



## Ethnomedicinal Studies of Tubers of Hoshangabad M. P.

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### ABSTRACT

*Ethnomedicinal study of Wild medicinal tubers of Hoshangabad district was done. In the present study 24 species of plant tuber growing wild in forest, which are used by tribals of Hoshangabad district for curing several diseases like Skin disease, Cough, Asthama, diarrhoea, wound, Piles, seminal debility, and other common diseases. The present paper reports the tubers their local names, availability, methods of uses for curing diseases.*

**Key words:** Ethno medicinal botany, Korku and Gond tribe, Hoshangabad.

### INTRODUCTION

Madhya Pradesh has a rich heritage of natural medicinal products. Hoshangabad has Korku and Gond dominated districts. Tribes are distinct ethnic groups which are usually confined to definite geographical areas, speak a common dialect and are culturally homogeneous and unifying social organizations. They form a sizeable percentage of total population in certain regions of India. The most popular name is 'Adivasi' while constitutional term is 'Anusuchit janjati' or 'Scheduled tribe'. The Indian subcontinent is inhabited by over 53 million tribal people belonging to over 550 tribal communities of 227 ethnic groups. They constitute about 7.7% of India's population. It is estimated that the predominant tribal areas comprise about 15% of total geographical area of the country. In the Hoshangabad district Gond and Korku are main tribes and specially fully spread over in tribal block Kesla. Gonds live all over central India, and in the states of Maharashtra and Orissa. As "hill people," they traditionally have been associated with hills and uplands in the Deccan Peninsula. Many Gonds live around the Satpura Hills, Maikala Range and Son-Deogarh uplands, and on the Bastar plateau. The Gond dialect is Gondi a Dravidian group of language. Korku is one of the fourth major tribes of Madhya Pradesh. Total population of this tribe is 4,52,149 (according to 2001 Census). They belong to proto-australoid group of tribes, with round face, flat nose, small eyes and elevated cheek bones. Their hairs are curly black. 'Korkus' draw their lineage from 'Ravana' and consider Mahadeo as their God. There are four groups among the Korkus, they are Raj Korkus, Mavasi Korku, Bawaria Korku, Potharia or Banderia Korkus [1].

### MATERIAL AND METHODS

The present study about tubers was undertaken around Hoshangabad in Hill area dominated by tribals belonging to Gond and Korku community. The data was collected from the Hill villages like Pachmarhi, Morpani, Mandikhoh, Taku, Belawada, Churna, Podhar, Bori, and Hill area of Hoshangabad. The tubers used by Korku and Gond tribes to cure various common diseases were identified and information regarding the mode of application for particular ailments were collected and verified from the tribal elders of this region and also confirmed by consulting tribal people of other villages also. Tubers of such plants have been kept preserved in the Botany department of Govt. Narmada P.G. college, Hoshangabad for records.

### RESULTS AND DISCUSSION

**1. *Acorus calamus* L. Local name- Bach [2]**

Chronic diarrhoea: One teaspoon paste of tuber is taken with one glass of water for three days.

**2. *Alocasia indica* (Roxb.) Local name- Mana**

Inflammation and Arthritis: Paste of tuber is tied on affected area of body in night for 5-6 days.

**3. *Alpinia malaccensis* Rosc. Local name- Jangali adrak**

Sores: Paste of tuber with hot water applied on sore in morning and evening till cure.

**4. *Amorphophallus bulbifer* (Roxb.) Local name- Van Makka**

Wound: One teaspoonful dry powder is to be taken with  $\frac{1}{2}$  teaspoonful coconut oil and mixed properly, this paste applied on wound for three and four days.

**5. *Amorphophallus companulatus* Blume. Local name- Gimmi Kand**

Piles: One teaspoonful powder is to be taken with  $\frac{1}{2}$  cup of hot water in morning and evening for fifteen days.

**6. *Arisaema tortuosum* (Wall.) Local name- Birbanka**

Wound: Paste of tuber with water applied on wound in morning and evening till cure.

**7. *Ceropegia bulbosa*. Roxb. Local name- Gakerkund, Jangli Sakarkand.**

Indigestion: 20 gm powder of tuberous root is given with one glass of cow's milk to cure digestion disorders.

**8. *Chlorophytum tuberosum* (Roxb.) Local name- Safed musli**

Seminal debility: 1 teaspoon dry powder of cladodes is taken with 1 glass milk every day.

**9. *Coccinia grandis* (L.) Local name - Van Kundru**

Cold and Cough: One teaspoonful powder is to be taken with  $\frac{1}{2}$  cup of hot water for three and four days.

**10. *Costus speciosus* (Koen.) Smith. Local name- Keokand**

Joint pains: The tuber is rubbed on a stone with a little water to obtain a paste. The paste is applied on the joints for 2 or 3 days.

**11. *Curcuma decipiens* Hook. Local name- Van haldi ( Jangli Haldi)**

Skin diseases: A pinch of haldi powder with kala jeera is applied on skin problem.

**12. *Curcuma angustifolia* Roxb. Local name- Tikhur**

Jaundice: Juice of  $\frac{1}{2}$  rhizomes is taken with boiled water for 7 days.

**13. *Curculigo orchioides* Gaertn. Local name- Kali musli**

Diarrhoea: 1 Spoon of Rhizome powder is taken in sleeping time for three days.

**14. *Cyperus rotundus* Linn. Local name- Nagarmotha**

Boil, Abscess, Black patches: The powder is made into a paste by mixing with a little water. This paste is applied on various skin diseases till cured.

**15. *Dioscorea alata*. L. Local name- Bhainsdhate [3]**

Skin diseases (Fungal): 2-3 gm Paste of tuber (*Dioscorea alata*) is tied on infected part of body.

**16. *Dioscorea esculenta* (Lour.) Local name- Pindi, Pindalu[4]**

Increase low weight: One tuber (boiled) is taken in morning and one tuber taken in evening for fifteen days.

**17. *Dioscorea pentaphylla* L. Local name- Bhusa Kand [5]**

Skin disease: The powder made into a paste by mixing with a little water. The paste is applied in the morning and evening till cured.

**18. *Eulophia nuda* Lindl. Local name- Amarkand**

Snake bite: One cup of roots crushed and put in four cups of water. On boiling, the water is reduced to one cup, cooled and taken. One cup each time, thrice, a day for three days.

**19. *Gloriosa superba* Linn. Local name- Kalihari**

Skin diseases: Paste of tuber is applied on infected area in morning and evening for 8 days.

**20. *Isoetes coromandelina* L.f. Local name- Jangli Lahsoon**

Cough: Two to three long piece of rhizomes is roasted in the in the fire. This is chewed and eaten like supari once a day for three days.

**21. *Momordica dioica* Roxb. Local name- Kakoda**

Weakness: The powder is mixed with water; 2 teaspoons full of powder are taken morning and evening for one month.

**22. *Pueraria tuberosa* (Willd) DC. Local name: Vidari Kand**

Anti-inflammatory: A tuber is ground fine and paste applied on swelling area for 7 days.

**23. *Tacca leontopetaloides* (L.) Kuntze. Local name- Sarapkand**

Conjunctivitis: 2-3 dilute root juice is given during Conjunctivitis.

**24. *Urginea indica* (Roxb) Kunth. Local name- Jangali piyaz**

Moggots in abscess; boils: one bulb is crushed and tied on the abscess or boil. The crushed bulb is tied every morning until cured.

## DISCUSSION

The tubers used by Korkus and Gond have been verified from Indian Ayurvedic literatures like [6-9]. Tribals of Hoshangabad Distt. are using the tubers of these plants in treating various types diseases. These tubers were found to be rich in alkaloids and steroids. The dried powder of the tubers has given positive result of presence of amines, aminoacids and nitrogen, which also signifies the presence of alkaloids in them. The alkaloids and steroids are known for their anti-inflammatory properties. The *Dioscorea spp.* Contain the steroid diosogenin, while *Gloriosa* sps. Contain tropane alkaloids and colchicines.

24 species were found to be having Ethno-medicinal importance. These tubers were used by Gond and korku tribes of the Hoshangabad distt. The tribals use these tubers for well being of their life. Several tubers are used for their general ailments and first aid.

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