

## Weeds and other plants used as traditional herbal medicines to cure malaria fever in Saharanpur district, Uttar Pradesh

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### Abstract

The present study was done during year 2008-09 and 2009-2010 to identify and enlist the weeds and plants which are traditionally used as anti-malaria by Ayurvedacharyas, Hakeems, local rural and tribal people. Specific parts of the plant are used as medicine in different way. In this paper, a list of 38 species of herbal medicinal plants belonging to 25 families of district Saharanpur are identified as herbal medicines to cure malaria fever. However, Krishna tulsi, Harr, Harishringar, Neem and many other plants have very good quality to cure malaria fever.

**Keywords:** Malaria, herbal plants, rural population.

### Introduction

In India about 8100 plants are recognized for their medicinal values that are being used in various traditional systems of medicines like Ayurveda, Unani, Homeopath, Sidhu, and Folk etc. for ancient time. Earlier, studies on medicinal plants of district Saharanpur were carried out by Bhargava (1982).

The distribution of Indian medicinal herbal flora has been studied by various scientists viz., Kiritkar & Basu (1933), Chopra *et al.* (1956) Bhatnagar (1961), Atal (1989), Dastur (1996) etc. The Ethno-medicinal studies have been carried out by few researchers viz., Jain (1991), Das *et al.* (2003), Sanyal (1995), Kaushik *et al.* (2000), Nagiyan *et al.*, (2003) and Richa & Bhargava (2005). Since then, no sincere effort has been made to explore the medicinal herbal plants of district Saharanpur pertaining to any specific disease. Hence, an effort has been made to identify and verify the herbal plants used as anti-malarial drugs.

The rural and tribal population generally depends upon various weeds and other wild plants instead of commercial or allopathic medicines. The forests and adjacent areas of district Saharanpur are very rich in herbal wealth which are widely used by the local and tribal population

for curing malaria fever since ancient time. The district lies between 77° – 15' to 77° - 55' east longitude and 29° - 24' to 30° - 30' north latitude. The attitude above the sea level is 275.05m. The Saharanpur region is situated between the Ganga and Yamuna 'Doab'. It contains varieties of features and is so complex in itself and thus influences the distribution of plants in the regions. While undertaking this Ethno-botanical study in the district the authors came across all 38 plant species belonging to 25 families.

### Materials and Methods

The author visited a number of villages and localities of Shivalik range, Ghad and other adjacent forest areas of district Saharanpur and collected the information from the local rural and tribal people of villages about the uses of these plants. Moreover, Ayurvedic practitioners and Hakeems were also consulted about the use of these medicinal plants as anti-malarial drugs.

All the information and data were checked and verified with relevant literatures. The plants botanical names, vernacular names and name of families were sincerely checked by standard books, herbarium and floras. In this paper the plants are arranged alphabetically and the order and families based on "Hutchinson classification".

## Results and Discussion

It is clear from the table 1 that there is a wide range of anti-malarial herbal plants which are traditionally being used in district Saharanpur, but some of them are most commonly used and effective viz., Gulmohar, Harsingar, Amla, Harr, Ghikanwar, Krishna Tulsi, Neem and Dhatura (Kumar & Bhargava 2005). These weeds or herbal plants have the ability to cure malarial fever. These plants as whole or their parts are used either

in the form on concoction, grinded powder or mixed with honey. Moreover, combinations of more than one plant are also given to diagnose the fever. Similar findings were also reported by Dastur (1956), Jain (1991), Kaushik & Dhiman (2000).

A complete list of malarial herbal medicinal plants with their family, botanical name, vernacular name, part used and type of fever is presented in Table 1.

**Table 1 List of identified weeds and herbal medicinal plants (2008-2009 to 2009-2010)**

Family Name	Botanical Name	Vernacular Name	Part Used	Type of Fever
Caesalpiniaceae	<i>Delonix regia</i> , Gamble	Gulmohar	Flower	Malaria Fever
Fabaceae	<i>Clitoria ternatea</i> , Linn.	Aparajit	Leaves	Malaria Fever
	<i>Erythrina Indica</i> , Linn.	Coral Tree	Bark	General/Malaria Fever
Moraceae	<i>Morus alba</i> , Linn.	Shehtoot	Fruit	General/MalariaFever
Cucurbitaceae	<i>Citrullus colocynthis</i> , Shrader.	Indrayan	Fruit	Malaria Fever
	<i>Ecbalium indica</i> , Linn.	Kateri Indrayan	Root and Fruit	Malaria Fever
	<i>Momordica charantia</i> , Linn.	Karela	Leaves	Malaria Fever
	<i>Trichosanthes dioica</i> , Roxb.	Parwal	Leaves	General/Malaria Fever
Bombacaceae	<i>Adansonia digitata</i> , Linn.	Gorakh amla or Kalpvraksha	Fruit Root and Leaves	General/MalariaFever
Malvaceae	<i>Sida cordifolia</i> , Linn.	Kungyi / Bala	Stem and Fruit	Malaria Fever
Euphorbiaceae	<i>Phyllanthus emblica</i> , Linn.	Amla	Fruit	Malaria Fever
	<i>Phyllanthus niruri</i> , Linn.	Jaramla	Whole Plant	Malaria Fever
Combretaceae	<i>Terminalia chebula</i> , Linn.	Harar	Fruit	Malaria Fever
Simaroubaceae	<i>Ailanthus excelsa</i> , Roxb.	Maharukha or Arva	Wood	Malaria Fever
Meliaceae	<i>Azadirachta indica</i> , Linn.	Neem	Leaves	General/Malaria Fever
	<i>Cedrela toona</i> , Roxb.	Tun	Bark Powder	Malaria Fever
Loganiaceae	<i>Strychnos nux-vomica</i> , Linn.	Kuhla	Seeds	Malaria Fever
Oleaceae	<i>Nyctanthes arboristis</i> , Linn.	Har Singar	Leaves	General/Malaria Fever
Apocynaceae	<i>Alistonia scholaris</i> , R.Br.	Learaunda	Leaves	Malaria Fever
Asclepiadiaceae	<i>Calotropis gigantea</i> ,(Linn.) R.Br, ex. Ait	Safed Ak	Root and Bark	Malaria Fever
Verbenaceae	<i>Clerodermis inermis</i> , (Linn.) Gaerth.	Lanjai	Gum Powder	Malaria Fever
	<i>Lantana camara</i> , Linn.	Van tusli	Pachang	Malaria Fever
Menispermaceae	<i>Cissampelos pareira</i> ,Linn.	Patha	Root	Malaria Fever
Piperaceae	<i>Piper longum</i> , Linn.	Pipalamul	Fruit	Malaria Fever
	<i>Piper nigrum</i> , Linn.	Kali Mirch	Fruit	Malaria Fever
Papaveraceae	<i>Argemone maxicana</i> , Linn.	Pili Kateli	Latex	Malaria Fever

Table Contd. ....

Polygonaceae	<i>Polygonum aviculare</i> , Linn.	Anjubar	Root	Malaria Fever
	<i>Vernonia cinerea</i> , Less.	Sahadevi	Root	Malaria Fever
Solanaceae	<i>Hyoscyamus niger</i> , Linn.	Khurasani Ajwain	Seed	Malaria Fever
	<i>Datura metel</i> , Linn.	Datura	Leaves	General/MalariaFever
	<i>Solanum suffrutence</i> , Linn.	Kateri	Fruit	General/MalariaFever
	<i>Withania somnifera</i> , Dunal.	Ashwagandha	Whole Plant	General/MalariaFever
Boraginaceae	<i>Corida myxa</i> , Roxb. Non, Linn.	Lasora	Bark	General/MalariaFever
Lamiaceae	<i>Ocimum sanctum</i> , Linn.	Krishna Tusli	Root	Malaria Fever
Liliaceae	<i>Aloe barbadensis</i> , Mill.	Ghikanwar	Fruit Juice	Malaria Fever
	<i>Asparagus adscendens</i> , Roxb.	Satavar	Tuber	Malaria/General Fever
Amarylidaceae	<i>Allium sativum</i> , Linn.	Lashun	Fruit	Malaria Fever
Poaceae	<i>Cynodon dactylon</i> (Linn.) pers.	Doobgrass	Root	Malaria/General Fever

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