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### Review Article

# ETHNOMEDICINAL ASPECTS OF SOME MEDICINAL PLANTS OF HANUMANGARH DISTRICT OF RAJASTHAN

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### ABSTRACT

The Hanumangarh district is situated in northern part of Rajasthan and constitutes a part of the Thar Desert. This region is rich in phytodiversity, especially in medicinal plants. In the present paper ten selected medicinal plant species, used extensively by local people and tribal communities, have been screened qualitatively to find out their ethnomedicinal properties. The listing includes botanical names, family, common names and ethnomedicinal uses.

**Keywords:** Ethnomedicinal aspects, tribal communities, Hanumangarh district

### INTRODUCTION

Hanumangarh district is situated between 20° 5' to 30°6' N latitudes and 74° to 75°3' E longitude having total area of 9656.09 km<sup>2</sup>. It is basically divided into three climatological regions- the semi arid region, the river (Ghaggar) irrigated region and the saline region. In such variable environmental conditions the district has great phytodiversity which also includes plants of food, fodder and medicinal importance.

Since from the time of Rigveda (4500-1600 B.C.) or even earlier man has been using the plants as medicine. The plant kingdom still has many plant species of medicinal value yet to be discovered. Literature on traditional medicines is very little, especially from the point of view of their ethnomedicinal value. The herbal plants of Rajasthan desert have been studied for their ethnobotanical aspects by many workers.<sup>1-13</sup> The ethnomedicinal studies have been undertaken for such plants that are used extensively by the local people and tribal communities of Hanumangarh district of Rajasthan.

The present investigation is very useful for pharmacologists, phytochemists and pharmaceuticals.

### METHODOLOGY

To collect and document this valuable information, several field trips were made in the villages of Hanumangarh district. Interviews were conducted with experienced people of

various communities, vendors, tribals experts of Ayurveda, and native doctors such as Ohjas, Bhopas, Bhagats and Vaidyas as they possess inherited knowledge regarding the plants of ethnomedicinal importance. Repeated enquiries and group discussion on the use of same plant were made to ascertain the authenticity of information.

### OBSERVATIONS AND DISCUSSION

Ten plant species from the study area have been selected for ethnomedicinal studies. The selected plant species are arranged systematically with their ethnomedicinal uses.

**1. *Abutilon indicum* (Linn.) Sweet.**, Malvaceae, Atibala.

The leaves and seeds are crushed with water to form a paste applied for 20 to 30 days on penis to cure syphilis. Tribals orally take the decoction before dinner for about a month to cure gonorrhoea. Paste of leaves is prepared with mustard oil and applied against rheumatism. The seeds are rich in mucilage and are used as a laxative.

**2. *Bacopa monnieri* (Linn.) Wettst.**, Scrophulariaceae, Brahmi.

The Bheel and Damor tribals apply warmed paste of leaves on the abdomen to cure abdominal pain. They also keep warmed leaves as such on swellings to get relief. They take orally the paste of plant with water to cure urinary duct inflammations. Local Vaidis prescribe the decoction of plant as a nerve tonic.

**3. *Barleria prionitis* (Linn.)**, Acanthaceae, Bajradanti. Bheel and Garasia tribals chew the leaves to relieve bodyache, toothache and to cure bleeding gums. Juice of leaves is applied to heal up chilblain of feet and hands during winter. The Saharia tribals apply the paste of root powder on boils and muscular swellings. They consider the leaf juice useful in fever, cough and diarrhoea. Kathodi tribals make a powder of shade dried plant and take it orally with cow milk to cure congestion of liver, hepatic dropsy. Meena tribals mix the paste of roots in goat milk and give orally to patient suffering from rheumatic fever. The bhil meena tribals crush the flowers with sugar to make a paste called "Gulkand" which is taken orally for a few days to cure painful menstruation. The decoction of whole plant is taken orally as a health tonic.

**4. *Corchorus depressus* (Linn.) Christensen**, Tiliaceae, Chamghas.

The plants are dried in shade, powdered and taken regularly by man with fresh milk of goat as a tonic to gain sexual vigour. The decoction of fresh plants is given orally to cure dysentery, dyspepsia and liver disorders. The nomadic tribes take decoction of fruits and seeds with goat milk and sugar (Gur) during acute diarrhoea. Kathodi tribals apply fresh leaves on wounds and skin eruptions.

**5. *Eclipta alba* (Linn.) Hassk.**, Asteraceae, Bhringraj.

It is used as hair tonic. The oil extracted, is used as a tonic. Leaf juice is taken orally with honey in jaundice and dysentery. It is keen stimulant to digestive system. It augments the appetite and improves digestion. The leaf extract is given orally with water to cure diarrhoea. The root has purgative properties and used in cases of liver, spleen and dropsy.

**6. *Portulaca oleracea* Linn.**, Portulacaceae, Luni.

The tribals specially Meenas, cook and eat the plant as vegetable. They rub the plant sap on the body during scorching heat of summers for relief in blisters and boils. The seeds are used as vermifuge by the Bheels. It has refrigerant properties and effective in scurvy and liver diseases.

**7. *Solanum nigrum* Linn.**, Solanaceae, Makoi.

The juice of fresh plant is taken orally daily early in the morning to cure liver diseases and as a blood purifier. The leaf juice is applied on the wounds caused due to dog bites, boils, psoriasis. The extract of roots is given orally to cure vomiting in children. The fruits are eaten against diarrhoea, eye infection and hydrophobia.

**8. *Solanum surattense* Burm.**, Solanaceae, Ringani.

Leaves are applied as such to relieve muscular pain. Dry fruits are smoken to cure cough, jawache and toothache or seeds are chewed for this purpose. Extract of the roots is taken orally to cure cough, asthma and pain in the chest. Dry mature fruits are soaked in mustard oil and burned in clay pot. Then the fumes are inhaled to cure pyorrhoea and toothache. The plant is dipped overnight in water and then a decoction is prepared which is given to the patients of syphilis. The flowers are crushed and given orally with water to cure diarrhoea in children.

**9. *Tribulus terrestris* Linn.**, Zygophyllaceae, Gokhru.

The fruits are powdered with seeds of til (Sesamum) and taken orally with to cure impotence, especially caused by masturbation. The fruit powder is also given orally to cure

urinary disorders by the local Vaidis and herbalists. The mucilagenous infusion of plant is prescribed as a remedy for impotence by Vaidyas and herbalists.

**10. *Xanthium strumarium* Linn.**, Asteraceae, Adhasisi.

The oil obtained from the fruits is applied on eczema and scabies. The leaf paste of plant is applied to cure leucoderma. Seeds are burned on fire and fumes are inhaled to cure piles. It is used to improve appetite, memory and voice. It is used in treatment of Malaria. The juice of plant is used as tonic. It is used in treatment of poisonous bites from insects. The extract of plant has digestive, antipyretic, diaphoretic and sedative properties.

## CONCLUSION

The Hanumangarh district a part of Thar Desert is very rich in medicinal plant wealth. These medicinal plants have been used by local people, tribal communities, vendors, native doctors such as Ojhas, Bhagats Bhopas and experts of Ayurvedic fields since long time in herbal and folk remedies. Hence, these medicinal plants have great potential to be used in drug and pharmaceutical industries.

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