

Survey report of medicinal plant used in folk medicine in tribal areas of Pandhurna, District Chhindwara (Madhya Pradesh)

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ABSTRACT

66 locally available plants of 40 families have been listed below which are used in folk medicine by the natives of Tehsil Pandhurna of District Chhindwara, M.P. The lists of the plants have been prepared in alphabetical order along with their local names and medicinal uses of each plant.

Key words: Tribal areas, Folk medicine, Ethnomedicinal, Herbal medicine.

INTRODUCTION

Chhindwara district is situated on Satpura plateau at 1550 – 3820 feet above the sea level. The district lies between 21.28 to 22.49 deg. North (longitude) and 78.40 to 79. 24 deg. East (latitude). Pandhurna tehsil head quarter is situated at Bhopal-Nagpur highway (NH-69) and above 100 km. away from Chhindwara. Gond tribes are the main inhabitants of the teshil. The villagers still practice herbal medicines. The knowledge of these medicines is age old. For them, use of herbs is the cheapest way for cure of various health disorders. So far, there is no any primary health centre in many villages.

In India Dixit and Panday (1984) and sinha and Dogra (1985) have reported the plants used as folk medicine in Jhansi, Uttar Pradesh and Santhal Pargana in Bihar. Kirtikar & Basu have also worked on Medicinal plants of India (1935). A lot of work has been done also on ethno medicinal plants in Madhya Pradesh (Rai et al 2000; Koli et al, 2000 & 02; Saxena et al, 2000 & 02 and Acharya Deepak, 2000 & 04)

But still there are some tribal pockets which could be surveyed for the search of new traditional medicines. We report the ethno medicinal plants of tehsil Pandhurna for the first time.

MATERIAL AND METHODS

The survey reported in this study was performed during the period of 2008-09 and was confined to the remote tribal areas of tehsil Pandhurna in Chhindwara district of Madhya Pradesh only. Plants were recorded with the help local vaidhyas and senior people having knowledge of local herbs. The plants were collected and the identity of the plants were confirmed by the botanist, botany department S.S.L. Jain P.G. College Vidisha & submitted to the herbarium of Pest Control & Ayurvedic Drug Research Laboratory Vidisha, M.P.

RESULTS AND DISCUSSION

The traditional knowledge of tribal communities in Pandhurna tehsil has high ethno botanical importance. They utilize numerous plants

Table 1: Some Medicinal plants with their uses of tehsil Pandhurna of distt. Chhindwara of M.P.

S.No.	Name of the Plant & Family	Local Name	Medicinal Uses
1.	<i>Abrus precatorius</i> L. (Fabaceae)	Gunja	Seed powder is used for the preparation of eye drop.
2.	<i>Acacia nilotica</i> (L.) wild (Mimosaceae)	Babul	Bark is useful in malaria fever. Bark ash is used in skin diseases & piles with karanz oil. Tender twigs are used as tooth - brush.
3.	<i>Achyranthes apera</i> L. (Amaranthaceae)	Latzeera	Ash of dry fruits mixes with honey and takes orally for relaxation in cough & cold as well as pneumonia & double pneumonia.
4.	<i>Actinopteris radiata</i> (J. Konig ex Sw.) Link (Actinopteridaceae)	Morpankhi	Ash of dry plants with honey is used to cure rickets.
5.	<i>Adhatoda vasica</i> Medic. (Acanthaceae)	Adhusa	Decoction of leaves is used for Asthma.
6.	<i>Aegle marmelos</i> (L.) (Rutaceae)	Bel	About 20 g. root is crushed and added 10 teaspoonful of water. This is taken thrice a day for a week to cure high fever.
7.	<i>Aloe - vera</i> (L.) Burm.f. (Liliaceae)	Gwar-patha	Cut a fresh leaf & scratch its mesophyll by knife, a jelly like substance appears. It applies directly upon wounds & burned skin.
8.	<i>Anacyclus pyrethrum</i> DC. (Astaraceae)	Akarkara	Fruits are chewed during tooth or Jaws pain.
9.	<i>Andrographis Paniculata</i> (Burm.f.) Wall. ex. Nees (Acanthaceae)	Kalmegh	Decoction of whole plant body is used against many kinds of fever like Malaria, Typhoid, Jaundice and Chiken-gunea..
10.	<i>Argemone Mexicana</i> Linn. (Papaveraceae)	Pili Kateri	Latex of plant is applied directly on eyes to cure Night blindness.
11.	<i>Asparagus recemosus</i> wild. (Liliaceae)	Narbod	Root Powder is used to increase vigor and strength.
12.	<i>Azadirachta indica</i> A.Juss. (Meliaceae)	Neem	Bark is useful in malaria fever. Tender twigs are used as tooth - brush. Dry fruits are used in tonic preparation and seeds are used in skin diseases.
13.	<i>Barleria prionits</i> (L.) (Acanthaceae)	Kati-korati	Leaf extract is used to cure tooth ache.
14.	<i>Boerhavia diffusa</i> (L.) (Nyctaginaceae)	Punarnava (lal)	Root extract of 20- 30 g. fresh root with 15- 20 g. mishri is given orally to regulate menses cycle properly.
15.	<i>Bryonopsis laciniosa</i> Linn (Cucurbitaceae)	Pachguria	Extract of fresh ripen fruits with Kalmegh, Giloy, Neem & Tulsi is given in malaria typhoid fever.
16.	<i>Bryophyllum calycinum</i> Salisb. Crassulaceae	Murari	Fresh leaves are chewed during mouth ulcer. 5-10 g. extract of leaves & 20 g. mishri are dissolved into 200 ml water and take orally to relieve stomach pain.
17.	<i>Butea monosperma</i> (Lam.) (Fabaceae)	Palas	Gum powder is mixed with water and given orally twice a day for 3 days to cure dysentery.

18.	<i>Caesalpinia bonducella</i> (L.) Roxb. (Caesalpinaceae)	Gataran	Seed powder is used for digestion purpose.
19.	<i>Calotropis gigantea</i> (L.) (Asclepiadaceae)	Safed madar	The root of the plant is used against snake bite. The latex of the plant is used to cure malaria & jaundice.
20.	<i>Calotropis procera</i> R. Br. (Asclepiadaceae)	Aak	The extract of leaves is used in acute ear pain of children & as antiseptic.
21.	<i>Cassia fistula</i> L. (Caesalpinaceae)	Amaltash	Bark powder is prescribed in the treatment of leprosy.
22.	<i>Cassia tora</i> Linn. (Caesalpinaceae)	Chirota	Powder of dry seeds is used in Asthma.
23.	<i>Catharanthus roseus</i> (L.) (Apocynaceae)	Sadabahar	Decoction of leaves is used to maintain high bp and for diabetes control
24.	<i>Centella asiatica</i> (L.) Urb. (Apiaceae)	Bramhi	Fresh leaves of plants are directly used with mishri for enhancement of memory power.
25.	<i>Chlorophytum tuberosum</i> (Roxb) (Liliaceae)	Safed musli	Root powder with mishri & milk is helpful to remove weakness during delivery period. It increases the sex power also.
26.	<i>Cissus quadrangularis</i> L. (Vitaceae)	Har-jodi	Pulp of fresh stem & leaves is applied on fracture bone and rolled cotton ribbon like plaster and decoction of stem & leaves is given orally for best treatment.
27.	<i>Citrullus aromatica</i> Salisb. (Cucurbitaceae)	Kacharia	The seeds are used in stomach trouble.
28.	<i>Clitorea ternatea</i> L. (Fabaceae)	Aparajita	Root are used as antidote to snake-bite
29.	<i>Curculigo orchioides</i> (Hypoxidaceae)	Kali musli	Powder of root tuber with milk is given to enhance sex capacity.
30.	<i>Cuscuta reflexa</i> Roxb. (Cuscutaceae)	Amarbel	Crushed climber is boiled in Til oil & applied on head for overnight up to 7 days for hair fall defance & dandruff control.
31.	<i>Daemia extensa</i> R.Br. (Asclepiadaceae)	Utran	The vegetable of fruits is used to cure menses problem. Root pulp is used to removal of snake or scorpion poison.
32.	<i>Datura metel</i> L. (Solanaceae)	Dhatura	Crushed fresh leaves 20 g. & silajit 5-10 g. mixed properly & applied upon Testes to removal of swelling.
33.	<i>Eclipta alba</i> (L.) Hassk (Asteraceae)	Bhringraj	Fresh leaves of plant are boiled with coconut or mustered oil and used as hair oil for hair fall defance and dandruff control.
34.	<i>Euphorbia nerifolia</i> L. (Euphorbiaceae)	Thubad	The pulp of stem is used in all kind of skin diseases specially in leprosy.
35.	<i>Euphorbia hirta</i> L. (Euphorbiaceae)	Nagarjuni	The powder of whole plant body is mixed with black piper, black salt, cumin, ajawain and fennel than take 1tea spoonful twice a day up to 1 month. It will surely to control asthma problem.
36.	<i>Gloriosa superba</i> L. (Liliaceae)	Kalihari	Extract of root is used to cure menses problem. Root pulp is used to removal of snake & scorpion poison.

37.	<i>Hemidesmus indicus</i> (L.) R.Br. (Asclepiadaceae)	Anantmul	Crushed fresh root is boiled with black tea and take orally for energy & treatment of respiratory diseases.
38.	<i>Hibiscus rosa-sinensis</i> L.(Malvaceae)	Gudhal	Paste of leaves & flowers is applied as poultice on head. It enhances the hair growth & reduces dandruff.
39.	<i>Jatropha curcas</i> L. (Euphorbiaceae)	Ratan-jot	The latex is used in skin diseases and wound recovery.
40.	<i>Melia azedarach</i> Linn.(Meliaceae)	Bakain	Leaf extract is given in respiratory diseases and chest pain. Bark is boiled with water and solution is used as antiseptic.
41.	<i>Mimosa pudica</i> L. (Mimosaceae)	Lazwanti	Root Powder is used to for strength. Seeds are used for digestion purpose.
42.	<i>Momordica dioica</i> Roxb.(Cucurbitaceae)	Kakora	Fruit vegetable is used in all kind of fever for mouth freshness & immediate recovery.
43.	<i>Mukuna pruriens</i> (L.) DC. (Fabaceae)	Kewanch	Roots are used against snake bite.
44.	<i>Nyctanthes arborescens</i> L.(Oleaceae)	Parizad	Decoction of shoot tips mixed with honey and taken once a day on empty stomach for seven days to cure malarial fever.
45.	<i>Ocimum sanctum</i> Linn. (Lamiaceae)	Tulsi	Decoction of leaves & seeds is used to cure malaria, Jaundice, Typhoid, Cough & cold and throat infection.
46.	<i>Opuntia dillenii</i> How. <i>Cactus indicus</i> Roxb. (Cactaceae)	Nagphani	Poultice of crushed stem is applied on wounds. 1 or 2 flower bud is burned in 'Kanda'(a fuel of cow dung) & mashed properly, filtrate with honey is given to children during 'Cucur-khanshi'.
47.	<i>Oxalis corniculata</i> L. (Oxalidaceae)	Khatti bhazi	The vegetable of leaves is given to diabetic patients.
48.	<i>Phyllanthus emblica</i> L. (Euphorbiaceae)	Amla	Fruit powder is used to prepare 'Triphla-Churna'.
49.	<i>Phyllanthus niruri</i> L. (Euphorbiaceae)	Bhui amla	Decoction of whole plant body with mishri (sugar) is used for jaundice treatment.
50.	<i>Psoralea corylifolia</i> L. (Fabaceae)	Bemchi	The lotion of seed with "Gau Mutra" is used to cure the leprosy. It is a guaranteed medicine.
51.	<i>Ricinus communis</i> L. (Euphorbiaceae)	Arandi	2 leaves of the plant are fried in mustered oil than filtered sap is given up to 3 days for the treatment of jaundice.
52.	<i>Ruta graveolens</i> L. (Rutaceae)	Sitab	The extract of leaves is used to treat against ringworm & <i>teenia solium</i> in children.
53.	<i>Semecarpus anacardium</i> Linn. (Anacardiaceae)	Bhilwa	The seed oil is applied on the painful spot or foot warm in leg soles.
54.	<i>Sida cordifolia</i> L. (Malvaceae)	Kharenti	The extract of leaves is used for heat in urine.
55.	<i>Solanum melongena</i> Linn. (Solanaceae)	Jangli baigan	The root powder is used in stomach pain and the heat of urine.
56.	<i>Solanum nigrum</i> L. (Solanaceae)	Makoi	Fruit powder is useful in digestion.

57.	<i>Terminalia bellerica</i> Roxb. (Combretaceae)	Baheda	Fruit powder is used to prepare 'Triphla-Churna' with Amla & Harra.
58.	<i>Terminalia arjuna</i> (Rpxb.)W.& A. (Combretaceae)	Arjun	Bark extract is used in heart disease & fractured bone recovery.
59.	<i>Terminalia chebula</i> Retz. (Combretaceae)	Harra	Fruitcarp of Harra, baheda and Amla crushed and mixed together. It is known as "Triphla churna"
60.	<i>Terminalia tomentosa</i> L. (Combretaceae)	Saja	New fresh leaves are collected & cut in to small pieces then mixed with wheat husk & grains. It serves to cattle as high energy source.
61.	<i>Tinospora cordifolia</i> (Lour.) Miers (Manispermaceae)	Giloy	Decoction of finger sized climber with Kalmegh, Shivilingee, Neem & Tulsi is used to cure any kind of fever like-malaria, chicken gunia, bird flue & swine flue etc.
62.	<i>Trichosanthes palmata</i> Roxb. (Cucurbitaceae)	Indryan-lal	Root powder gives orally in fever. It mixes with "Gau-Mutra" and prepare a lotion for leprosy.
63.	<i>Tridax procumbens</i> L. (Asteraceae)	Kamarmodi	Sap of leaves is full of antiseptic property it uses for wound healing.
64.	<i>Tylophora asthematica</i> L.(Asclepiadaceae)	Anta-mul	Root powder is used to cure asthma.
65.	<i>Woodfordia fruticosa</i> L. kurz. (Lythraceae)	Dhuben	10 g. dry flowers, 10 g. dry <i>Acacia</i> bark, 5 g. tobacco & 2 pinch salt mixed together & powdered. It is used as tooth-powder for 'Payria' disease.
66.	<i>Xanthium strumarium</i> L. (Asteraceae)	Gokhru	Leaf juice is applied on painful teeth to relieve pain.

and their various parts viz, roots, leaves, stems, flowers and fruits in various ways. A total no. of 66 plant species belonging to 58 genera under 30 families are used to daily life of the Gond tribes. Out of 66 plant *Cassia tora* & *Achyranthes aspera* are most common herb of the area. It distributes in almost all part the Pandhurna tehsil while *Anacyclus pyrethrum* & *Trichosanthes palmata* plants have a minute occurrence in the area. According to senior people-before 5-10 years ago

these were modetary distributed but due to over exploitation, it limited up to dance forest of Sillevani valley only. The tribals are so innocent and some times they misguided and misused by some pharmaceutical brokers and shop keepers of herbal drugs. They explored a large quantity of medicinal plant without leaving a single ex-plant. There is a need to organize a training program on sustainable utilization of medicinal plant, otherwise many expensive medicines will be lost forever.

REFERENCES

1. Acharya, Deepak., Few traditional and popular medicinal plants. One day training cum-workshop on "Medicinal plant; conservation and cultivation" at department of botany, Danielson college, Chhindwara (M.P.): 22-37 (2002).
2. Acharya, Deepak, Medicinal plants for curing common ailments in India. Positive health: 102 (2004).
3. Dixit, R.S. and Pandey, H.C., Plants used folk medicine in Janshi and Lalitpur section of Bundelkhand uttar Pradesh Int. *Crude Drug*

- Res*; **22**: 47- 51 (1984).
4. Kirtikar, K.R. & Basu, B.D. (1935). Indian medicinal plants vol. 1-4. Lalit Mohan Basu, Allahabad.
 5. Koli, M.C.; Saxena, B.R.; Saxena, R.C. and Thakur, S., -medical and pharmacological activity of *Tridax procumbens* linn *him. Env. Zool*; **15**(2): 141-146 (2001).
 6. Koli, M.C.; Shrivastava, S.; Mishra, P.K.; Shrivastava, A.; Saxena, R. and Saxena R.C., Report of some medicinal plants used in folk medicine in tribal areas of lateri, distt. Vidisha M.P. *Nature and Biosphere*; **7**(1&2): 42- 48 (2002).
 7. Rai, M.K.; Pandey, A.K. and Acharya, D., Ethno-medicinal plants used by Gond tribe of Bhanadehi, distt. Chhindwara, M.P. *Journal of non-timber forest*; **7**(3/4): 237-241 (2000).
 8. Saxena, B.R.; Koli, M.C.; Saxena, R.C.; Chaudhur, R. and Shukla, D., Preliminary Ethnomedical and phytochemical study of *Colius aromaticus*. *Adv. Pharmacol. Toxicol*; **3**(1): 25-28 (2002).
 9. Saxena, B.R.; Koli M.C.; Saxena, R.C.; Chaudhur, R. and Shukla, D., Preliminary Ethnomedical and Phytochemical study of *Colius aromaticus* *Adv. Pharmacol. Toxicol*; **3**(1): 25-28 (2002).
 10. Sinha, S.K.P. and Dogra, J.V.V., A survey of the plants of Bhagalpur and Santhal Pargana for Saponin, Flavonoids and Alkaloids. *Int. Crude Drug. Res.*; **23**: 77-86 (1985).