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Ethnomedicinal plants used in Tribes of Bharatpur block (Koriya district) C.G.

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Abstract

Present communication brings to knowledge the traditional methods of treating human diseases and disorders using plant-based drugs recorded from tribal and rural folks in Koriya district (C.G.). The present paper is a study of the traditional knowledge of medicinal plants and its use by local people of Koriya district. It has rich variety of plant species. Medicinal plants are the principal health care resources among the most of people in India. Local people of this region are basically depends upon medicinal plants for their primary health care system. Their primary cure of diseases is based upon deep observation of nature and their understanding of traditional knowledge of medical practices. Local people in this region, especially tribal people and women heavily use these traditionally available medicinal plants for health and believe that these are easily available, less expensive and have no side effects as compare to modern medicine. A total of 42 plant species belonging to 32 families of angiosperms are employed by the inhabitants in the form of infusion, decoction, oil, paste, latex, etc. either as a sole drug or in combination to treat various ailments. and method of administration are given along with botanical name, family, plant's part/ form of recipe used and local plant names. The folk herbal formulations however, require further testing

Keywords: Ethno medicine, Medicinal plants, Koriya district.

1. Introduction

India's natural forests are home to about 8000 medicinal plants that form the primary source of health care for 60-80% of the country's population, specially the rural people, tribal community and poor people. About 80% of traditional medicines used for principal healthcare are derived from plants. During the last few decades, there has been an increasing interest in the study of medicinal plants and their traditional use in different parts of the globe. Documenting indigenous knowledge through ethnomedicinal studies is significant for the management and utilization of biological resources. There are significant economic benefits in the development of indigenous medicines and in the use of medicinal plants for the cure of various diseases

Medicinal plants have played an important role of primary healthcare system among the local people of Koriya district (C.G.). Plants have been used as a source of medicine for living beings from ancient times. According to an estimate of WHO, approximately 80% of the people in developing countries rely chiefly on traditional medicines for primary healthcare needs. Ethnomedicinal surveys help mankind to search and develop new cures to treat various ailments. The inhabitants of the study area have rich heritage particularly related to plant utility and the literature survey shows that the region was almost untapped from this point of view. The pioneer workers contributed a lot in the field of ethnobotanical research. The present communication focussed on some more plant species from this region.

The district has a sizeable tribal population using enormous range of plants for their basic needs, sustenance and livelihood. The district has very rich plant diversity, including medicinal plants.

Study area

The hill tribes and aboriginals of Koriya district the Kol, Gond, Bhuniyar (Pando) tribes dominate the Koriya populace. Besides immigrant tribes like the Cherva, Rajwars, Sahu, Ahir, Gwalas, Oraon, etc also reside in the district. the districts sampling sites were selected randomly these are Masora, Jardol, Patwahi, Bhagwanpur, Badkadol, Jolgi, Kudra, Hatwari, Ghaghra, Belgawan, Bahrasi, Mainpur, Mannod, Khatoli, Umarwah, Titoli, Pandari, Semaria,

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Rend and Wadhvar are in Bharatpur block.

Chhattisgarh, the 26th state of the country, has ample variation in physical and cultural features. It has about 44% of its total geographical area covered with forests. It enjoys hot and humid climate and gains rainfall from both north-east and south-west monsoon. It has about 30 small and big drainage systems. These features have an important contribution to its biological wealth.

Koria district in Chhattisgarh lies between 22058' and 23051' North Latitude and 81059' and 82045' East Longitude and has a forest area of 81.23%. Average rainfall is 121.36 cm. and annual mean temperature is 240c. The district is dominated by Upper Gondwana rocks which are rich in deposition of coal.

Materials and Methods

Ethnobotanical field explorations were carried out during the years 2007-2009 in between the age group of 50-70 years. Information on folk-medicinal use of plants was obtained through oral interviews enduring local plant name, parts used, other ingredients added (if any), method of preparation and mode of administration for each species. Plant specimens were collected from the study area, authenticated and kept in the Herbarium of the C.M.D.P.G. College Bilaspur. The ethno- medicinal 42 plant species used as medicine by the Local tribals have been arranged alphabetically with their Botanical name followed by family. A short taxonomic note plants parts used in the treatment of various diseases and disorders and specific uses have been given.

Enumeration of the Species

***Abrus precatorius* L. (Papilionaceae)**

Karanani/Ghunchi.

Twining Shrub.

Fl. & Fr. period: September-October and November-December
Specific uses: The Seed contain a powerful alkaloid used in skin diseases. the watery extract of roots is used in relieving obstinate cough.

***Acacia catechu* Willd. (Mimosaceae).**

Khair.

Small Tree.

Fl. & Fr. period: May- October and

November-February.

Specific uses: Root paste is applied on the joints in rheumatism.

***Achyranthes aspera* Linn. (Amaranthaceae).**

Chirchiri.

An erect herb.

Fl. & Fr. Period: October-january.

Specific uses: Plant juice is used to heal wounds.

***Adina cordifolia* Hook. (Rubiaceae).**

Karam.

Large Tre.

Fl & Fr. Period: June-july and February-May

Specific uses: Bark paste is given to kill worms.

***Adhatoda zeylanica* medic. (Acanthaceae).**

Bakas.

Shrub.

Fl. & Fr. Period: December- April and February- May

Specific Uses: Leaves juice or decoction is prescribed in bronchitis, cough and asthma.

***Argemone mexicana* L. (Papaveraceae).**

Sial kanta.

Annual prickly herb.

Fl. & Fr. Period: Fl. Through out the year, Fr.- February.

Specific uses: Leaves juice is applied in cut, wounds, blisters and burns. Latex is used in ophthalmic infection.

***Asparagus racemosus* Willd. (Liliaceae).**

Satawar.

A slender climber.

A slender climber.

Fl. & Fr. period: September- October and December.

Specific uses: Root paste mixed with sugar candy is given for Laucorrhoea.

***Azadirachta indica* A. Juss. (Meliaceae).**

Neem.

Tree.

Fl. & Fr. Period: march-May and June-July.

Specific uses: Oil extracted from seed is useful in parasitic skin diseases in both men and animal.

***Bacopa monnieri* (L.). Penn. (Scrophulariaceae)**

Brahmi.

Herb.

Fl. & Fr. Period: July-April.

Specific uses: Leaves juice is given to infants in bronchitis. The Plant is considered a good blood purifier.

***Boswellia serrata* Roxb. (Burseraceae).**

Salai.

Tree.

Fl. & Fr. Period: January-March and May-June

Specific uses: Gum is used in rheumatism, nervous and skin diseases.

***Casearia tomentosa* Roxb. (Samydaceae).**

Beri.

Small tree.

Fl. & Fr. Period: March-April and April-May.

Specific uses: Bark paste is used for treating dropsy and fever.

***Cassia fistula* L. (Ceasalpinaceae).**

Amaltas.

Medium sized tree.

Fl. & Fr. Period: May-August and January-February.

Specific uses : Decoction of the leaves and fruits is used as laxative.

***Cassia tora* Linn. (Ceasalpinaceae).**

Chakor.

Annual herb.

Fl. & Fr. Period: September-October and November-December.

Apecific uses : Seed paste is used in ringworm and itching.

***Celastrus paniculata* willd. (Celastraceae).**

Kujri.

Climbing shrub.

Fl. & Fr. Period: April-May and October-December.

Specific uses: Seed oil is useful in epilepsy and skin diseases.

***Cuscuta reflexa* Roxb. (Convolvulaceae).**

Amarbel.

Climber.

Fl. & Fr. Period. October-December and December-January.
Specific uses: Plant paste is applied with bondage for curing hydrocele (eksira) or as a poultice on sprain inveterinary practice.

Cyperus iria Linn. (Cyperaceae).

Motha grass.
Annuyal glabrous weed.
Fl. & Fr. Period: August-October.
Specific uses: Root paste is applied on joints to cure rheumatism

Datura metel Linn. (Solanceae).

Datura.
Shrub.
Fl. & Fr. Period: July-september.
Specific uses: Drug consisting of leaves, Flower and seeds is used in bronchitis or
Asthma and controls salivation in mouth.

Diospyros melanoxylon Roxb (Ebenaceae).

Tendu/kendu
Tree.
Fl. & Fr. Period: September-December and February.
Specific uses: Oil from seed is given in diarrhoea and dysentery. Bark used in dysentery and inter -mittent fever.

Emblica officinalis Gaertn. (Euphorbiaceae).

Aonla.
Tree.
El. & Fr. Period: May and October-April.
Specific uses: Green fruit-Astringent. Fruit is eaten as a cure for cough. Fruit juice is useful in eye inflammation. Boiled fruit extract is used externally for skin diseases.

Indigofera arborea Roxb. (Papilionaceae).

Jirhul.
Shrub.
Fl. & Fr. Period: November-February and February-April.
Specific uses: Root decoction is given for cough.

Ipomaea turpethum Br.

Syn. Operculina turpethum (Linn.)
Silva Manso. (Convolvulaceae).
Pitohri.
Climber.
Fl. & Fr. Perid: November-January.
Specific uses: The powdered root made into a paste is applied in rheumatism.

Jussiaea suffruticosa L. (Onagraceae).

Parsauti.
Herb.
Fl. & Fr. Period: August-September and November-December.
Specific uses: Root decoction is drunk for fever.

Litsea glutinasa (Lour.) Robinson. (Lauraceae).

Mada bokla.
Large tree.
Fl. & Fr. Period: June-November.
Specific uses: The bark is astringent, aphrodisiac and used for the treatment of sprain, bruises, diarrhea and dysentery. The leaves are considered as antiseptic and used as poultice for bruises and wounds.

Mallotus philippensis (Lamk.) Muell.

Arg. (Euphorbiaceae).
A small ro middle sized tree.
Fl. & Fr. Period: October-May.
Specific uses: The red glandular hairy substance found on the surface of the fruits is used for removing tapeworm and ascaris.

Mimosa pudica Linn. (Mimosaceae)

Lajwanti.
Small under shrub.
Fl. & Fr. Period: August-November.
Specific uses: A decoction of the root is considered to be useful in gravellish complaints.

Moringa oleifera Lamk. (Moringaceae)

Sahjna.
A small tree.
Fl. & Fr. Period: January-March and April-June. Specific uses: The oil obtained from seeds is used locally in acute rheumatism.

Mucana pruriens DC. (Papilionaceae)

Algusi.
Climber.
Fl. & Fr. Period: September-November and January-February.
Specific uses: Paste Made from the Powdered root is applied for dropsy.

Nyctanches arbortfristis L. (Oleaceae)

Harshinghar.
Smaoll tree/shrub.
Fl. & Fr. Period: September-October and December-January.
Specific uses: Preparation from the root is given for rough skin.

Pterospermum acerifolium willd. (Sterculiaceae)

Mackchun.
Large tree.
Fl. & Fr. Period: March-July and March-July of the following year.
Specific uses: Extract obtained by the expression of flowers soaked overnight in water is mixed with sugar and given as a remedy for indigestion, dehydration and loo.

Pueraria tuberosa DC. (Papilionaceae)

Sarur
Wooclimber.
Fl. & Fr. Period: February-April
Specific uses: The tuberous root is Eaten to relieve renal complaints.

Rauwolfia serpentina Benth. (Apocynaceae)

Serpghandha.
Undershrub.
Fl. & Fr. Period: May-July and July-August.
Apecific uses: The plant is referred as antidote to snake bite and for the treatment of high blood pressure.

Ricinus communis Linn. (Euphorbiaceae)

Arandi.
A tall tree.
Fl & Fr. Period: March-April and May-September.

Specific uses: The oil obtained from seeds is used as purgative.

***Schleichera oleosa* (Lour.) Oken.** (Sapindaceae).

Kusum.

Tree.

Fl. & Fr. Period: February-March and June-July.

Specific uses: Oil from the seeds used for the cure of itch and acne.

***Smilax zeylanica* Linn.** (Liliaceae)

Ramdatoon.

A Stout prickly climber.

Fl. & Fr. Period: June –September and November-January.

Specific uses: Root paste is prescribed in anaemia.

***Solanum xanthocarpum* Schrad & Wendl.** (Solanaceae)

Rangaini.

Herb.

Fl. & Fr. Period: December-June.

Specific uses: The fruit boiled in ghee is given for cough, toothache.

***Swertia angustifolia* Buch-Ham. ex. D. Don.** (Gentianaceae)

Chiraita.

Herb.

Fl. & Fr Period: October-September.

Specific uses: The entire plant is used as tonic, stomachic and laxative.

***Syzigium cumini* (Linn.) Skeel.** (Myrtaceae)

Jamun.

Large tree.

Fl. & Fr. Period: May and July-August.

Specific uses: Vinegar prepared from fruit is useful in dysentery, seeds are used for treating diarrhoea, constipation.

***Tamarindus indica* L.** (Ceasalpinaceae)

Imli/tetar

Large tree.

Fl. & Fr Period: April-June and December-April.

Specific uses: Fruit pulp is used as laxative.

***Thespesia lampas* Dalz.** (Malvaceae).

Ban-kapasi.

Shrub.

Fl. & Fr Period: August-October and October-December.

Specific uses: The root and fruit is given in Gonorrhoea.

***Vinca rosea* L.** (Apocynaceae)

Sadabahar.

Herb.

Fl. & Fr. Period: All the year round.

Specific uses: Ulcers.

***Vitex negundo* linn.** (Verbenaceae)

Sindwair

A Large Shrub

Fl. & Fr. Period: Most of the Year

Specific use: Decotation of twig is used as a mouth wash to relieve from toothache.

***Vitis repanda* W&A.** (Ampelidaceae)

Harjora

Large Climber

Fl. & Fr. Period: may-June

Specific use: The root Powdered and heated is Applid to Cuts and Fractures.

Results and Discussion

Locally available plants are used by the people as their household remedies. The data has been accrued from the tribal and rural people of the Koriya districts which still find place in their traditional therapy. However, isolation of active principles, phytochemical and pharmacological investigations are desired to validate the claims of the traditional healers. This may provide new sources of herbal drugs. The formulation of these effective phytomedicines should be encouraged for their sustainable uses. Statistically, information for treating a particular ailment from different informants certainly reflects the accuracy and authenticity of the folk drugs employed.

The villages of the region are rich in ethnomedicinal knowledge owing to their close affinity with the surrounding plant cover. They obtain a variety of plant products from wild plants to fulfil their own needs as they are economically weaker sections of the society. In the tribal areas the rules and regulations by which the tribal people have been traditionally governed are now being gradually abolished by the young literate generations. Another crucial factor responsible for such change is the migration of youth from tribal areas to urban areas. This gap is further widened the adoption of modern medicine. Therefore, the importance of recording indigenous knowledge base related technology as described here become essential in view of rapid socio-economic and cultural changes and for high tech low cost solution. Religious and cultural faith, poor economy and lack of modern medical facilities in villages of the study area seem to be the cause of utilisation of these plants. While conducting the survey the inhabitant revealed that most of the people were dependent on plants and they also preferred it, although the preparing methods are known only to local faith healers. Due to rapid increase in human and consequent increased population biotic interference some species are dwindling from their natural habitats. It is, therefore, imperative that herbal medicines of the aborigines which are still in vogue should be documented for obvious reasons.

Conclusion

The Koriya district people have a close relationship with nature. They are fully dependent upon forest for food, fruits, fodder, and medicinal plants for their healthcare. Local people in this region, especially older age people, tribal people and women heavily use these traditionally available medicinal plants for health and believe that these are easily available, less expensive and have no side effects as compare to modern medicine. The present situation of traditional knowledge regarding to medicinal plants everywhere is an issue of deep anxiety as the traditional knowledge is gradually declining and disappearing from the countryside. Due to the deforestation, impact of tourism on natural vegetation of this region, population explosion & heavily construction of this region for development and changing of climate and many more to responsible for its.

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