

**RESEARCH REPORT**

## Ethno-Medico-Botanical observations on some wild tuberous plants of Kinwat Forest, Nanded

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**ABSTRACT**

An extensive survey of Kinwat forest during 2009-2010 related to wild tuberous medicinal plants was conducted. It has been observed that, wild tuberous plant species are in traditional use by local tribes to treat various human diseases. The present paper provides the medicinal uses of the few less-known wild tuberous plants.

**Key words:** Ethnobotany, Wild tuberous plants, medicinal use, Kinwat.

**INTRODUCTION**

Ethnobotany is a multidisciplinary science that deals with a direct relationship between man and his surrounding plants. The number of workers have been contribute (Upadhye *et al.*, 1994 ; Gpoan and Bhadane, 2005; Deore and Somani, 2006 ; Patil and Ramaiah, 2006; Jain, 1990; Kirtikar and Basu, 1918; Jagtap, 2005; Gogte, 1982) to this field results in recording the ethnobotanical importance of plant species.

Kinwat is unique tribal taluka place located in South-East part of Nanded district of Marathwada region of Maharashtra. There are five communities of tribes inhabited in this region namely Andh, Gond, Pradhan, Naikda and Kolam. These peoples use various wild tuberous medicinal plants for their health problems. Tribes accommodate very close to the forest and have lot of knowledge about the medicinal plants of this region.

Kinwat region is rich in forest which makes a natural asset of immense value regarding medicinal plants. Kinwat forest comprises five different ranges which covers 73690.669 hectare area. The floristic survey of different ranges of Kinwat forest has been done earlier by various workers ( Zate, 1983; Naik, 1998;

Chavan, 2002 ) to understand the floristic wealth of the region. Naik (1998) and Chavan (2002 ) explore certain plants of the area with short ethno-botanical notes . The large number of plant species including wild tuberous remain unexplored with regards to ethno-medicinal values. Therefore, ethno-medico-botanical observations on some wild tuberous plants of Kinwat forest has been undertaken.

The present paper focused on first hand information about the medicinal uses of the nine wild tuberous plant of the area. Several trips were undertaken during 2009-2010, in the different villages of the study region and collected plants were preserved in form of herbarium and some of them in standard preservatives in department of Botany Baliram Patil College, Kinwat Dist. Nanded. The collected plant species were identified with the help of floras (Cooke, 1967 ; Zate, 1983; Rothe, 1985; Almeida, 1990; Naik, 1998 and Yadav and Sardesai, 2002 ) and by Botanical Survey of India, Pune. The wild tuberous plant species are enumerated and arranged in alphabetical order which includes botanical name, family, local name and medicinal uses.

#### **Enumeration:**

##### **1. *Amorphophallus campanulatus* Blume Araceae – Surkand.**

It is rare in the forest. The local tribal medicine men planted it in their house gardens for its tuber. It grows in rainy season and later dries up but tuber lives under the soil for a long time.

**Local use:** The tuber is effective in cattle diseases. A disease locally called as 'Mandi' or 'Farya Rog' is caused by *Clostridium shovum*. A paste of tuber applied on the infected portion is found to be effective. In human being the small tablets of tuber are given to the patients for three weeks who are suffering from piles results are found to be good.

##### **2. *Amorphophallus sylvaticus* Roxb. Araceae- Jangali suran/ Surnali**

This is an important medicinal plant in Ayurveda occurs in the study region during rainy season only and later it dries up.

**Local use:** Corm and its prepared tablets used to relief the painful piles as well as to stomach pain.

##### **3. *Ceropegia bulbosa* Roxb. Asclepiadaceae - Hanuman gadda**

It is a twining perennial herb occurs under the bushes in hilly forest slopes in the study area.

**Local use:** Tubers of the plants are used as medicine. The tubers are sweet and used as an energetic tonic. The fresh pieces of the tubers are given to the patients who suffer from weakness due to long illness for 7 days and it is found to be positive effect.

##### **4. *Chlorophytum tuberosum* Roxb Liliaceae - Pandhari musali.**

It is an erect perennial herb occurs on hill slopes of the forest of study region. The roots of this plant are fibers slender ending with white, small ellipsoidal tubers.

**Local use :** The tubers are used as medicine. The powder of tuber or raw tuber is considered to be highly energetic as good as tonic.

##### **5. *Corallocarpus epigaeus* Rottl. & Willd. Cucurbitaceae- Mirchikand**

It is an important medicinal plant used in Ayurvedic medicine. It is climbing monoecious herb with tuberous roots. It occurs only in hill forest of the study region. The tuber is bitter in taste.

**Local uses :** The tubers are used as medicine in snake bite. Tubers eaten by snake bitten person, he feels sweet taste. Poison of snake remove through vomiting and too minimize be intensity of poison and ultimately helps to save the life.



*Amorphophallus campanulatu*



*Ceropegia bulbosa* Roxb.



*Curcuma pseudomontana* Grah



*Dioscorea bulbifera* L.



*Tacca leontopetaloides* L.



*Habenaria grandifloriformis*

**Fig. 1** Collected wild tuberous plants.

**6. *Curcuma pseudomontana* Grah. Cat.-  
Zingiberaceae - Ran halad**

It is a perennial herb of the study region occurs in forest. Its rhizome is used as medicine. It is found only in wild condition in the area. It is not cultivated in the area till today.

**Local use:** The rhizome is used as medicine. It is useful in hepatitis. The paste of rhizome given to the patient with cow milk three times in a day, for three days found to cure the disease.

**7. *Dioscorea bulbifera* L. Dioscoreaceae-  
Nuska/Appagadda/Dukkar Kand.**

It is a large perennial herb common in the forest of region. It has large tubers deep in the soil. It frequently occurs in different ranges of the forest.

**Local use:** The tubers are used as medicine. The paste of tubers applied on skin diseases and found to be effective and used as food in insufficient food condition.

**8. *Habenaria grandifloriformis* Blatt and Mc Cann. Orchidaceae – Tinpani**

It is a very beautiful orchid of the study area found in marshy hilly slopes during rainy season.

**Local use :** Tubers are used as medicine. Tribal medicine men believed that, the consumption of tubers increase the body strength.

**9. *Tacca leontopetaloides* L. Taccaceae Jatashankar / penghagara**

It is a perennial herb with white or brownish corms in the soil. It is endangered plant of this area having high medicinal value.

**Local use :** The tubers are used as medicine. It is used to cure cellulites and stomach pain. A small piece of corm with betel pan once in a day for seven days given to the patient and found to cure cellulites and also effective in psychiatric problems.

It is clear from the enumeration that, the wild tuberous plants of Kinwat forest play vital role in treating various ailments in tribal communities. It indicates the presence of important drugs in the plants. It is also observed that, these plants are rapidly vanishing and is cause of worry. Therefore it is an urgent need to make the inventory, protection and safe conservation of such important endangered plants of the area.

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