Ethnomedicinal wisdom of tribals of Kinwat forest of Nanded district (Maharashtra)

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Ethnomedicinal applications of plants by tribals of Kinwat forest range of Nanded district of Maharashtra were assessed through a survey during 2006-2008. First hand information on ethnomedicinal preparations, dosage and their mode of administration was gathered from herbal practitioners of Gond, Kolam, Andh and Pradhan tribes. Hitherto unreported applications of 25 plant species belonging to 22 families and 25 genera are presented in this paper. The study has brought to light some interesting data on plants which may form a potential source of information for new bio-dynamic compounds of therapeutic value in phytochemical researches.

Keywords: Ethnomedicine, Gond, Kolam, Andh, Pradhan, Tribes, Kinwat, Nanded District, Maharashtra

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Introduction

Kinwat taluka is located in the North East of Nanded district of Maharashtra. It is bounded on East and South by the State of Andhra Pradesh and on the West and North by Yeotamal district of Maharashtra state. Geographically Kinwat taluka is situated between 19°25′ to 19°55′ North latitude and 77°51′ to 78°19′ East longitude. The total geographical area of the taluka is 2012 sq. km and the population is 2,42,650 of which about 29.68% is inhabited by different tribes. Gond, Pradhan, Kolam and Andh are some of the major tribal communities living in this area1.

The tribal and rural populace depends upon plants for treating various diseases but in Maharashtra, ethnobotanical studies on medicinal plants were mostly conducted in Amaravati, Dhule, Nasik, Nandurbar and Pune. Kinwat tahsil of Nanded district is still underexplored ethnobotanically, no detailed study on ethnobotany of medicinal plants has been published5–7. Therefore, present study was conducted to document the ethnobotanical wisdom of this region. Comparison of documented information was done with the available literature to identify new and unreported uses8–14.

Methodology

The observations are based on surveys conducted in tribal dominated and rural areas of Kinwat taluka. Information was obtained through interviews with medicinemen, tribes (Gond, Pradhan, Kolam and Andh) and Vaidyas. The information was verified in different seasons and areas of the taluka and plants were identified with the help of floras15–19 and voucher specimens were housed in Department of Botany, Dnyanopasak College, Parbhani. The plants are enumerated alphabetically with their botanical name followed by family, local name, collection number and uses (Plate 1).

Enumeration

1. *Ailanthus excelsa* Roxb. (Simaroubaceae), Maharukh (DPG27)
About a cup of extract of stem bark is administered orally twice daily for three days to cure colic while decoction of bark is given two times daily for eight days to cure arthritis.

2. *Argemone mexicana* Linn. (Papaveraceae), Bilayati (DPG58)
Spoonful extract of root is given two times for two days against indigestion. Leaf juice is poured in eye to cure cataract diseases of eye.

3. *Asparagus racemosus* Willd. (Liliaceae), Shatawari (DPG35)
Spoonful extract of root is given thrice a day for three days to stop white discharge.

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4. *Balanites aegyptiaca* (Linn.) Del. (Balanitaceae), Hinganbet (DPG40)
   Water extract of fruit is poured into eyes twice a day for three days to cure cataract disease. A small piece of seed is chewed along with betel leaf daily for three days cures cough.

5. *Buchanania lanzan* Spreng (Anacardiaceae), Charoli (DPG55)
   About 10g seed powder is mixed with water and given daily in the morning as a tonic. Decoction of bark is drunk twice a day for three days to control typhoid.

6. *Butea monosperma* (Lamk) Taub. (Fabaceae), Palas (DPG153)
   Flower powder along with sugar is given two times in a day for seven days to stop white discharge and also to increase sperm count.

7. *Calotropis gigantea* (Linn.) R.Br. (Asclepiadaceae), Ruchki (DPG98)
   Few drops of extract of leaves is poured in the nose to get relief from head ache.

8. *Cardiospermum helicacabum* Linn. (Sapindaceae), Kapalphuti (DPG73)
   About 12 drops of latex mixed with 100g of jaggery is given thrice daily for three days to cure typhoid.

9. *Cocculus hirsutus* (Linn.) Diels. (Menispermaceae), Vasanvel (DPG99)
   Spoonful extract of rhizome is given orally thrice in a day for three days to cure dysentery. About a cup of decoction of root is mixed in cow milk and given twice a day for three days to cure hepatitis.

10. *Curculigo orchioides* Gaertn. (Hypoxidaceae), Kalimusli (DPG63)
    Extract of seed along with boiled milk is given to cure abdominal pain and cough.
23 *Polyalthia longifolia* (Sonner.) Thw. (Annonaceae), Ashok (DPG 148).
Powder of stem bark (10g) is mixed with 50ml curd and 10g sugar and this mixture is given orally thrice a day to cure diarrhoea.

24 *Tectona grandis* Linn.f. (Verbenaceae), Sagwan, Sag, (DPG 101).
About 10g of seed powder is mixed with 50ml of milk and given twice a day for eight days to treat kidney stone.

About 50 ml extract of bark with 25g jaggery is given once in a day for three days to reduce body heat. A spoonful bark extract with 5g jaggery is given once in a day for three days to cure heart disease.

**Discussion**
The tribal medicine has been considered as mother of indigenous system of medicines. Tribals in this area have been using hundreds of plants for curing different ailments but the younger generation has now developed a tendency to rely upon the modern medicine and less importance is being given to their traditional medicine. This gross negligence may have a drastic impact on the existence of many important plant species and their usefulness.
The present investigation has brought to light 25 medicinal plants used against various diseases by rural population in different rural and forest areas of Kinwat tahsil of Nanded District (Plate 1). The data was compared with the published literature and it was found that many of the usages listed were not recorded earlier. Some unlisted usages are as follows: *Ailanthus excelsa* stem bark is used for colic pain and arthritis; *Asparagus racemosus* root extract is used to treat white discharge; *Butea monosperma* flower is used to enhance sperm count; *Cocculus hirsutus* leaves are used to treat dysentery and hepatitis; *Enicostema axillare* root extract is used against snake bite; *Glossocardia bosvallia* is used to treat typhoid; *Helicteres isora* pod is used for fits; *Jatropha gossypifolia* latex is used for treatment of typhoid; *Madhuca indica* flower is used to cure oral ulcer; *Peristrophe paniculata* whole plant is used to reduce abdominal pain.

**Conclusion**

The study represents a contribution to the existing knowledge of folk remedies that are in current practice for the treatment of different diseases and this information will serve as a useful lead for phytochemists and pharmacologists for further study especially on uses of plants which have been reported first time from this region.

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**References**