Some unique ethnomedicinal perceptions of tribal communities of Chitrakoot, Madhya Pradesh

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Chitrakoot is rich in ethnic and biological diversity since ancient times. Several tribal communities like *Kol, Gond* and *Mawasi* inhabit Chitrakoot region, and utilize wide variety of plant resources for food, fodder, fibre, medicine, etc. An ethnobotanical study among the tribal communities of Chitrakoot has been carried out during 2002-2005. In the study, ethnomedicinal uses of 28 plant species belonging to 27 genera and 23 families have been reported. These uses are not reported in earlier published literature.

Keywords: Ethnomedicine, Chitrakoot, Madhya Pradesh, Kol, Gond, Mawasi

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Chitrakoot is situated in the northern region of Satna district of Madhya Pradesh and surrounded on North, Northwest and Northeast by Karwi (Chitrakoot) district of Uttar Pradesh and West by Panna district of Madhya Pradesh (Fig. 1). It lies between 80° 52' to 80° 73' N latitude and 25° 10' to 25° 52' E longitude, covering an area of 1,584 sq km. The forest of the Chitrakoot predominantl by consists of tropical dry mixed deciduous type. Since times immemorial, it is famous for its religious importance, elegant environment and spiritual peace^{1,2}. Several tribal communities like Kol, Gond, Mawasi, etc. reside in Chitrakoot forest area and utilize a wide variety of plants for food, fodder, fuel, medicine, dve, gum, tannin, thatching, household and farming implements, etc. The tribals are familiar about the medicinal uses of plants found in their village surroundings and forest areas. However, the young generation is not interested to hold this invaluable traditional knowledge transmitted orally from generation to generation. Therefore, before this traditional knowledge is lost forever it must be documented properly.

Methodology

An ethnobotanical study was carried out in 7 villages, namely Surangi (inhabited by *Mawasi* tribes), Michkurin (*Kol* tribes), *Mohkamgarh* (*Mawasi*), Chandeni (*Mawasi*), Patani (*Gond*), Padwania (*Kol*) and Barha (*Mawasi*). The first hand information on medicinal uses of plants, viz. mode of preparation, administration/application, dose, duration of the treatment, etc. was collected from old and experienced tribal medicine man and women with the help of a standard questionnaire (Figs. 2&3). The voucher specimens of the plants collected during the field study were identified and preserved in the herbarium of Arogyadham, Deendayal Research Institute, Chitrakoot³⁻⁵.

Enumeration

Plant species are enumerated alphabetically with their plant names, followed by family, local names and medicinal uses:

Actiniopteris radiata (Sw.) Link.

(Actiniopteridaceae); Morshikha

Uses: Whole plant paste is applied on cuts and wounds; paste with sugar is given to kill intestinal worms twice a day for 3 days; paste with sugar is

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also given two times a day as an aphrodisiac; also used as tonic to increase the potency. The plant paste with sugar candy is given as a cooling agent in case of syphilis. The paste of two fronds is given daily two times a day to children to cure rickets. The whole plant paste mixed with cow's milk is given in the morning for 21 days in case of irregular menses. The same dose for 21 days is also given for the treatment of piles and leucorrhoea. In vomiting and diarrhoea, plant paste with cow's milk is given twice a day for 2-3 days. In case of epilepsy, plant paste with sugar candy is given. The plant paste with honey is given twice a day for the treatment of leucorrhoea (Fig. 4).

Adiantum philippense L. (Adiantaceae); Hansraj

Uses: Leaf paste with sugar is given in spermatorrhoea once a day for one month.

Alectra chitrakutensis (Rau) R. Prasad & R.D. Dixit (Scrophulariaceae); Nirgundi

Uses: Rhizome paste mixed with equal quantity of cow urine and strained through a cloth, liquid thus obtained is given to leprosy patients every day for at least one year. Salt, pepper, chilies, acids, sweets and oil are prohibited during treatment. The dried and powdered rhizome is used to cure other skin diseases. Rhizome paste taken with milk early in the morning for 2-3 days relieves constipation. Rhizome paste is given once a day for 2-3 days to expel intestinal worms. For the treatment of malaria, fresh rhizome paste with cow urine is given twice a day for two days. The plant and almond. cucumber. rhizome extract with watermelon, long cucumber, cardamom and rose petals is taken as an invigorating tonic. Rhizome powder is also given to cure paralysis and piles. In case of spermatorrhoea, rhizome powder is given with milk twice a day for one month (Fig. 5).

Anogeissus pendula Edgew. (Combretaceae); Kardhaawai

Uses: Twigs decoction is applied on burn part of the body to clear the spot.

Argemone maxicana L. (Papaveraceae); Azan Uses: Leaf paste is applied on boils and wounds twice a day till cure.

Centella asiatica (L.) Urban (Apiaceae); *Brahmi* Leaf juice is given to children once in a day for one month in rickets. *Cissus quadrangularis* L. (Vitaceae); *Hadjod* Uses: Paste of two internodes mixed with wheat flour is fed to cattle in case of bone fracture.

Cissampelos pareira L. (Menispermaceae); *Padi* Uses: The tuber is crushed and fried in mustard oil; the fried paste is applied on joints pain.

Cochlospermum religiosum (L.) Alston

(Cochlospermaceae); Gabdi, Amarkantan

Uses: Root powder mixed with water is applied on face to reduce wrinkles (Fig. 7).

Convolvulus prostratus Forssk. (Convolvulaceae); Sakholi

Uses: Leaf paste with sugar mixed in cow's milk is given once a day for one month for the treatment of spermatorrhoea (Fig. 8).

- *Crinum latifolium* L. (Amaryllidaceae); *Van kodra* Uses: In case of hydrocele, swollen testis is washed with tuber decoction.
- *Diospyros exsculpta* Buch.-Ham. (Ebenaceae); *Tendu* Uses: Leaves are chewed thrice a day for 2-3 days for curing cough.

Elytraria acaulis (L.f.) Lindau (Acanthaceae);

Sahasmuria

Uses: Root paste is given once in a day for 21 days in leucorrhoea. Roots paste with black piper is applied on snakebite. Root paste is applied on piles evening and morning.

Eulophia herbacia Lindl. (Orchidaceae);

Vansinghara, Bilarikand

Uses: Crushed bulb is fried in mustard oil; the residue oil is applied on rheumatism thrice a day till cure.

Eulophia nuda Lindl. (Orchidaceae); Jhulukia

Uses: Root juice is given for the treatment of snakebite.

Euphorbia neriifolia L. (Euphorbiaceae); Senhud

Uses: Leaf of Sehund, Ak (Calotropis procera), Dhatura (Dhatura metel), Arand (Ricinus communis) and Medaki (Vitex negundo) is boiled in mustard oil; the residue oil is applied on rheumatism thrice a day (Fig. 9).





Fig. 1- Location map of the study area





Fig.4 Actiniopteris radiata



Fig.2 Man with medicinal plant Fig.3 Interviewing Mawasi medicine man



Fig 5 Alectra chitrakutensis



Fig.6 Uraria picta



Fig.7 Cochlospermum religiosum



Fig.8 Convolvulus prostratus



Fig.9 Euphorbia neriifolia



Fig.10 Luffa echinata



Fig.11Thespesia lampas



Fig.12 Madhuca longifolia



Fig.13 Trichosanthes bracteata

Holarrhena pubescens (Buch.-ham.) Wall. ex G.Don (Apocynaceae); Kuda

Uses: Leaf decoction is given to cattle for arthritis and diarrhoea twice a day till cure.

Ichnocarpus frutescens (L.) R.Br. (Apocynaceae); Dhimerbel

Uses: Leaf paste is applied on cuts to stop bleeding.

Lepidagathis cristata Willd. (Acanthaceae); *Siyarbethca*

Uses: Leaf juice with copper sulphate is given during snakebite for regaining consciousness.

Luffa echinata Roxb. (Cucurbitaceae); Tarmakhar

Uses: Stem and leaf decoction is given in fever. In case of rheumatism, leaf decoction is applied. The root paste fried in mustard oil is applied on leprosy (Fig. 10).

Madhuca longifolia (J. Koenig.) Macbr. var *latifolia* (Roxb.) Cheval. (Sapotaceae); *Mahua*

Uses: Flowers decoction is given to calf to expel stomach worms, locally called *patedha* (Fig. 12).

Marsdenia tenacissima (Roxb.) Moon

(Asclepiadaceae); Chanahur

Uses: Tuber paste is applied on joints pain. Root juice is given in jaundice twice a day for seven days.

Steriospermum chelonoides (L.f.) DC. (Bignoniaceae); *Padar*

Uses: For the treatment of knob in the nipples of the buffaloes, the leaves are burnt and the knob is fomented with the fumes.

Syzygium heyneanum Wall.ex Wight. & Arn.

(Myrtaceae); Kathjamun

Uses: Bark paste mixed with whey is given in diarrhoea and dysentery twice a day for two days. Bark juice mixed with rice water is given once a day for 21 days for the treatment of leucorrhoea.

Terminalia arjuna (Roxb. ex DC.) Wight & Arn. (Combretaceae); *Kahua*

Uses: Leaves of *Kahua, Jamun (Syzygium cuminii)*, and *Khair (Acacia catechu)* pounded together is given to cattle for treatment of diarrhoea. Root paste is applied on headache. Tender leaf paste with sugar and milk is given once a day for 20 days for the treatment of spermatorrhoea.

Thespesia lampas (*Cav.*) *Dalz.* & *Gibs.* (*Malvaceae*); Chaumukhia, Van kapas

Uses: The root paste is given twice a day for 7 days in jaundice (Fig. 11).

Trichosanthes bracteata (Lamk.) Voigt.

(Cucurbitaceae); Konhari

Uses: Rind of dried fruit pounded with water is applied on swollen neck glands (Fig. 13).

Uraria picta (Jacq.) Desv. (Fabaceae); *Chinva* Uses: Leaf paste is applied on cut and wound twice a day (Fig. 6).

Discussion

The study revealed that the Chitrakoot is rich in ethnomedicobotanical diversity. The tribal people use locally available plant species for the treatment of human as well as livestock ailments and diseases. Out of 28 species reported, 5 species, viz. Cissus quadrangularis, Holarrhena pubescens, Madhuca longifolia var latifolia, Steriospermum chelonoides and Terminalia arjuna are used in veterinary medicine and rest are used in the treatment of human ailments. Of the reported species, 19 species are used in single disease, 3 are used in 2 diseases, 4 in 3 diseases and 2 species i.e. Actiniopteris radiata and Alectra chitrakutensis are used in more than 3 diseases. The reported data was compared and was found that the reported uses are not reported earlier⁶⁻²¹. These new uses provide lead for further scientific research for the development of modern medicine.

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