied externally in the form of infusion, decoction, paste or powder.

Information on 64 tree species belonging to 57 genera, represented by 32 families were collected (Table 1). Family-wise analysis revealed that Fabaceae is dominant family with 5 species followed by Caesalpiniaceae, Mimosaceae, Moraceae, with 4 species each. Ancardiaceae, Apocynaceae, Combretaceae, Euphorbiaceae, Meliaceae, Rubiaceae, with 3 species each and Annonaceae, Bombacaceae, Bignoniaceae, Myrtaceae, Rutaceae, Sterculiaceae, with 2 species each. Burseraceae, Cochlospermaceae, Ebenaceae, Flindersiaceae, Lecythidaceae, Malvaceae, Moringaceae, Nyctanthaceae, Punicaceae, Rhamnaceae, Santalaceae, Simaroubaceae, Sapindaceae, Verbenceae with single species each.

Table 1 - ***Disease wise analysis of the species is given below***

S. No.	Diseases	Plant species
1	Anti cancerous	*Bridelia retusa*
2	Anti viral	*Bridelia retusa.*
3	Antipyretic	*Wrightia tinctoria, Bauhinia racemosa, Sesbania grandiflora, Moringa oleifera, Azadirachta indica*
4	Anthehelmintic	*Alstonia scholaris, Tamarindus indicus, Butea monosperma, Pongamia pinnata, Azadirachta indica, Acacia catechu, Mimusops elengi*
5	Anemia	*Cassia siamea, Terminalia bellerica, Holarrhena antidysenterica, Pithecellobium dulce, Ficus hispida, Ixora arborea,*
6	Asthma	*Semecarpus anacardium*, *Alstonia scholaris, Boswelia serrata, Terminalia bellerica, Albizzia lebbeck, Acacia nilotica, Ailanthus excelsa*
7	Blood- disease	*Buchnania cochinchiensis, Ficus hispida, Ficus religiosa Mimusops elengi.*
8	Brain - disorder	S*yzygium cumini*
9	Cough & cold	*Terminalia bellerica, Holarrhena antidysenterica, Cochlospermum religiosum, Drypetes roxburghii, Pterocarpus marsupium, Careya arborea, Albizzia lebbeck, Acacia catechu*

10	Diarrhea	*Holarrhena antidysenterica, Wrightia tinctoria, Boswellia serrata, Stereospermum chelonoides, Bauhinia racemosa, Bridelia retusa, Lagerestromea parvifolia,, Acacia catechu, Punica granatum, Ziziphus jujuba, Morinda citrifolia, Limonia acidissima, Sapindus emarginatus*
11	Diabetes	*Adansonia digitata, Boswellia serrata, Terminalia arjuna, Diospyros melanoxylon, Sesbania grandiflora, Thespesia populnea, Aegle marmelos*
12	Dysentery	*Holarrhena antidysenterica, Adansonia digitata, Boswellia serrata, Butea monosperma, Dalbergia sissoo, Thespesia populnea, Soymida febrifuga, Acacia catechu, Acacia nilotica, Ficus racemosa, Punica granatum, Limonia acidissima, Ailanthus excelsa*
13	Epilepsy	*Sapindus emarginatus*
14	Fever	*Stereospermum chelonoides, Cassia siamea, Dryptes roxburghii, Soyamida febrifuga, Pithecellobium dulce, Moringa oleifera, Nyctanthus arbo-tristis, Mitrygyna parvifolia, Ixora arborea, Ailanthus excelsa*
15	Gonorrhea	*Cochlospermum religiosum*
16	Headache	*Bauhinia racemosa, Terminalia arjuna, Pongamia pinnata , Sesbania grandiflora, Ziziphus jujuba, Gmelina arborea*
17	Hypertension	*Alstonia scholaris, Boswellia serrata, Terminalia arjuna.*
18	Heart disease	*Buchnania lanzan, Alstonia scholaris, Bombax ceiba, Moringa oleifera, Gmelina arborea*
19	Inflammation	*Annona squamosa, Polyalthia longifolia, Wrightia tinctoria, Adansonia digitata, Cassia fistula, Tamirundus indicus, Terminalia bellerica, Emblica officinales, Careya arborea, Ficus benghalensis*
20	Jaundice	*Wrightia tinctoria, Ficus hispida*
21	Joint pain	*Syzygium cumini, Mitrygyna parvifolia*
22	Leucorrhoea	*Soymida febrifuga, Acacia nilotica, Santalum album*
23	Leucoderma	*Semecarpus anacardium, Alstonia scholaris, Terminalia bellerica, Dalbergia sissoo, Soymida febrifuga*
24	Malaria	*Soymida febrifuga, Moringa oleifera, Ailanthus excelsa*
25	Nausea	*Sterculia urens, Sapindus emarginatus, Sterculia foetida*
26	Night-blindness	*Diospyros melanoxylon, Sesbania grandiflora*
27	Piles	*Polyalthia longifolia, Boswellia serrata, Butea monosperma, Thespesia populnea, Acacia nilotica, Ficus hispida, Syzygium cumini*
28	Skin diseases	*Mangifera indica, Polyalthia longifolia, Wrightia tinctoria, Boswellia serrata, Stereospermum chelonoides, Cassia fistula, Bridelia retusa, Pongamia pinnata, Pterocarpus marsupium, Thespesia populnea, Azadirachta indica, Melia azedarach, Acacia catechu, Chloroxylon swietania, Madhuca indica, Sterculia urens, Sterculia foetida*
29	Snake-bite	*Wrightia tinctoria, Bridelia retusa, Careya arborea, Albizia lebbeck, Santalum album*
30	Sore-throat	*Terminalia bellerica, Sesbania grandiflora*
31	Stomachic	*Wrightia tinctoria, Kigelia pinnata, Cassia fistula, Aegle marmelos, Mimusops elengi*
32	Toothache	*Wrightia tinctoria, Pterocarpus marsupium, Moringa oleifera, Azadirachta indica, Mimusops elengi*
33	Ulcer	*Mangifera indica, Annona squamosa, Alstonia scholaris, Adansonia digitata, Terminalia arjuna, Dalbergia sissoo, Careya arborea, Ficus benghalensis, Ficus religiosa, Psidium guajava, Morinda citrifolia, Madhuca indica, Ailanthus excelsa*
34	Uterine- disorder	*Polyalthia longifolia.*
35	Vomiting	*Emblica officinalis, Dalbergia sissoo, Azadirachta indica, Melia azaderach, Ficus benghalensis, Aegle marmelos*

CONCLUSIONS

The present survey has shown that Nagpur is an important area for medicinal plants, which are gradually disappearing or are on the verge of local extinction due to over exploitation, deforestation and fragmentation. Many of tree species are frequently used by local inhabitant of the area, but rapid urbanization and industrialization results in the loss of not only medicinally important plant species but also in the loss of traditional knowledge. Local people should be considered in the decision making there is need to propogate awareness for the protection of wild- medicinal plant.

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