Ethnomedicinal flora of Euphorbiaceae used in dermatological problems

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Euphorbiaceae, the spurge family is a significant family of angiosperms is cosmopolitan in distribution. The communication deals with ethnomedicinal significance of few plants of family Euphorbiaceae growing frequently in district Bahraich. District is endowed with diverse flora of medicinal plants. In the ethnobotanical field survey, 7 genera with 11 species, which are used in care and cure of different dermatological problems were collected. The botanical name, local name, parts utilized and mode of treatment by traditional methods have been included.

**Keywords:** Ethnomedicine, Dermatological problems, Euphorbiaceae, Tharus

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Skin is a sensitive organ and is continuously exposed to various environmental stresses. Millions of people are affected annually with dermatological problems that cause marked discomfort, significant morbidity and even rarely death. Bahraich is a terai belt of Northwestern Uttar Pradesh, with an area of 5,026.6 km\textsuperscript{2} and is located at 27°04' to 28°24'N latitude and between 81°03' to 83°13'E longitude (Fig. 1). Ethnobotanical study of the area with limited objectives has been done by some researchers\textsuperscript{1}. In views of this, the work has been carried out. The studied area is having good population of tribal people and their knowledge regarding plants has descended from one generation to another as a domestic practice\textsuperscript{2}.

**Methodology**

A field survey of different villages, viz. Phakeerpur, Lohari, Sohani and Baligaon of Mihinpurwa block of Nanpara tehsil in which tribal population was sufficient, was done during 2006-2007. The collection of voucher specimens was done during flowering/fruiting period to facilitate the process of identification. During the field survey information was gathered by making repeated queries time to time through interviewing the tribals, i.e. Tharus, aged peoples, herbal healers, local vaid\textsuperscript{s} and hakims of the area. The medicinal property of each flora was accepted as valid if at least four or five separate informants had a similar positive answer. The collected plants were identified\textsuperscript{3,9}. The herbarium of plant species were prepared scientifically following the method and deposited in departmental herbarium for record and reference\textsuperscript{10}.

**Enumeration**

Plant species, belonging to Euphorbiaceae family, which are used in traditional medicine, are enumerated with their botanical and vernacular (Hindi) name, the mode of use of the different plant parts in various treatments is also mentioned.

* **Acalypha indica** Linn. (*Khajoti*)

Uses: Fresh juice of leaves mixed with salt is applied on eczema of hand and sole of legs. Leaf paste is applied on burns, with juice of lime. It is also useful in early stages of ringworm.

* **Croton banplandianum** Baill. (*Putri*)

Uses: Latex is applied to treat scabies and sores. Leaf paste is applied in cuts and wounds to stop bleeding. Stem juice is applied on ringworm.

* **Embilica officinalis** Gaertn. (*Aonla*)

Uses: Equal amount of *Embilica officinalis* Gaertn. and *Azadirachta indica* A. Juss. powder dried in shade, mixed in honey is applied in the treatment of leprosy. Ash of seeds of plant mixed with equal amount of coconut oil is applied in itching. Latex of the plant is applied in painful wounds. Fresh leaf juice is applied on cuts for blood clotting.
**Euphorbia thymifolia** Linn. (*Choti dudhi*)

*Uses:* Fresh milky latex of the plant is applied on ringworm and pimple of face. The fresh plant paste mixed in butter of cow milk is applied on skin for curing itch. Paste of plant juice and castor bean is applied for curing wounds.

**Euphorbia hirta** Linn. (*Mothi dudhi*)

*Uses:* Latex is applied against skin parasites twice a day till it is cured. Latex is also applied to destroy warts.

**Euphorbia nerifolia** Linn. (*Sehund*)

*Uses:* Fresh leaf latex is rubbed on skin for curing wounds and pimples.

**Euphorbia dracunculoides** Lamk. (*Tittli*)

*Uses:* Leaf juice is used to kill lice in human as well as in animal. Leaf paste is used to cure problems of head.

**Euphorbia nivulia** Buch. Ham (*Schur*)

*Uses:* Latex is applied on finger joints as a poultice to cure pain and also used for healing of wound.

**Jatropha curcas** Linn. (*Safed Arand*)

*Uses:* Seed oil is used externally for skin diseases such as leucoderma, sores and pimple. Latex is used for the treatment of eczema.

**Phyllanthus amarus** sehum. & thom. (*Bhui aonla*)

*Uses:* Fresh leaf paste is applied over wounds and is bandaged. Latex of stem is applied for curing wounds till it is cured.

**Ricinus communis** Linn. (*Arand*)

*Uses:* Root decoction is applied on skin diseases such as wart & wound twice a day till it is cured. Fresh paste of leaf is applied for curing wound & carbuncle. The warmed root part is applied as a poultice to cure boils.

**Results and discussion**

Present study includes information on 7 genera and 11 plant species, belonging to family Euphorbiaceae, which are used in remedies for various skin diseases, viz. eczema, leprosy, itching, wounds, cuts, warts, ringworm, pimples, boil, sore, carbuncles, leucoderma, scabies and burns (Figs 2-6). The study
offers a great deal of scope for ethnobotanical research not only because of the richness of the flora but also because of good population of tribals in studied area. The study represents a contribution to the existing knowledge of folk remedies that are in current practice for the treatment of skin diseases, which happens to be the most common ailment amongst rural population because of their unhygienic having condition. It is hoped that, this information will be a useful lead for phytochemists and pharmacologists for further study. Once the efficacy of these herbal medicines in treating skin diseases is scientifically established, the popularization of these remedies can be recommended in Indian healthcare system for wider application.

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