



ISSN (E): 2320-3862
ISSN (P): 2394-0530
NAAS Rating 2017: 3.53
JMPS 2017; 5(6): 114-119
© 2017 JMPS
Received: 19-09-2017
Accepted: 20-10-2017

Dr. Mantosh Kumar Sinha
K.R. Technical College, Sarguja
University, Ambikapur,
Chhattisgarh, India

Medicinal plants used among the tribals of manendragarh block (Koriya District) C.G

Dr. Mantosh Kumar Sinha

Abstract

India is one of the world's 12 mega biodiversity centers having rich vegetation of plant species and a wide variety of medicinal plants along with tradition of plant based knowledge distributed among the vast numbers of ethnic groups. Chhattisgarh is the only state of the country where about 44.2% (59772.2Heq) of the total area of state occupied by the forest. Forest division of northern hilly zone of Chhattisgarh was surveyed to study the distribution pattern and ethno-botanical use of medicinal plants. In this state the percentage of sal and mixed forest is more than the teak forest. The life style of tribal people Depends upon the land. Agriculture, hunting, fishing, collection of forest products, bamboo work or labour of any kind is their livelihood. The tribal people depend on forests for their livelihood and most of the rural people still depend on traditional medicine as a primary healthcare source. The paper highlights the rich plant resources and the vast wealth of ethnobotanical information available with the various tribes of the region. In this paper, some new and less known ethno medicinal uses of 55 plants species of Angiosperm belonging to 30 families, used by the tribes of district Koriya.(C.G.) to treat human in different ailments have been reported.. The ethnomedicinal information was gathered from interviews with living elders of the study area.

Keywords: Ethnomedicinal, Chhattisgarh, Koriya District.

Introduction

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 receives an annual average rainfall of 60 inches. Rice is the principal crop of the State. A predominantly tribal State endowed with rich mineral and forest wealth, The climate of Chhattisgarh is mainly tropical, Humid and sub-humid. The climate is hot because of its position on the tropic of cancer. May is the hottest month and December and January are the coldest ones. The State is completely dependent on the monsoons for rains. The Mahanadi is the principal river of the State. Chhattisgarh state is divided geographically in to three regions, namely Northern hills, Chhattisgarh plain and Bastar plateau. Northern hill zone of Chhattisgarh comprises Surguja, Korea, Jashpur and Raigarh districts of Chhattisgarh which possesses a huge wealth of biodiversity of plants, especially in tribal habitats, where several naturally established herbal species are used as traditional and effective medication. Sal forest provides comparatively more congenial habitat condition for the growth of diverse medicinal plant species.

Medicinal plants have been available in human societies since time immemorial. Indeed, the uses of plants were discovered by ancient people by the method of trial and error. The system of traditional medicine had their root in the uses of plants by these people and survived only by the oral communications from generation to generation. The forest and remote rural places have been the traditional sources of herbs. During the past decade, a dramatic increase in exports of valuable plants attests the worldwide interest in traditional health system. Most of these plants being taken from the wild species Since past decade there has been a considerable interest towards the uses of herbal medicine. Tribal and rural communities use a number of plants for the treatment of various human diseases and disorders.

Study area

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.

Correspondence

Dr. Mantosh Kumar Sinha
K.R. Technical College, Sarguja
University, Ambikapur,
Chhattisgarh, India

the districts sampling sites were selected randomly these are Narayanpur, Parasgadi, Udalkachhar, Chainpur, Peepariya, Kathautiya, Boridand, Khongapani, Salhi, Belbahra, Nevri, Domanpara, Chirmirighat, Dubchhola, Khurasiya, Seda, Majholi, Bhallore, Kothari, and Jhagrakhand (Manendragarh Block)

Material and Methods

The Present paper gives an account of 55 plants species of Angiosperm belonging to 30 families, used by the tribes of Manendragarh block district Koriya to treat human ailments. More than 20 villages were visiting during the period of 2013 to 2014 to collect the information, some proper Knowledgeable informants, elderly people, tribal medicine man, Vaidya interviewed, because they are only source to collect the information's about local plant name and their uses.

Ethno-botanical field work was conducted in several tribal rich villages of Manendragarh block Data on uses were recorded in the field from experienced people. Some very common plants like well-known trees were not collected for voucher specimens. Only information provided by the tribal people for these species was recorded. The Ethnomedicinal information was obtained from knowledgeable person, experienced people, medicine men, and heads and local inhabitants of the village, who have knowledge of plants for health and livelihood security. The First-hand information was recorded during the field visits to the study area. Field work was done as per planned schedule of field visit. Information collected through questionnaire and personal interview on the spot was the basic source of the knowledge in the present study. Ethnomedicinal studies were conducted in the Twenty villages Manendragarh block in Koriya district in Chhattisgarh state. All the villages were regularly visited and data was recorded and Information's were collected by asking questions in interview session in their own dialect. Data was also recorded during the field visits in groups. Help was also taken from the forest officers posted in the area. Interviews were also conducted with rural development professionals working in the study area.

Enumeration of the Species

***Alangium lamarkii* Thwaites**, (Cornaceae).

Dhelkanta.

Small tree.

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

Specific uses: Bark and root are useful in jaundice.

***Albizia lebbek* Benth.** (Mimosaceae).

Siris.

Large tree

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

Specific Uses: Decoction of bark, leaves and fruit is given in case of anaemia and for curing itch.

***Alstonia scholaris* R.Br.** (Apocynaceae).

Chhatni

Medium sizes tree.

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

Specific uses: Dried bark is considered very efficacious is chronic diarrhoea and dysentery.

***Anogeissus latifolia* Wall.**

(Combretaceae).

Dhaunta.

Large tree.

Fl. & Fr. Period: June-September and December-January;

Specific uses: Gum is used for curing cholera.

***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.

***Butea monosperma* Roxb.** (papilionaceae)

Palas.

Small tree

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

Specific uses: Gum is used in diarrhoea. Seeds are anthelmintic.

***Caesalpinia bonducella* Fleming.** (Caesalpinaceae).

Kath-Karanj.

Climbing Shrub.

Fr. & Fr. Period: August and April

Specific uses: The Seed is a powerful tonic it is also used as antiperiodic in fever.

***Calatropis gigantea* R.Br.** (Asclepiadaceae).

Akwan.

Large shrub.

Fl. & Er. Period: December-July and February-June.

Specific uses: Root Bark paste is used on elephantiasis.

***Careya arborea* Roxb.** (Myrtaceae).

Kumbhi

Medium sized tree.

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

Specific uses: Bark paste is prescribed for indigestion and flatulence.

***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.

***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.

***Clerodendron infortunatum* Linn.** (Verbenaceae).

Ghato / Bhant.

Shrub.

Fl. & Fr. period: February-May and May-July.

Specific uses: Roots and Leaves are employed externally for tumour and certain skin diseases.

***Clerodendron serratum* (L.) Moon.** (Verbenaceae).

Bharangi.

Shrub.

Fl. & Fr. Period: April-November and shortly after flowering.

Specific uses: The root is considered useful in asthma, cough and scrofulous infections.

***Crotalaria sericea* Retz.** (Papilionaceae).

Jhunjhunia. Herb.

Fl. & Fr. Period: September-February and December-May
Specific uses: Plant is made into a paste Which is effective in rheumatism.

***Croton oblongifolius* Roxb.** (Euphorbiaceae).

Putri.

Large shrub.

Fl. & Fr. Period: January-February and April

Specific uses: The bark and root are given as a purbative and also as an alternative in dysentery.

***Cryptolepis buchanani* Roem & Schult.** (Asclepiadaceae).

Madha / singhi.

Twining shrub.

Fl. & Fr. period: May-June and December-February.

Specific uses; Preparation of the plant is given as a cure for rickets to children.

***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.

***Ficus glabella* Bl.** (Moraceae).

Phutkal.

A large tree.

Fl.& Fr. Period: April-December.

Specific uses: Bark Juice is given for dysentery.

***Ficus glomerata* Roxb** (Moraceae).

Gular.

A large tree.

Fl. & Fr. Period: February- September.

Specific uses: Sap from root is given as a remedy for stomach disorder.

***Flemingia chappar* Buch. Ham.** (Papilionaceae).

Galphulli.

An erect shrub.

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

Specific uses: Juice extracted from pressed seeds is used as a remedy in eye troubles and to remove cataract.

***Holarrhena antidysenterica* wall.** (Apocynaceae).

Dudhia.

Large shrub.

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

Specific uses: Dried bark is a useful drug in amoebic dysentery.

***Indigofera arborea* Roxb.** (Papilionaceae).

Jirhul.

Shrub.

Fl. & Fr. Period: November-February and February-April.

Specific uses: Root decoction is given for cough.

***Jussiaea suffruticosa* L.** (Onagraceae).

Parsauti.

Herb.

Fl. & Fr. Period: August-September

and November-December.

Specific uses: Root decoction is drunk for fever.

***Litsea glutinosa* (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.

***Melia azedarach* Linn.** (Meliaceae).

Bakain.

A small tree.

Fl. & Fr. Period: May-June and

November-December.

Specific uses: Juice from leaves is used as anthelmintic.

***Michelia champace* L.** (Magnoliaceae)

Champa.

A large tree.

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

Specific uses: Fruit is useful for healing cracks in feet.

***Milletia auriculata* Baker ex. Brandis.** (Papilionaceae)

Gauj/ Gurar.

Large shrub.

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

Specific uses: Root is used for killing insects on cattle shores.

***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.

***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.

***Pongamia Pinnata* Pierre.** (Papilionaceae)

Karanj.
Karge tree.
Fl. & Fr. Period: May-June and December-January.
Specific uses: Bark paste is useful in constipation/indigestion.
Expressed oil of seeds is a valuable drug for skin diseases as well as in rheumatism.

***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.

***Pterocarpus marsupium* Roxb.** (Papilionaceae)

Bijasal.
A large or moderate sized tree.
Fl. & Fr. Period: October and December-February.
Specific uses: The water in which a block of wood of this tree has been soaked over night is useful for the diabetic patient.

***Pterospermum acerifolium* Willd.** (Sterculiaceae)

Mackchun., Kullu
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
Woodclimber.
Fl. & Fr. Period: February-April
Specific uses: The tuberous root is eaten to relieve renal complaints.

***Rauwolfia serpentina* Benth.** (Apocynaceae)

Sergandha.
Undershrub.
Fl. & Fr. Period: May-July and July-August.
Specific 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.

***Semecarpus anacardium* L.f.** (Anacardiaceae).

Bhelwa.
Tree.
Fl. & Fr. Period: June-September and December-March
Specific uses: Fruit is an important ingredient in some native medicines for dyspepsia, piles and skin diseases.

***Shorea robusta* Gaertn.f.** (Dipterocarpaceae)

Sal/Sakhua.
A large tree.
Fl. & Fr. period: March-April and May-June.
Specific uses: Small quantity of powdered resin is taken with hot milk to relieve chest pain and stomach ache.

***Sida cordifolia* L.** (Malvaceae).

Bariari.
Under shrub.
Fl. & Fr. Period: August-December and October- January.
Specific uses: Decoction prepared by soaking pulverised twigs with sugar is prescribed in gonorrhoea.

***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.

***Tectona grandis* Linn. f.** (Verbenaceae)

Sagwan.
Large tree.
Fl. & Fr. Period: August-December.
Specific uses: The oil obtained by distillation of wood chips cures eczema and ringworm.

***Terminalia bellirica* Roxb.** (Combretaceae)

Baheria.
Large tree.
Fl. & Fr. Period: February-March and January-April.
Specific uses: Dry fruit is useful in stomach disorder such as

indigestion and diarrhoea.

***Terminalia chebula* Retz.** (Combretaceae)

Harra.

Large tree.

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

Specific uses; Green fruit is eaten to relieve from cough.

***Terminalia tomentosa* W & A.** (Combretaceae)

Asan.

Large tree.

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

Specific uses: Leaves paste is given in vomiting and loose motion.

***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.

***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

The Chhattisgarh state in district Koriya Manendragarh block is very rich in floristic diversity and we are recorded 55 plant species and belonging to 30 families this district. This area provides an enormous range of indigenous medicinal plants that are used by the tribal and local communities in the treatment of various diseases and disorders. Most of the tribal groups do not have modern health facilities. However, they use the traditional knowledge of locally available plants for medicinal purpose. Due to industrialization and over-exploitation and unscientific exploitation of natural resources, the valuable traditional knowledge is depleting very fast.

A total number of 55 plant species and samples have been collected and stored with detailed information about locality and uses for future reference and study. All the species are widely used by the tribals of this regions for various types of diseases. The plant species have been arranged alphabetically followed by their family, local names, use are reported by the tribals. The tribal people live in interior village deep inside dense forests and are dependent on many medicinal plants growing nearby This study deals with traditional knowledge on 55 medicinal plants used by the tribals of Manendragarh block (Koriya district) in the treatment of various diseases and disorders. There is an urgent need of documentation of this irreplaceable knowledge. It may be lost when traditional cultures collapse with advent of modernization. Enumeration of the Species shows data related to plants which are used in different diseases. Some species are facing threats due to various reasons and require immediate attention for their conservation.

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 healthand 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.

References

1. Ahirwar, Ramesh Kumar. Ethnomedicinal uses of plant roots from Shadol district of M.P. India. Ind. J.Appl. Pure Bio. 2010; 25(1):71-76.
2. Ahirwar RK. Diversity of Ethnomedicinal Plants in Boridand Forest of District Korea, Chhattisgarh,India. American Journal of Plant Sciences. 2015; 6:413-425.
3. Brijlal Dubey VP. A survey of plant ethnomedicine of Amarkantak plateau in Central India, Agri. Biol. Res. 1992; 8:29-37.
4. Ayyanar M, Ignocimuthu S. Traditional Knowledge of Kani Tribals in Kouthalai of Tirunelveli Hills, Tamil Nadu, India. Journal of Ethnopharmacology. 2005; 102:246-255.
5. Ahirwar RK. Utilization of Medicinal Plants by the Tribes of Bhatiya, District Shahdol, Madhya Pradesh. Int. J. Sci. and Res. 2014; 3(9):49-151.
6. Brijlal, Dube VP. A survey of the plant of ethnomedicine of Amarkantak Plateau in Central India. Agri. Biol. Res, 1992; 8(1):29-37.
7. Biswas TK, Mukherjee B. Plant Medicines of Indian Origin for Wound Healing Activity: A Review. International Journal of Lower Extremity Wounds. 2003; 2:25-39.
8. Dubey BK, Bhadur F. A study of the tribal people and tribal areas of Madhya Pradesh. Tribal Res. And Dev. Ins., Bhopal, 1996.
9. Gupta, Ashok Kumar, Mishra SK, Khan AA. Ethnobotanical notes on some herbs from Chhatisgarh region of Madhya pradesh. Ad. Plant Sci. 1999; 12(1):163-166.
10. Gupta, Ashok Kumar, Mishra SK. Folklore dental protector plants of Chhatisgarh, India. Ad. Plant Sci., 2000; 13(11):501-503
11. Jain SK. Observations on the ethnobotany of Central India. In Glimpses of Indian Ethnobotany, 1981.
12. Khan AA, Santosh Kumar Agnihotri, Manoj Kumar Singh, Ramesh Kumar Ahirwar. Enumeration of certain angiospermic plants used by Baiga tribe for conservation of plant species. Plant archives. 2008; 8(1):289-291
13. Khanna KK, Kumar A, Dixit RD, Singh NP. Supplement to the Flora of Madhya Pradesh. Botanical Survey of India, Calcutta. Kumar, V. and Sikarwar, R.L.S. (2002). Observations on some rare and endangered plants of Chhattisgarh state, India. Phytotaxonomy. 2001; 2:135-142.
14. Khan AA, Singh Pragyan, Pandey Rajshree. Herbal treatment curing children disease amongtribals of Shahdol district (M.P.) India. Plant Archives. 2005;

5(1):159-163.

15. Maheshwari JK, Painuli RM, RP. Notes on Ethnobotany of the Oraon and Korwa tribes of Madhya Pradesh. Contributions of Ethnobotany of India, 1990, 75-90.
16. Parna IC, Ahirwar RK, Singh GK. Traditional Medicinal Knowledge about Some Herbaceous Plants Used by Baiga Tribes of Bajag Forest, District Dindori Madhya Pradesh India. Int. J Sci Res. 2014; 3(12):2232-2236.
17. Parihar P, Parihar L, Bohra A. *In Vitro* Antibacterial Activity of Leaves of Some Important Pteridophytes. Journal of Microbiology and Antimicrobials. 2010; 2:19-22.
18. Rai R, Nath V, Shukla PK. Use of Medicinal plants by traditional herbal healers in Central India. Indian Forester. 2005; 13(3):463-468.
19. Shukla KML, Khan AA, Khan Shabina, Verma Ashok Kumar. Ethnobotanical studies in Korba basin district Bilaspur (M.P.) India Ad. Plant Sci. 2001; 14(11):391-394.
20. Singh NP, Singh DK, Hajra PK, Sharma BD. (eds.) Flora of India. Introductory, Botanical Survey of India, Calcutta. 2000, II.
21. Saikia AP, Ryakala VK, Sharma P, Goswami P, Bora U. Ethnobotany of Medicinal Plants Used by Assamees People for Various Skin Ailments and Cosmetics. Journal of Ethnopharmacology. 2006; 106:149-157.
22. Tiwari, Usha, Mishra SK, Chatterjee D. Conservational aspects of ethnobotanical medicinal plants used by Kol tribes of Bandhavgarh region of Madhya Pradesh. Ecodevelopment and Environ (ed. Singh *et al.*) Vindra Publication, Jalgaon. 1996, 48 -51.