

## Ethnomedicinal plants and their utilization by tribals of Mahur range forest of Nanded district of Maharashtra, India

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The present paper deals with the observation of ethnomedicinal uses of plant wealth by Gond, Kolam, Pradhan, Naikde and Andh tribes of Mahur range forest of Nanded district. This range was selected for investigation, as the tribals of this area are mainly dependent upon the forest flora for their livelihood and use herbal medicines for curing the ailments and diseases. Altogether 25 plants were recorded which are used by tribal people in formulation of 32 different ethnomedicinal preparation for curing 24 different types of diseases and ailments. Many of these ethnomedicinal preparations are new. Among 32 ethnomedicinal uses 20 are administrated in the form of single drug for curing white discharge, dysentery, fever, cough, kidney stone, asthma, etc. The data of this study provide the botanical name, family, local name, part(s) used, mode of administration, etc. Some noteworthy plants which are used in curing the diseases are: *Abelmoschus crinitus* Wall., *Crotalaria notonii* Wight & Arn., *Cyperus sanguinolentus* Vahl., *Gloriosa superba* Linn., *Indigofera tinctoria* Linn., *Phyllanthus maderaspatensis* Linn., *Desmodium velutinum* (Willd.) DC., etc.

**Keywords:** Ethnomedicine, Maharashtra, Mahur forest, Nanded District, Tribals.

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### Introduction

Mahur taluka of Nanded district of Maharashtra has old heritage of medicinal plants and herbal medicines. The tribes *Gond*, *Kolam*, *Pradhan*, *Naikde* and *Andh* depend on forest resource. The forest is rich in vegetation of rare medicinal plants. The tribal folk, rustics, vendors and others of this area have been using various medicinal plants and their parts as medicine. The traditional knowledge of the use of medicinal plants is descended through generations orally. The death of a tribesman, headman or practitioner of local medicines signifies the loss of a pool of knowledge developed or conserved through many generations<sup>1</sup>. Therefore, it is essential to document their knowledge. The literature survey shows a little ethnobotanical work has been carried out from this region<sup>2-6</sup>. Thus there is a crux need of documentation of such knowledge and popularize the sustainable use of medicinal plants for their long term conservation. Therefore, present study was planned to document ethnobotanical observation carried during 2009-2011. The enumeration is also compared with Standard ethnobotanical literature<sup>7-12</sup>.

### Materials and Methods

During the course of study, a numbers of extensive and periodical surveys were conducted during 2009-2011 in different villages and tribal hamlets in the forest. Information about ethnobotanical uses of plants was collected from tribal men, women, practitioners and vaidyas (Plate 1). The data was verified in subsequent visits. The collected plants were identified by using renowned floras<sup>13-16</sup> and the voucher specimens were housed in Department of Botany, Dnyanopask College, Parbhani.

### Enumeration

The plants are enumerated alphabetically along with their botanical and local name, family, voucher number, uses, formulation, dosages and mode of administration for treating diseases and the name of resource person.

#### 1. *Abelmoschus crinitus* Wall., *Rantlaki* (Malvaceae), PRK 119

Paste of leaves is applied on forehead to cure headache (Gangaram).

#### 2. *Ammannia multiflora* Roxb. Mungni (Lythraceae) PRK 51

Two spoonful powder of plant is mixed with

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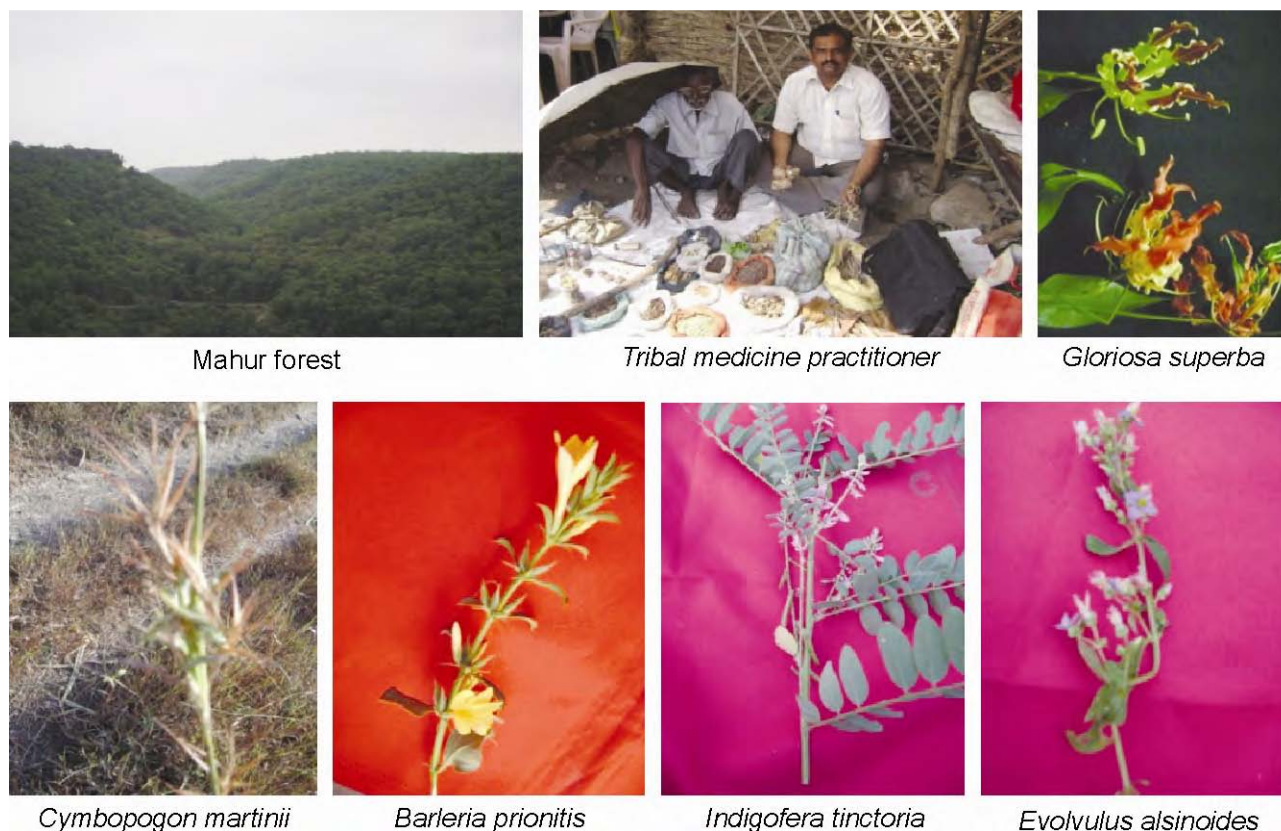


Plate 1—Some important ethnomedicinal plants of Mahur forest and medicine practitioner

coconut oil and applied externally over head at night for eight days to cure head itching (Maruti Ubale).

3. *Anogeissus latifolia* (Roxb. ex DC.) Wall., Dhawda (Combretaceae), PRK 14

Water soaked gum is given two times in a day for two days to cure dysentery (Gangaram). Dried gum powder is mixed in wheat flour then it is fried in cow ghee and advised to consume 100 g in early morning for 15 days to cure weakness (Gangaram and Baliram).

4. *Barleria cristata* Linn., Nilikoranti (Acanthaceae), PRK 64

Spoonful juice of leaves is mixed in a spoonful of honey and is given twice a day for three days to control coughing. Spoonful juice of leaves is given twice a day for seven days to cure fever (Maruti Ubale).

5. *Barleria prionitis* Linn., Pivli kate koranti (Acanthaceae), PRK 133

Few drops of mixture of leaf juice and kapur is dropped in ear to control earache and tympanitis (Kadam).

6. *Caesulia axillaris* Roxb., Jangali pandhra (Asteraceae), PRK 33

Two drops of leaf juice is dropped in ear two times in a day for two days to get relief from earache (Gangaram).

7. *Crotalaria montana* Roth., Rapati (Fabaceae), PRK 56

Powder of root is used to control lice (Maruti Ubale).

8. *Crotalaria notonii* Wight & Arn., Pivla charak (Fabaceae), PRK 82

Powder of whole plant is mixed with coconut oil and is applied regularly to cure skin diseases (Perchake).

9. *Curculigo orchoides* Gaertn., Kalimusali (Hypoxidaceae), PRK 90

Spoonful powder of tuber is taken orally along with cow milk twice a day as a tonic (Gangaram).

10. *Cymbopogon martinii* (Roxb.) Wats., Tikhadi gawat (Poaceae), PRK 1

Spoonful extract of rhizome and root is given in early morning for three days to control asthma (Maruti Ubale).

11. *Cyperus sanguinolentus* Vahl., *Rangavat* (Cyperaceae), PRK 77

For the control of leucoderma, paste of fresh rhizome is applied over affected area early in the morning for one hour thereafter it is washed with water. Subsequently coconut oil is applied on that area and exposed to sunlight for five to ten minutes. It is continued up to the disappearance of white patches (D.D. Kamble).

12. *Desmodium velutinum* (Willd.) DC., *Chirmi* (Fabaceae), PRK 79

Juice of fresh leaves is applied on feet at night for eight days to cure burning sensation (D.D. Kamble).

13. *Evolvulus alsinoides* Linn., *Vishnukanta* (Convolvulaceae), PRK 75

Paste of fresh plant is applied on breast twice a day for eight days to cure mastitis and breast inflammation (Gangaram).

14. *Gloriosa superba* Linn., *Kalawi* (Liliaceae), PRK 11

Paste of root stock is made in cow urine then it is applied on piles twice a day for seven days (Pawar).

15. *Gantelbua urens* (Heyne ex Roth) Bremek., *Matoli* (Acanthaceae), PRK 83

Spoonful seed powder is mixed in a cup of cow milk and given early in the morning for four days to cure kidney stone (Behare).

16. *Hibiscus lobatus* (Murr.) O. Kuntze, *Lahanjaswand* (Malvaceae), PRK 55

Paste of fresh plant is applied on breast to cure mastitis (Maruti Ubale).

17. *Hybanthus enneaspermus* (Linn.) F. Muell., *Ratanpurush* (Violaceae), PRK 86

Spoonful plant powder is taken with cow milk for eight days to increase sperm count. About one spoonful powder of root is taken twice a day for three days to stop white discharge (Doheli).

18. *Haplanthodes verticillata* (Roxb.) R. Br., *Pankenar* (Acanthaceae), PRK 110

Spoonful extract of root is taken orally with honey twice a day for seven days to treat asthma (Ubale).

19. *Indigofera tinctoria* Linn., *Neel* (Fabaceae), PRK 8

Paste of flowers is applied over burnt area two times in a day for eight days (Maruti Ubale, Perchake, Cherange and Kadam).

20. *Ipomoea pes-tigridis* Linn., *Gulabitolwan* (Convolvulaceae), PRK 31

Powder of leaves is mixed with coconut oil and applied on boils till cure (Perchake).

21. *Nerium indicum* Mill., *Pandhri kahner* (Apocynaceae), PRK 185

Paste of root is applied on wound till cure and 1 g of root is given as an antidote to snake bite (Gangaram).

22. *Ocimum basilicum* Linn., *Sabja* (Lamiaceae), PRK 69

Leaf juice is applied on body early in morning to cure body pain. A spoonful juice of leaves is mixed in a spoonful honey and is taken twice a day for fifteen days to control asthma. About two spoonful extract of root is mixed in one spoonful honey and it is given twice a day for eight days to control asthma (Maruti Ubale).

23. *Phyllanthus maderaspatensis* Linn., *Bhuijambul* (Euphorbiaceae), PRK 54

Powder of fruit is applied on teeth twice a day to control teeth diseases. About spoonful fruit powder is given at night for eight days against indigestion (Maruti Ubale).

24. *Rhynchosia minima* (Linn.) DC., *Pivli pushpin* (Fabaceae), PRK 35

About a spoonful juice of plant is taken orally thrice a day for two days to cure chronic fever (Perchake).

25. *Tephrosia hirta* Buch.-Ham., *Ranlalari* (Fabaceae), PRK 43

A spoonful extract of root is taken twice a day for three days to control cough (Ubale).

## Discussion

The prevalence of a variety of climatic conditions puts India in a supreme position with respect to richness of herbal medicinal flora. Herbal formulations are popular among the rural and urban community of India. Interest in medicinal plants has been shown throughout the world because of the safe and effective constituents of plants products<sup>17</sup>. Synthetic drugs widely used in the treatment of various diseases may cause toxicity and adverse side effects whereas herbal medicine is considered less toxic than synthetic drugs<sup>18</sup>.

The medicinal plants are used as cheap and safe remedies for various ailments by tribals in Mahur range forest of Nanded district and it is widely acknowledged for its herbal treasure. Some of the

medicinal plants in the present study have been identified as significant for typical therapeutic value. They are as follows: *Anogeissus latifolia* gum is used to cure dysentery; *Barleria cristata* leaves are used to control cough and fever; *B. prionitis* leaf is used to treat tympanitis; *Crotalaria notonii* whole plant is used to cure skin diseases; *Cymbopogon martini* rhizome is used to control asthma; *Evolvulus alsinoides* whole plant is used to cure mastitis; *Gloriosa superba* root stock is used to treat piles; *Gantelbua urens* seeds are used to cure kidney stone; *Hybanthus enneaspermus* root is used to treat white discharge; *Ipomoea pes-tigridis* leaves are used to treat boils; *Nerium indicum* root is used to heal wound; *Ocimum basilicum* leaves are used to treat asthma; *Phyllanthus maderaspatensis* fruit is used against teeth diseases; and *Tephrosia hirta* root is used to treat cough.

### Conclusion

The present study revealed that the tribal aborigines of Mahur forest range have adequate ethnomedicinal knowledge which has been transmitted from one generation to another but the present enumerations were not recorded or documented. However, to prove their utility scientifically, detailed phytochemical, antimicrobial and pharmacological investigations are essential for optimum utilization.

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