

## STUDY ON SOME IMPORTANT MEDICINAL PLANT OF PUTKA HILLS AND SATRENGA OF KORBA CHHATTISGARH

**Kamini Kaushik\***

Department of Botany, Dr. C.V. Raman University, Bilaspur (CG) India 495113.

Article Received on  
25 April 2018,

Revised on 15 May 2018,  
Accepted on 05 June 2018,

DOI: 10.20959/wjpr201812-12587

### \*Corresponding Author

**Kamini Kaushik**

Department of Botany, Dr.  
C.V. Raman University,  
Bilaspur (CG) India  
495113.

### ABSTRACT

Numerous plants have been used for treating human diseases and disorders in our country since ancient times. Medicinal plants are the most exclusive source of life saving drugs for the world population. Plants used in medicine are freely available in forest and villages in different part of India. The tribal people depend on forests for their livelihood and most of the rural people still depend on traditional medicines as a primary healthcare source. The study highlights the rich plant resources and the vast wealth of ethanobotanical information available with the various tribes of the region. Putka hill is the famous place in Korba district of Chhattisgarh. Another site is Satranga it is

located 45 km from the Korba district. Here numerous amount of medicinal plants have been found. The present study deals with the medicinal plants on the Putka hills, where 27 variety of plant species belonging to 20 families have been found. Another area Satrenga where 17 variety of plant species belonging to 15 families were found. These plants are commonly used in vomiting, diarrhea, ringworm, ear pain, gastric problem, stone, infertility, diabetes and blood pressure etc. The present work listing the main objective of work is to give the information and documentation of medicinal plant used by tribal people of the study site.

### INTRODUCTION

Natural product has been playing a vital role in health care for decades. Medicinal plants are the most exclusive source of life saving drugs for the world population. Plants have been utilized as medicine for thousands of years. Medicinal plants and plant derived medicines widely used in traditional cultures. Plant synthesize hundreds of chemical compound for function including defense against insect, fungi diseases and herbivorous mammals. Medicinal plants are plants that have a recognized medical use of herbs are one of the oldest

forms of medical treatment in human history. Medicinal plants refer to using a plant seed barriers root, leaves, bark or flower for medical purpose. Plants contain numerous biologically active compounds, many of which have been shown to have antimicrobial properties (Cowan, 1999). Ethnobotanical data are useful in the search for new antimicrobial agents and several bioactive compounds have been isolated from medicinal plants (Penna et al. 2001).

There are about 45,000 medicinal plant species in India. Use of plant as a source of practitioners formulate and dispense their own recipes; hence this requires proper documentation and research. In west also the use of herbal medicines is growing with approximately 40 per cent of population reporting use of herb to treat different diseases within the past year. General Public, academic and government interest in traditional medicines is growing rapidly due to the increase side effects of the adverse drug reactions and cost factor of the modern system of medicine.

Medicinal plant also called medicine herbs have been discovered and used in traditional medicine practices since prehistoric times. Medicines used in diagnosis prevention and curing treatment of diseases medicinal plants had been used by all culture throughout history. It was an integral part of the development of human civilization. Most of ayurvedic drug are safe. The use of medicinal plant can be considered as a living tradition. Traditional medicine system range from Ayurvedic Unani, Siddha and Tibetan in India, it is reported that traditional healers use 2500 plant species and 100 species of plants serve as regular sources of medicine (Pei, 2001).

## MATERIAL AND METHODS

**Sample site:** Korba district is located at Chhattisgarh, Korba district is rich in floristic and diversity. There is two forest site in korba named Putka and Satrenga. Putka hills is located at Balco forest. Here huge amount of medicinal plants found. It is about 60 km from Korba. Putka hills are very famous and dangerous also.

Another hills near Korba is Satrenga, which is located 45 km away from Korba headquarter very famous for the many medicinal plants and natural beauty and famous picnic spot. According to the Forest Department, Korba, the total area under natural vegetation or forest is 2136.470 sq.km. In the study area highest percentage of forest cover is reveals from Korba, which is 54.84%, and the lowest percentage is 35.15%.

**Sample Collection:** Medicinal plants sample were collected in two different sites in the putka hill and satrenga field work and collection of medicinal plants were made in April 2018. Standard method was followed with regard to collection of plant material drying, mounting, Preparation and preservation of plant specimen. Plants with their correct nomenclature were arranged alphabetically by family name, vernacular name, botanical name and medicinal use.

**Personal Interview of local traditional healer:** Aboriginal peoples are living near this hill area. According to them variety of medicinal plants found in hills and they use as medicine for different types of diseases and they have observed magical effect of these. Local traditional healers having practical knowledge of plants in medicines were interviewed in study period. Method of collecting informants depended upon the distribution of local people having folk knowledge. The wealth of medicinal plant knowledge among the people of this district is based on hundreds of years of beliefs and observations. The questionnaire were used to obtain information on medicinal plant with their local name, parts used, mode of preparation and administration. Informants were asked to come to field and show the plant with local name. The species mentioned by the informants were taxonomically identified.

**Identification:** The specimens were identified and classified on the basis of their taxonomical characteristics as well as information recorded in available literature (Panigrahi and Murti 1989, Sharma et al., 1993, Khanna et al., 2001, Singh et al., 2000, Verma et al., 1993.).

## RESULT AND DISCUSSION

Each study sites were rich in medicinal plants and 90% of them grow naturally. We worked on the medicinal plants available in this area, which given interesting and encouraging results. The present study deals with the medicinal plants on the putka hills, where 27 variety of plant species belonging to 20 families have been found (Table 1). Another area satrenga where 17 variety of plant species belonging to 15 families were found (Table 2). The collected medicinal plant were arranged in alphabetically by the botanical names followed by local names, habits, family names, part use and medicinal use and some photographs were given in Table 1 and table 2.

All the details of different medicinal plants are mentioned in table 1 and table 2 respectively. While sample collection and study of plants in both sites found various species like trees (14),

shrub (12), climber/lianas (7), herb (6), The most dominant families in the study were euphorbeaceae (4), fabaceae (3), Caesalpiniaceae (3), acanthaceae, liliaceae, sapotaceae, combretaceae,(2), Other families with few numbers are listed below verbenaceae, menispermaceae, asteraceae, vitaceae, apiaceae, hypoxidaceae, dioscoreaceae, anacardiaceae, combretaceae, lythraceae, primulaceae, rutaceae, araceae, zingiberaceae, asclepiataceae, costaceae, malvaceae, meliaceae, sapindaceae, Lamiaceae.

The majority of remedies are prepared in the form of juice followed by powder and paste form, from freshly collected plant parts. Medical administrations includes inhalation, oral administration, paste/applying and rubbing massage. These plants are commonly used in vomiting, diarrhea, ringworm, ear pain, gastric problem, stone, infertility, diabetes and blood pressure, leucorrhea, leprosy, insect bite, sperm scarcity, asthma, brain weakness, birth control, gout, cuts and wounds, tuberculosis, fever, piles, irregular menstruation, headache, scorpion sting and snake bite (Sandey and Sharma, 2016). The observations and findings made under present investigation reveals that the ethnic groups and local people of the area are highly dependent on the natural plant resources surrounding their vicinity and these resources play an important role in their routine life (Hingora and Sharma, 2016). From our survey of medicinal plants, the result obtained confirms the therapeutic potency of some plants used in traditional medicine. In addition this results from a good basis for selection of potential plants species for further phytochemical and pharmacological investigation of putka and satrenga hills at korba districts.

**Table 1: Medicinal plants of Putka Hill.**

Sr. No.	Botanical Name	Local Name	Habitat	Family	Part Used	Diseases
1	Aegle marmelos (L)	Bel	Tree	Rutaceae	Fruit,Leaf	Gastric Disorder Diabetes
2	Acorus calamus L.	Bach	Herb	Araceae	Rhizome leat & flower	Stomach disorder, Palmonary attections
3	Andrographis Paniculata(Bru m F)	Kalmegh/Chirata	Shrub	Acanthaceae	Whole Plant	Malaria, Jaundice
4	Azadirachta Indica A. Juss.	Neem	Tree	Meliaceae	Leat & seed oil	Skin diseases Diabetes
5	Asparagus racemosus willd.	Satawari	Shrub	Liliaceae	Root	Anaemia, Weakness
6	Achyranthes Aspera L.	Circhita	Shrub	Amaranthaceae	Root & Bark	Asthama
7	Bahunia	Kachnar	Tree	Caesalpiniaceae	Bark	Dycentry

	Variegata L.					
8	Bauhinia vahlii(wtsam)	Mohlain	Lianas	Caesalpiniaceae	Root	Syhphilis or Gonourhe
9	Butea monospera (Lam K.)	Palas	Tree	Fabaceae	Bark	Disentery
10	Chloro Phytum tuberosum (Bak)	Safed Musli	Herb	Liliaceae	Root	Weakness Sexual vitality
11	Curculigo orchioides	Kali Musli	Herb	Hypoxidaceae	Tuber	Impotency
12	Centella asiatica (L) Urban	Brahmi	Herb	Apiaceae	Leaf	Brain tonic, Skin problem
13	Clitoria Ternatea L.	Aparajita	Lianas	Fabaceae	Leaf seed	Biccho toxin Purgative
14	Catharanthes roseus (L.) G. Don.	Sadabahar	Herb	Apocynaceae	Leaf	Diabetes
15	Cissus Quadrangularis L.	Harjor	Lianas	Vitaceae	Stem	Boan fracture
16	Dioscorea bulbifera L.	Kadu Kanda	Lianas	Dioscoreaceae	Tuber	Stomech diseases
17	Emblica Officinalis Gaertn.	Amla	Tree	Euphorbiaceae	Fruit	Gastric Disorder
18	Eclipta alba L.	Bhringraj	Herb	Asteraceae	Whole plant leaf	Splin & liver disorder
19	Jatropha curcas L.	Ratanjot	Shurb	Euthorbiaceae	Root	Fever
20	Madhuca indica J Gmel	Mahua	Tree	Sapotaceae	Flower	Bronchitis & cough
21	Ocimum tenuiflorum L	Tulsi	Shurb	Lamiaceae	Whole plant	Fever, cough & cold
22	Phyllanthus niruri Auct.	Bhui Amla	Shurb	Euphorbiaceae	Whole plant	Menstrual Bleeding, Jaundice
23	Tinospora cardifolia (L) merr	Giloy	Lianas	Menispermaceae	Stem	Diabetes, Sexual vitality
24	Terminalia bellirica (gaertn) Roxb.	Bahera	Tree	Combretaceae	Fruit seed	Cough,Asthma heart disease chest pain
25	Terminalia chebula Retz.	Harra	Tree	Combretaceae	Seed	Piles,cough,scolds
26	Vitex Nergundo C	Nirgundi	Shrub	Verbenaceae	Leaf	Joint Diseases,Skin eruption
27	Woodfordia Faructiosa (c) kurz	Dhawai	Shrub	Gthraceae	Fruit Leaf	Cough,Cold

Table 2: Medicinal plants of Satrenga Hill.

Sr No.	Botanical Name	Local Name	Habitat	Family	Part Used	Diseases
--------	----------------	------------	---------	--------	-----------	----------

1	<i>Abelmoschus monihot</i> (L) medic	Jungli Bhindi	Shrub	Malvaceae	Whole plant	Astma, Blood pressure
2	<i>Andrographis paniculata</i> (BrumF)	Kalmegh	Shrub	Acanthaceae	Whole plant	Malaria, Jaundice
3	<i>Butea monospera</i> (Lamk.)	Palas	Tree	Fabaceae	Bark	Dysentery
4	<i>Costus speciosus</i> (Keon) Sm	Keokand	Lianas	Costaceae	Rhizome	Cold, Fever, Asthma, Pneumonia
5	<i>Cassia Fistula</i> L.	Amaltas	Tree	Caesalpiniaceae	Fruit/Leaf	Abdominal disorder, Pimples
6	<i>Calotropis Procera</i> (Aiton) W.T. Aiton	Aank	Shrub	Asclepiadaceae	Whole plant	Cough, leprosy
7	<i>Cureuma angustifolia</i> Roxb.	Tikhur	Herb	Zingiberaceae	Tuber	Jaundice, Alsar, Pathri, Fever
8	<i>Embelia tsjerium cottam</i> (Roem & schult)	Baybiding	Shrub	Primulaceae	Fruit	Stomach Diseases
9	<i>Hemidesmus indicus</i> (L) RBr	Anant -mool	Lianas	Apocynaceae	Root	Fever, Skin, Disease
10	<i>Jatropha curcas</i> L.	Ratanjot	Shrub	Euphorbiaceae	Root latex	Fever, Skin, Disease
11	<i>Madhuca Indica</i> J Gmel	Mahua	Tree	Spotaceae	Flower	Bronchitis & Cough
12	<i>Pterocarpus Santalinus</i> L.f.	Rakta Chandan	Tree	Fabaceae	Bark	Weakness Blood
13	<i>Ricinus Communis</i> L.	Arandi	Shrub	Euphorbiaceae	Whole plant	Payria Skin disease, Heart diseases
14	<i>Schleichera Oleosa</i> (lour) merr	Kosam	Tree	Sapindaceae	Leaf	Stomach Disease
15	<i>Semecarpus anacardium</i> L.F.	Bhelwa	Tree	Anacardiaceae	Fruit	Cough, Skin disease. Sytica
16	<i>Terminalia arjuna</i> (Roxb. Ex.Dc)	Arjun/ Kahwa	Tree	Combretaceae	Fruit	Stringent Purgative
17	<i>Wood fordia Faructiosa</i> (L) Kurz	Dhawai	Shrub	Lythraceae	Fruit/Leaf	Cough, Cold

## REFERENCE

1. Akerele O. Heywood, V. and synge H, Conservation of medical plant Cambridge university press., 1991.
2. Acharya, D; Anshu S. Indigenous Herbal Medicines: Tribal Formulations and Traditional Herbal Practice., 2008.
3. Acharya, Deepak and Shrivastava Anshu Indigenous Herbal Medicines: Tribal Formulations and Traditional Herbal Practices, Aavishkar Publishers Distributor, Jaipur-India.s. Jaipur: Aavishkar Publishers., 2008.
4. Ahmad, 1., Mehmood, Z. and Mohammad, F. Screening of Indian Medicinal Plants for their anti-microbial properties. J Ethnopharmacol., 1998; 62: 183-193.

5. Anonymous Compendium of Indian Medicinal Plants, Central Drug Research Institute Publications., 1990, 1991, 1993; 1-4.
6. Arya, K.K. Recent observations on medicinal plant biodiversity and conservation of some hot spot areas of Kumaon Himalayas. *J Med. Arom Plant Sci* 2001; 23: 77-81.
7. Chopra, K.N. and Chopra, I.C. Glossary of Indian Medicinal Plants. CSIR New Delhi., 1956. Haridasan, K., Shukla, G.P. and Beniwal, B.S. Medicinal plants of Arunachal Pradesh. In: SFRI Information Bulletin Arunachal Government Press., 2002; 5.
8. Chandra Prakash Kala "Commercial Exploitation and Conservation Status of High Value Medicinal Plants across the Border Line of India and Nepal & Pithoragarh" *Indian Forester*, Dehradun, 2003; 80 – 84.
9. Dr. S.S. Purohit, N. D. Parjapati "Medicinal Plants: Local Heritage with Global Importance". *Agro Bios* January, 2003; I(8): 7-8.
10. D. M. Tripathi "Authentication, Standardization, Clinical, Validation, Reproducibility & Quality Control of Herbal Drugs: The Best of Nature Hold the Key of Success to Place Indian Herbal Drug Industry High above the Sky" *Proceedings of the Conference on Emerging Trends in Indian Medicinal Plants*, Lucknow, 2003; 53 - 54.
11. De Alucislyn A bio cultural medicinal plants for forest conservation and health care Srilanka., 1997.
12. Duke, J.A. Bogenschutz Godwin, M.J. du Cellier, J, and Duke P.A. *Handbooks of Medicinal herbs*, 2ed crc press., 2002.
13. Dr. S.K. Jain "Medicinal Plants", National Book Trust, India., 1968.
14. Dr. K.M. Nadkarni's "Indian Materia Medica" Popular Parkashan Pvt. Ltd. Mumbai., 1976.
15. Dwivedi, S.N., Dwivedi, Abhishek and Dwivedi, Sumeet Status and utilisation of medicinal plants in Shahdol district, Madhya Pradesh, India, Part 2. *NutraCos (Milano-Italy)*, 2010; 9: 40-42.
16. Dwivedi, S.N., Sangeeta Alawa and R. P. Mishra Phytochemistry, pharmacological studies and traditional benefits of *Trachyospermum ammi* (Linn.) Sprague. *IJPLS*, 2012; 3(5): 1705-1709.
17. Donald, P.B. *Medicinal Plants and phytochemistry Linking plant Biochemistry and physiology to human health Plant Physiology*, 2000.
18. Ekka Amia "Some traditional medicine for anti-fertility used by the tribals in Chhattisgarh India". *International Journal of Biology Pharmacy and Allied Sciences*, 2012; 1(2): 108-112 UK.

19. Gupta, Ashok Kumar, Mishra, S.K. and Khan, A.A. Ethnobotanical notes on some herbs from Chhatisgarh region of Madhya Pradesh. *Ad. Plant Sci.* 1999; 12(1): 163-166.
20. Gupta, Ashok Kumar and Mishra, S.K. Folklore dental protector plants of Chhatisgarh, India. *Ad. Plant Sci.*, 2000; 13(11): 501-503.
21. Hemant.K.Badola, Endangered Medicinal Plant species in Himanchal Pradesh. G.B. Plant Institute of Himalayan Environmental and Development. *Current Science* 2002; 83.7.
22. Harsha, V.H., Hebbar, S.S., Shripathi, V, and Hegde, G.R. Ethnomedical knowledge of plants used by Kunabi tribe of Kamataka in India. *Fitoterapia*, 2002; 73: 281-287.
23. H. H. Bhagt Singh Jee "History of Hindu Medical Science" Logos Press, New Delhi., 1998.
24. Hingora, I., Sharma, A. Traditional Uses of Medicinal Plants of Gariaband District Chhatisgarh. *Int J Rec Res Life Sci.* 2017; 4(1): 9-11.
25. Jain S. K. and deFillips R. "Medicinal Plants of India Republish" Algonac USA, Vols 1991; 1-849.
26. Jain, S. K. and Tarafder, C.R. medicinal plants economic Botany., 1970.
27. J.P.Pascal & B.R.Ramesh, A Field key to the trees and lianas of the evergreen forests of the Western Ghats. Institut Francias De Pondichery 1987; 1-220.
28. Jain Jitendra B. and KumaneSheetal C and Bhattacharya S. "Medicinal Flora of Madhya Pradesh & Chhatisgarh. A review" *Indian Journal of traditional Knowledge*, 2006; 5(2): 237-242.
29. Jadhav Dinesh Medicinal Plants of Madhya Pradesh & Chhatisgarh, Daya Publishing House., 2008.
30. Sandey, H., Sharma, A. Study on ethnomedicinal plants of Achanakmar-Amarkantak Tiger reserve of Chhatisgarh. *J. Sci. Let.* 2016; 1(3)Suppl.: 216-222.