

INTERNATIONAL JOURNAL OF PHARMACY & LIFE SCIENCES

Traditional knowledge and indigenous medicine of the tribal of

Biosphere Reserve, Central India

Sahu Pankaj Kumar

Guru Ghasidas Vishwavidhyalaya, Bilaspur C.G. (India)

Abstract

The present ethno-botanical exploration study presents the utilities of traditional knowledge and indigenous medicine by tribes of the Achanakmar-Amarkantak Biosphere Reserve (AABR), central India. Total seventy plant species from forty three families, which are therapeutically used against different diseases, such as stomachache, fever, jaundice, dysentery, skin diseases, piles and spermatorrhoea etc., are covered in this paper. Part of the plant used, dosage, and the mode of drug administration in different ailments are described. The present study was focused on study area to collect traditional knowledge (IK) regarding medicinal plants from herbal practioners, and ethnic peoples.

Keywords: Indigenous medicine; Tribal people; Traditional knowledge; AABR

Introduction

The AABR, comprises is one of the important sacred places of central India (22 °41N and 81 46 E). It covers parts of Anuppur and Dindori districts of Madhya Pradesh and part of Bilaspur district of Chhatisgarh state with an area of 3,835.51 sq km. The elevation above the mean sea level ranges between 300-1100m. Due to elevated topography and dense sal forests of Amarkantak receives the highest rainfall within the region. This Biosphere Reserve (BR) is the place of union of two mountain ranges, Vindhyas and Satpura. The main rivers originate from BR viz. Narmada, Johilla and Sone. Most of the land is undulated and covered with thick subtropical forest. The area experiences a typical monsoon climate, with three distinct seasons-summer from March - June, rainy from July - October and winter from November - February. More than 85% of annual average rainfall is received during the monsoon months extending from June to September. The mean annual rainfall for Amarkantak (1070 m) is about 1619.9 mm distributed over average annual rainy days of 92. Mean daily minimum temperature reaches 1.34°C in January and mean daily maximum temperature 33.9°C in May. The annual rainfall at a low altitude site, viz. Pendra (625 m) averages 1382.6 mm, distributed over 76 rainy days, and mean daily temperature ranges from 10.9⁰C (January) to 39.1° C (May).2. POPULATION: There are 416 villages and two urban settlements in the Reserve comprising a total population 3,38,738 (1991 census)¹. The age-old tribal knowledge of plants is important aspects of ethnobotanical research. The tribal tracts are storehouse of information and knowledge on the multiple uses of plants. Achanakmar-Amarkantak Biosphere Reserve (AABR), central India is tribal dominated area and total populations of which 54.11% and 6.90 % are Schedule Tribe (ST) and Schedule Caste (SC), respectively. The common tribal community's viz. Baiga, Gond, Bharia, Bhils, Oraon, Kol, Kanwar and Uikey tribes. Bharia and Gond tribes also dominant in southern central of Madhya Pradesh.

Aim to study

They are partially or completely dependent on forest product for their survival. Indigenous Knowledge is a potential tool in searching for new economic plants for uses of medicinal plants for various purposes by tribals. The tribal people have assimilated unique knowledge about the surroundings plant wealth.

* Corresponding Author:

E-mail: sahu.pankaj1@gmail.com, Mob. 099752868558

IJPLS, 1(8):471-478

Sahu, Dec., 2010

Material and methods

The present study is based on intensive field excursions during 2005-2007. The plant species collected during field tour were identified at the Botanical Survey of India, Central Circle, Allahabad. Identification of collected plant specimens were done at Herbarium of Botanical Survey of India, Allahabad (BSA). Ethnobotanical information presented here was gathered with the help of tribal peoples, traditional medicinal practitioners and ethnic peoples of Biosphere Reserve. The traditional medicinal practitioners were also consulted and were persuaded to accompany us on the field trips. Sometimes we used forest guards (Employees of the State Forest Department of M.P. & C.G.) as interpreters and guides for the locality. The collected voucher specimens with vernacular names and field notes have also been recorded during field trips.

Results and Conclusion

The data of seventy ethno-medicinal plant species, belonging to forty three families, were found to be used by indigenous people, tribal communities, and local medicine practitioners as indigenous medicine. The families and the species within a family are arranged in alphabetical order. Species names are followed by collector's initials, collection number, vernacular names/local names and habitat of plant. Voucher herbarium specimens were deposited in Botanical Survey of India, Allahabad, India. The ethno-medicinal uses include used parts, methods of preparation, administration dosage and duration, wherever available. The newly reported medicinal uses for the area (not found in earlier literature) are marked by an asterisk(*).

4.1. Acanthaceae

4.1.1. Andrographis paniculata Nees. /PKS62355/Kalmegh/Herb

*The whole plant decoction is used in fever and gastritis.

4.1.2. Barleria strigosa Willd. /PKS62163/Saptaphena/Herb

The root decoction (50ml), *Zingiber officinale* Roscoe, (20g dried ginger rhizome), *Piper longum* L. (7 pieces), *Elettaria cardamomum* (L.) Maton (3-5 small pieces) and *Negella sativa* L. (10g) given twice a day for 7-10 days, to cure bile and gastric trouble.

4.1.3 Hygrophila auriculata (Schum) Heine /PKS62008/Oontkaanta/Herb

The stem ash is eaten with honey for kidney and urinary bladder stone. *Leaves and seeds are ground into paste, made into pills, 2 pills every day taken for jaundice.

4.2. Amaranthaceae

4.2.1. Achyranthes aspera L. /PKS63171/Latjira, Addajhara/Herb

The root paste is given to stop bleeding after abortion. A pinch of its root powder in combination with pepper powder (*Piper longum* L) and honey forms a good remedy for cough. *Root (50g) is boiled with gur (*Sacharum officinarum* L) made as tea is given to patient for abortion.

4.3. Anacardiaceae

4.3.1. Buchanania lanzan Roxb. /PKS62009/Char, Chironji/Tree

The young bark mixed together with new earth (preferably out of anthill) is ground in water and prepared paste is massaged on the bitten part against snakebite.

4.3.2. Lannea coromendelica (Houtt.) Merr. /PKS62390/Gunja/Tree

Seed paste used externally in forehead to cure headache.

4.3.3. Semicarpus anacardium L. f. /PKS62901/Bhelwa/Tree

*The nut oil is used to raise blister on skin occasionally used by tribal. Some times the oil is applied externally in rheumatism and leprosy.

4.4. Apiaceae

4.4.1. Centella asiatica L. /PKS62170/Brahmi/Herb

The whole plant decoction mixed with cow's milk, two seed of kali mirch (*Piper longum* L.) is used to treat madness, and controlling wet dreams. *One teaspoon of the leaf juice, mixed with equal proportion of doob-grass (*Cynodon dactylon* L.) is orally administered by women in the morning and before bed-time with cold water for at least a week to overcome menorrhea.

4.5. Apocynaceae

4.5.1. Alstonia scholaris (L.) R.Br./PKS62133/Saptaparni/Tree

IJPLS, 1(8):471-478

Sahu, Dec., 2010

The bark juice is considered as very good astringent. The usual dose is about two tea spoonful with milk or honey, two times a day for a week or even more.

4.5.2. Holarrhena pubescence (Buch.-Ham.)Wallich ex G. Don. /PKS62326/Dudhi/Tree

The bark paste or powder (5g) is eaten with sugar candy early in the morning to control diarrhea and blood dysentery.

4.5.3. Rauvolfia serpentina Benth. ex Kurtz. /PKS63291/Sarpgangha/Herb

The root used in reducing high blood pressure and its decoction is employed to increase uterine contractions and for the expulsion of foetus in different cases and root extract is used in intestinal disorders.

4.5.4. Wrightia tinctoria (Roxb.) R.Br. /PKS 62376/Kalidudhi/Tree

The plant bark, root, and fruits are ground in equal proportion, make paste, 10g paste given twice a day to nursing mother to expel thread worms form breast fed infants.

4.6. Arecaceae

4.6.1. Phoenix sylvestris (L.) Roxb. /PKS62287/Chhind/Tree

Root piece is wrapped in a cloth and tied to the hair of the expectant mother to start labour pain and to make delivery easy. Sometime prescribed to mother for eat the young shoots.

4.7. Araceae

4.7.1. Acorus calamus L. /PKS62072/Bach/Herb

The small pieces of dried rhizome are boiled with water, than cooled down; this cold extract is used to cure the chronic diarrhea and dysentery. *Baiga tribes of BR are used the rhizome to cure tuberculosis.

4.8. Asclepiadaceae

4.8.1. Calotropis gigantea (L.) R.Br. /PKS62295/Madar/Shrub

Posses know flowers digestive, stomachic and tonic properties and its powder is used in coughs, colds, asthma and indigestion.

4.8.2. Hemidesmus indicus R.Br. /PKS62278/Anantmul/Climbing Herb

*The root paste is mixed with coconut oil (*Cocos nucifera* L.) and used as ailment in skin diseases, sometime its root decoction is prescribed for fever.

4.9. Asteraceae

4.9.1. Ageratum conyzoides L. /PKS62070/Sahdehi/Herb

The plant decoction is given in diarrhea and gastro-intestinal ailments. The whole plant extract possesses insecticidal properties too.

4.9.2. Bidens pilosa L./PKS62546/Katua/Herb

The crushed leaf juice is applied on itching feet during rainy seasons.

4.9.3. Eclipta prostrata (L.) L./PKS59755/Bhringraj/Herb

The fresh leaf juice mixed with neem oil (Azadirachta indica L.) applied to promote hair growth.

4.9.4. Sphaeranthus indicus L./PKS62383/Mundi/Herb

The flower paste is used as blood purifier in skin diseases. *The whole plant is used by the Baiga tribes to kill fishes. *4.10. Bignoniaceae*

4.10.1. Oroxylum indicum Vent. /PKS63655/Sanparan/Tree

*The seeds are fried in mustard oil (*Brassica campestris* L.) mixed with lahsun (*Allium sativa* L.) and heeng (*Ferula narthex* Boiss) then 1-2 drops oil in earache.

4.11. Caesalpiniaceae

4.11.1. Cassia fistula L. /PKS62033/Amaltas/Tree

The root and bark decoction (50-100 ml) is taken twice daily and leaves paste is applied on the affected part of eczema and leucoderma.

4.11.2. Cassia occidenalis L. /PKS63012/Chakora/Herb

Tender leaves boiled with buttermilk, made into paste then mixed with powder of cumin seeds (*Cumimum cyminum* L.), pills made from the mixture, taken twice a day against diarrhea.

4.12. Celastraceae

4.12.1. Celastrus paniculatus Willd. /PKS62119/Kujri/Tree

*The root or bark paste applied on forehead in children to cure boils. The long root (5 cm) and *Piper longum* L. (5 pieces) made into paste into boiled rice water and given twice a day against leucorrhoea and spermatorrhoea.

IJPLS, 1(8):471-478

Sahu, Dec., 2010

4.13. Combretaceae

4.13.1. Terminalia bellerica (Gaertn.) Roxb. /PKS62534/Bahera/Tree

Fruits powder prepared from after burning is taken with rock salt for diarrhea treatment.

4.13.2. Terminalia chebula Retz. /PKS62094/Harra/Tree

zPericarp paste taken along with curd used in diarrhea.

4.13.3. Terminalia alata Heynee ex. Roth. /PKS62153/Saaja/Tree

The bark powder boil with mustard oil (Brassica campestris L.) then filtered the oil applied in the ear for hard hearing.

4.14. Cucurbitaceae

4.14.1. Bryonopsis laciniosa (L.) Naud. /PKS63537/Shivlingi/Climbing Herb

*Seeds are used in female sterility, after the menstrual cycle period, three seed powder taken with milk in early morning.

4.15. Cuscutaceae

4.15.1 Cuscuta reflexa Roxb./PKS62264/Amarbel/Climbingherb

The whole plant paste (30-40g) after crushing is boiled in water (500 ml) and the amount is allowed to reduce to nearly half, the filtered decoction is mixed with equal amount of curd preparation from cow's milk. This preparation is orally administered 2-3 times a day for at least 7 days to cure jaundice.

4.16. Cyperaceae

4.16.1 Cyperus rotundus L. /PKS62411/Nagarmotha/Grass

One gram dried roots pounded with rock salt (1gm), taken twice a day against stomachache.

4.17. Dioscoreaceae

4.17.1 Dioscorea bulbifera L. /PKS62146/Ban-aalu/Herb

Leaves ground and rubbed all over the body against acute itching.

4.18. Euphorbiaceae

4.18.1. Mallotus philippensis (Lam.) Muell. Arg. /PKS62429/Sinduri/Tree

Fruit powder mixed with betel (Piper betle L.) and ghee, applied externally to cure piles.

4.18.2. Phyllanthus emblica L. /PKS62043/Aamla/Tree

The dried fruit powder mixed with powder of *Phyllanthus amarus* Schumach. & Thonn. in buttermilk is administered for 3 days for jaundice.

4.19. Fabaceae

4.19.1. Alysicarpus vaginalis (L.) DC. /PKS62598/Gohmana/Herb

The leaf juice (10 ml) is drunk twice a day for 7 days in treatment of jaundice.

4.19.2. Butea monosperma (Lam.) Kuntze. /PKS62954/Palas,Teshu/Tree

The root decoction is used in urinary troubles. The bark decoction is used loose motion.

4.19.3. Clitoria ternatea L. /PKS62111/Aparajita/Climbing Herb

The whole plant ash (0.5g) is taken with equal amount of cow's milk once a day for one month against acne.

4.19.4. Flemingia strobilifera (L.)Ait. /PKS62063/Chiptikushrunt/Shrub

One teaspoonful root decoction is taken every night for 2-3 days to cure diarrhea.

4.19.5. Pueraria tuberosa DC. /PKS63651/Patalkhonra/Herb

*The tuber decoction is given to pregnant women for abortion. The grounded root with water is taken orally in malarial fever.

4.19.6. Tephrosia purpurea Pers. /PKS62307/Sharphunkha/Herb

The grounded leaf with buttermilk is administered against jaundice.

4.19.7. Smithia conferta J.E. Smith /PKS62594/Laxmanbutti/Herb

Tuber boil with mustard oil (Brassica campestris L.), then the oil used externally in affected part of scabies, eczema or in other skin diseases.

4.20. Hypoxidaceae

4.20.1. Curculigo orchioides Geartn. /PKS62013/Kalimusli/Herb

The root paste with salt is applied externally against boils. The long root (2-3g) chewed thrice daily for 21 days for increase sexual potentiality and administered to those who pass semen in urine.

4.21. Liliaceae

IJPLS, 1(8):471-478

Sahu, Dec., 2010

4.21.1. Gloriosa superba L. /PKS63040/Kalihari, Kirkichuau/Herb

The tuberous root paste is applied over super pubic region for promoting labour pain, the object of promoting labour. The starch obtained from the root is given internally in gonorrhoea.

4.21.2. Asparagus racemosus Willd. /PKS62097/Naarbod, Satavar/Climbing Herb

The tuberous roots are grounded and cooked in milk and given for 5-7 days to the mother as galactagogue. The root decoction (50ml) is used three times daily for 15 days in delivery as a tonic. Tuberous roots are actively used in spermatorrhoea.

4.22. Loranthaceae

4.22.1. Viscum articulatum Burm.f. /PKS62366/Madang/Epiphytic Herb

The whole plant mixed with *Piper longum* L. (10 pieces) and made into paste in cow's milk, then 10g paste given once daily up to 3-4 days against blood dysentery.

4.23. Lythraceae

4.23.1. Woodfordia fruticosa Kurz. /PKS62041/Dhawai/Shrub

*Bark paste mixed with coconut oil (*Cocos nucifera* L.) and used externally on affected wounds cause by fire. The flower paste is applied externally in the piles treatment.

4.24. Malvaceae

4.24.1. Abelmoschus moschatus Medik. /PKS62148/Janglibhindi/Shrub

Root and seed powder in equal quantity mixed with sugar candy, one teaspoonful powder taken with water for promoting sterility in men.

4.24.2. Abutilon indicum (L.) Sw. /PKS62136/Kanghi/Shrub

The bark is used as astringent and diuretic. The flowers are applied to boils and ulcers and their powder is eaten in ghee in blood vomiting and cough. *Fresh leaves mixed with garlic (*Allium sativa* L.), black pepper (*Piper longum* L.) and dried chilly seeds (*Piper nigrum* L.), ground in water and infusion given orally once a day for a week in malarial fever.

4.24.3. Hibiscus rosa-sinensis L. /PKS62064/Jasun, Gurhal/Shrub

The dried flowers powdered (50g) mixed with *Piper longum* L. berries (7 pieces); the mixed powder (5g) is taken thrice a day against bleeding piles.

4.24.4. Sida cordifolia L. /PKS59840/Bala/Herb

The root powder is given with milk and sugar to cure leucorrhoea. The fresh plant is collected, cleaned and crushed to extract juice. *The juice (10-15 ml.) is taken in empty stomach for 5-7 days is very effective in the treatment of jaundice.

4.25. Meliaceae

4.25.1. Azardirachta indica A. Juss. /PKS62427/Neem/Tree

The leaf decoction is mixed with water, to take bath, and in the same time, leaves paste is applied to the affected wound part in leprosy.

4.26. Menispermaceae

4.26.1. Tinospora cordifolia (Willd.) Meiers. /PKS62340/Gurench,Gurbel/Climbing Herb

One teaspoonful root decoction is used twice daily for 3-5 days for malarial fever.

4.27. Moraceae

4.27.1. Ficus benghalensis L. /PKS62099/Bargad/Tree

Stem bark along with, mango bark (*Mangifera indica* L) and root bark (*Ficus religiosa* L) is mixed in equal proportions and crushed into a paste or powdered. The Sal (*Shorea robusta* Gaertn.*f.*) resins (2-3 g) with lemon juice (8-10 drops) are also mixed, 5-7 g of the drug is eaten with honey every morning and evening for 3-5 days to treat ailments like body aches, body swelling, colic and loss of appetite.

4.27.2. Ficus racemosa Roxb. /PKS59734/Gular/Tree

The bark decoction is effectively used in excessive menstruation and useful drug in piles, also. The fresh leaf juice (20 ml) together with honey is used for reducing sugar in urine.

4.28. Moringaceae

4.28.1. Moringa oleifera Lamk. /PKS62916/Munga/Tree

Bark crushed and boiled in mustard oil (*Bassica campestris* L.) for use as a balm for acute traumatic pain. Leaf and fruit used in lowering of blood pressure.

IJPLS, 1(8):471-478

Sahu, Dec., 2010

4.29. Nyctaginaceae

4.29.1. Boerhaavia diffusa L. /PKS62301/Punarnava, Patharchatta/Herb

*Bleeding piles are treated with turmeric (*Curcuma aromatica* Salisb.) and root decoction, alternatively the root paste (5g) is taken with goat milk (20 ml). This mixture is boiled in milk and taken in the morning and evening to dissolve gall bladder stone.

4.30. Oleaceae

4.30.1. Nyctanthes arbor-tristis L. /PKS63554/Harshinger, Parijaat/Tree

Leaf (10-12 pieces) is gently boiled in 500 ml water for 3-4 minutes; the decoction is filtered and drunk warm to cure intermittent fever. 3-4 doses are usually recommended, each with in an interval of 6-8 hours.

4.31. Orchidaceae

4.31.1. Vanda tassellata (Roxb.) Hook.f. ex G.Don. /PKS62509/Banda/Herb

Leaf juice extract in oil used as in earache. In bone fracture, fractured bone properly set with bamboo strips and plastered with plant paste and tied by cloth for 15 days.

4.32. Oxalidaceae

4.32.1. Oxalis coniculata L. /PKS62038/Khattibutti/Herb

The leaf crushed to make paste is taken internally 10 mg once daily on empty stomach for dysentery.

4.33. Plumbaginaceae

4.33.1. Plumbago zeylanica L. /PKS62106/Chitrak/Herb

The root decoction with cow's milk and is taken orally in abortion. The root paste with coconut oil (*Cocos nucifera* L.) and applied on leucodermic spot.

4.34. Poaceae

4.34.1. Cynondon dactylon (L.) Pers. /PKS62316/Doobgrass/Grass

The plant twig paste mixed with rice water & one teaspoonful sugar is added and is given once a day during painful menstruation.

4.35. Rubiaceae

4.35.1. Rubia majinith Roxb. ex. Fleming /PKS63037/Manjistha/Climbing Herb

Root actively used in jaundice. The root powder (50g) mixed with 50g gur (*Sacharum officinarum* L.) then make 42 tab. Taken twice daily for 21 days to cure constipation and other stomach problems.

4.35.2. Wendlandia tinctoria (Roxb.) DC. /PKS62469/Tila/Tree

*The root (15 g) and *Piper longum* L. berries (3 pieces) made into paste and given once daily for 3 days after menses for birth control.

4.36. Rhamnaceae

4.36.1. Ziziphus xylopyrus (Retz.) Willd. /PKS63622/Ghont/Tree

Bark and leaf powder or paste applied externally for chest pain due to cough.

4.37. Rutaceae

4.37.1. Murraya paniculata (L.) Jack. /PKS62035/Madhukamini/Shrub

The leaf powder (100 g) mixed with gur (*Sacharum officinarum* L.) and make 42 tab. Taken twice daily for 21 days to cure any gastric problems.

4.38. Scrophulariaceae

4.38.1. Bacopa monnieri (L.) Wettst. /PKS59879/Brahmi/Herb

The leaf juice (15 ml) mixed with honey (15 ml), given once a day in empty stomach for 45 days against epilepsy. *4.39. Solanaceae*

4.39.1. Withania somnifera (L.) Dunal /PKS62129/Ashwagandha/Herb

The root (5g) is cut into pieces and dried. The root powder prepared after cutting & drying (5g) mixed with sugar candy (5 g) and make paste in little water, then the paste taken once a day for 15-20 days for arthritis problems. *4.40. Sterculiaceae*

4.40.1. Helicteres isora L. /PKS62137/Marorphali/Shrub

Crushed fruit and pounded root bark is mixed with a glass cold water and given twice a day for 5-7 days to cure diabetes. *Fruit powder mixed with gur (*Sacharum officinarum* L.) then taken orally for 7 days against stomachache. *4.41. Verbenaceae*

4.41.1. Vitex negundo L. /PKS63026/Nirgundi/Shrub

IJPLS, 1(8):471-478

Sahu, Dec., 2010

The leaf decoction is used as a bath of women who has just given birth to a child. Dried leaves are used as insecticides in the storage of grains.

4.42. Zingiberaceae

4.42.1. Zingiber roseum Rosc. /PKS63650/Jangliadrak/Herb

The tuber decoction taken with black pepper (*Piper longum* L.) to cure cough and cold. The tuber boiled with castor oil (*Ricinus cummunis* L.) obtaining from applied externally to cure rheumatic pain.

4.43. Zygophyllaceae

4.43.1. Tribulus terrestris L. /PKS 62321/Gokhru/Herb

The fresh leaf and fruit decoction are drunk against jaundice.

The information collected from tribes was re-examined by consulting important works pertaining to Indian medicinal plants and ethnobotany such as Indigenous medicinal plants², The Indigenous Drugs of India³. Indian Medicinal plants⁴, A Hand book of field and Herbarium Methods, Today and Tomorrow's publication⁵, Tribals of Madhya Pradesh and Forest Bill of 1980⁶, Observation of the Ethnobotany of Madhya Pradesh⁷, Notes of Ethnobotany of the Oraon and Korwa tribes of Madhya Pradesh⁸, Medicinal Plants of India⁹, A Survey of plant ethnomedicine of Amarkantak plateau in central India^{10,} Traditional phytotherapy among the Baiga tribe of Shahdol district of M.P., India¹¹, Observation on certain plants used in various disease by the tribals of Shahdol district¹² and Traditional phytotherapy of Maikal range and plateau of Pindra district Bilaspur (M.P) India¹³. The re-examine of the information used by the natives of BR, in view of earlier reported uses, indicated that 20 claims appear to be new to the Indian ethno-medicine. Ethnomedicinal uses of 70 plants species are recorded gonorrhoea, dyspepsia, rheumatism, piles, jaundice, fever, anthelmintic, spermatorrohoea, snakebite, skin disease, menorrhoea, diarrhoea etc., are considered to be most common.

Among them the anti-fertility claim for Wendlandia tinctoria (Roxb.) DC., and Piper longum L deserves special mention in the present context of the increasing search for birth control agents of plant origin. An interesting findings is Bryonopsis laciniosa (L) Naud.) seeds are used in female sterility, after the menstrual cycle period. The root of Achyranthes aspera L. and Sacharum officinarum L. is used for abortion. The nut oil of Semecarpus anacardium L. f. is used to raise blister on skin. The tuber decoction of Pueraria tuberosa DC, is given to pregnant women for abortion. For rheumatism, fever, toothaches, snakebite and insect stings, tribal people use a number of plant parts on the basis of their indigenous knowledge. The claims emanating from the present survey need to be subjected to pharmaco-chemical studies in order to discover their true potential as it is very difficult to judge the effectiveness of folk medicine. The present study was focused on study area to collect traditional knowledge (IK) regarding medicinal plants from herbal practioners, and ethnic peoples. They use their IK and indigenous system of medicine for the treatment of various diseases. This IK is a potential tool in searching for new economic plants for medicine, food and uses of certain medicinal plants for various purposes by tribals and its transferred to the next generation verbally-the sole way of ethnic documentation. The information provided in this paper is limited and further similar surveys in dealing with all the communities of the district of BR will definitely reveal more information of plant uses. The purpose of this paper is not to prescribe any remedies for any of these diseases but to documentation of indigenous medicine and draw the attention of plant workers and pharmacologists for further scientific research in this line.

Aknowledgements

The author is grateful to Director, Botanical Survey of India, Kolkata, for given facilities to work. I am also thankful to Ministry of Environment and Forests, Government of India, New Delhi for financial support for Achanakmar - Amarkantak Biosphere Reserve project. Author is also thankful to Honorable Vice Chancellor Guru Ghasidas Vishwavidhyalaya, Bilaspur for encouragement.

References

- 1. EPCO (2005). Environmental Planning and Co-ordination Organization, Bhopal.
- 2. Maheshwari J. K. and Dwivedi R. P. (1958). Today's and Tomorrow's, 139-155.
- 3. Dey K. L. (1973). The Chronica Botanica, New Delhi.
- 4. Kirtikar K.R. and Basu B.D. (1975). Indian Medicinal Plants, vol. 1-4. Periodical Experts, Delhi.

IJPLS, 1(8):471-478

Sahu, Dec., 2010

- 5. Jain S. K. and Rao R. R. (1978). A Hand book of field and Herbarium Methods, Today and Tomorrow's publication, New Delhi.
- 6. Shrivastava R. (1984).Man in India, **64(3**): 320-321.
- 7. Saxena H. O. (1986). Bulletin of Botanical Survey of India, 28, 149-156.
- 8. Maheshwari J. K., Painuli R.M. and Dwivedi R. P. (1990). Contributions to Ethnobotany of India, 75-90.
- 9. Jain S.K. (1990). Observation on Ethnobotany of the tribals of central India. Contributions to Ethnobotany of India, 69-73.
- 10. Lal Brij and Dubey V.P. (1992). Agricultural and Biological Research, 8 (1): 29-73.
- 11. Verma P., Khan A. A., Singh K.K. (1995). Ethnobiology, 7: 69-73.
- 12. Khan A. A. and Khan I. M. (1997). Observation on certain plants used in various diseases by the tribals of Shahdol district. *Advances in Plant Sciences*, **9** (11): 39-43.
- 13. Shukla K.M.L., Khan A.A., Shabina and Verma A. K. (2001). Advance Plant Science, 14 (1): 11-14.