

## POTENT PLANTS FOR HERPES FROM DISTRICT SHRAWASTI AND BALRAMPUR, UTTAR PRADESH, INDIA

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### ABSTRACT

The rich Ethnobotanical practices of the aforesaid districts have already received considerable scientific attention and the ethnobotanical practices specific to tribals (Tharus). The paper deals with the documentation of various traditional herbal methods of treatment for Herpes practiced in these district.

**KEYWORDS:** Ethnobotanical, Tharus, Herpes.

### INTRODUCTION

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.

Shrawasti and Balrampur district of Devipatan Mandal is a terai belt of North-western Uttar Pradesh with an area of 50266 km<sup>2</sup> and is located at 27<sup>0</sup>4' to 28<sup>0</sup>24' N latitude and between 81<sup>0</sup>03' to 83<sup>0</sup>13' E longitude. Ethnobotanical study of the area has been done by some researchers viz., Mall, 2009; Mall and Sahani, 2013; Mall and Tripathi, 2016; Sahani and Mall, 2016; Tripathi and Mall, 2016; Mall, 2017 and Mall and Tripathi, 2017.

The studied area is having good population of Tharus and their knowledge regarding plants has descended from one generation to another as a domestic practice (Brahmam, 2000). Due to vast area of natural forest Bahraich and Balrampur are known as paradise of the nature.

Herpes is an acute recurring skin inflammation caused by infection of a group of virus named as Herpes labialis, Herpes zoster in developing countries.

Appearance of spreading clusters of tiny red blisters of vesicles on the skin associated with the severe burning sensation is the diagnostic symptoms of Herpes.

In the study area the local populace relies mostly on traditional herbal methods, because it is cheap, easily available and having no side effect, their witnessed confidence upon these time-tested treatment practices renders them worthy of a scientific enquiry as such traditional data may provide valuable clues to the development of novel plant-based medicine to treat Herpes.

## METHODOLOGY

A field survey at one month or so interval of different villages of district Shrawasti viz, Katkueya, Ranipur, Motipur Rehar and of district Balrampur viz, Sarni, Marni, Gorni, Thuthwalia villages was done during 2015-2017 so as to collect plant in flowering stage and to facilitate the identification.

During the field survey the information was gathered by making repeated queries time to time through conversations with the tribal people; Tharus, aged people, herbal healers, Local Vaid and Hakeem's of the area. The collected plants were identified by flora and reputed text of the Ethnobotany and systematic Botany (Duthie, 1903-1929, Jain, 1987, Hooker, 1872-1897, Joshi, 2000).

The Herbarium of the plant species were prepared following method of (Jain and Rao, 1976) and deposited in departmental herbarium for record and reference.

## Enumeration

List of plants and their parts used for cure of disease.

### Root

1. **Abrus precatorius** L. Gumchi, Kunch, Koonch, Chanothi, Ratti, Gaunjchi, Gunja, Shanjir, Gunj, Ratigeti, Kaincha, (Papilionaceae).
2. **Acacia leucophloea** (Roxb.) Willd. Safed kikar, Safed babool, Goera, Agla bel, Biswal, Khangkhu, Khang, Climbing wattle, Khamer, Khang-hu, Willd. (Mimosaceae).
3. **Aristolochia indica** L. Hooka-bel, Gandhanakuli Garudakkodi, Eswaramooli, (Aristolochiaceae).
4. **Asparagus racemosus** Willd. Satavar, Shatavari, Shatamull, Shatimuli, (Liliaceae).
5. **Boerhaavia diffusa** L. Gadapuraina, Hogweed, Pigweed, Hogweed Red spidering panaua, Vasedo, Biskhapara, Gadhadand, Komme, Punarnava, (Nyctaginaceae).

6. **Catunaregam spinosa** (Thunb.) Tirv. Mountain Pomegranate, Kukurummum, Karai, (Rubiaceae).
7. **Celastrus paniculatus** Willd. Woody liana, Black oil plant, Climbing staff tree, Intellect tree, Malkangani, (Celastraceae).
8. **Croton tiglium** (L.) Balak. Croton, Rush foil, Jamalgota, (Euphorbiaceae).
9. **Hemidesmus indicus** (L.) Schult. Anantmool, Indian sarsaparilla, Anantbel, Maenmool, (Asclepiadaceae).
10. **Indigofera tinctoria** L. Neel, Indigo dye, True indigo, (Papilionaceae).
11. **Ixora coccinia** L. Jungle Aag, Jungle geranium, Flame of the woods, (Rubiaceae).
12. **Rauwolfia serpentina** (L.) Benth. Sarpagandha, Chandrabagha, Chota chand, Sarpagandhi, Harkaya, Harki, Asrel (Apocynaceae).
13. **Tabernaemontana divaricata** (L.) R. Br. Chandni, Crape jasmine, Moonbeam, Carnation of India (Apocynaceae).

The roots are washed in a safe water repeatedly so that their remains regarding soil particle and organic matter of soil is washed: roots are cut into small pieces to ease the grinding with the help of traditional grinder that is sil-batta (A slab of stone on which condiments are ground with a muller): a very small amount of water is added so as to make fine paste. Whole substance is squeezed to prepare root juice, 15 ml of juice is given thrice a day till cure. Few inhabitants do not use the juice they prefer to use semi solid paste on the blister of the disease and when paste is dried, fresh paste is applied.

The above list shows that the 13 plants belong to 12 families of Angiosperms.

#### LEAF

1. **Abrus precatorius** L. Gumchi, Kunch, Koonch, Chanothi, Ratti, Gaunjchi, Gunja, Shanjir, Gunj, Ratigeti, Kaincha (Papilionaceae).
2. **Azadirachta indica** A. Juss. Neem, Montrii, Indian lilac, Margosa tree, Nim, Limba, Pakvakrita, Nimbaka (Meliaceae).
3. **Breynia vitis-idaea** (Burm. f.) Fisch. Hokkien, Hujan panas, Formosanbreynia, Largecalyx breynia, Medicinal breynia, Indian snowberry, Mountain coffee bush, Coral berry tree (Euphorbiaceae).
4. **Clerodendrum viscosum** (L.) Moon Bhand, Titabhamt, Bhandira, Bhandirah (Verbenaceae).

5. **Gymnema sylvestre** (Retz.) R. Br. Ex Schult. Gurmar, Madhunaashini, Bedakicha pala (Asclepiadaceae).
6. **Indigofera tinctoria** L. Neel, Indigo dye, True indigo (Papilionaceae).
7. **Ixora coccinia** L. Jungle Aag, Jungle geranium, Flame of the woods, (Rubiaceae).

The fresh leaves free from any type of infection are collected and washed with fresh water so as to remove dust etc. present on lamina, it is crushed on traditional sil-batta and made fine paste in a fresh water. In this paste the sufficient amount of water is added and it is left for 25 minutes are so that the water-soluble contents should reach in the mixture, it is squeezed and about 25 ml juice is given thrice a day till cure.

The above list shows that 7 plants belong to 6 families of Angiosperms.

### Stem Bark

1. **Bombax ceiba** L. Semal, Silk cotton tree, Kapok tree, Sittan, Sanmali, Salmali, Simul, (Bombacaceae).
2. **Bridelia retusa** (L.) Spreng. Kaji, Khaja, Kassi, Spinous Kino Tree (Euphorbiaceae).
3. **Careya arborea** Roxb. Kumbhi, Kumbh, Wild guava, Ceylon oak, Patana oak, Slow match tree, Kalindi, (Lecythidaceae).
4. **Ficus benghalensis** L. Bargad, Banyan, Peraal, Aal, Vat tree, (Moraceae).
5. **Holarrhena pubescens** (Roxb.) A. DC. Karva indrajau, Indrajao, Kurchi, Keor, Kewar, Indrajav, Indrayava (Apocynaceae).
6. **Oroxylum indicum** (L.) Vent. Broken bones tree, Indian trumpet flower, Tree of damocles, Bhut-vriksha, Dirghavrinta, Kutannat, Patrorna, Tatelo, (Bignoniaceae).

The stem bark is collected and washed and made into fine paste along with small amount of lemon juice. The paste is applied with soft hand above the blisters and it is get dried, after drying the same is replaced by new one. The use of lemon is because of its cooling and soothing property.

The above list shows that the 6 plants belong to 6 families of Angiosperms.

### Whole plant

1. **Centella asiatica** (L.) Urban. Brahmi, Indian Pennywort, Bhandi, Mandukaparnni, Gota kala, (Apiaceae).
2. **Cynodon dactylon** (L.) Pers. Doob, Bermuda grass, Niladurva, Saddala, (Poaceae).

3. **Eclipta erecta** (L.) Bhangaraia, False daisy, Trailing eclipta, Kesharaj (Asteraceae).
4. **Sida rhombifolia** L. Baryar, Sahadeva, Cuban jute, Jelly leaf, Queensland hemp (Malvaceae).

The whole plant is uprooted with the help of trowel and pick so as to save the underground parts. The whole material is washed repeatedly with potable water and decoction of the whole plant is prepared in an earthenware pot, for preparation of decoction, water is taken four times to the materials that is 1:4. The preparation is done on a very low intensity of the flame and when one third content is left, it is filtered. Two teaspoonful juices are given twice a day till cure. The above list shows that 4 plant species belong to 4 different families of the Angiosperms.

### FRUIT

1. **Catunaregam spinosa** (Thunb.) Tirv. Mountain Pomegranate, Kukurummum, Karai (Rubiaceae).
2. **Cuminum cyminum** L. Jeera, Jira, Cumin, White cumin, Green cumin (Apiaceae).

The ripe fruits are grinded with the help of rural traditional grinder i.e., sil-batta along with small amount of lemon juice so as to make fine paste, this paste is given thrice along with lukewarm Goat/Cow milk till full cure.

The above list shows that 2 plant species belongs to 2 families of the Angiosperms.

### Pericarp, Stem, Seed and Rhizome

1. **Areca catechu** L. Kattha (Arecaceae).
2. **Jatropha curcas** L. Ratanjot, Bio-diesel plant (Euphorbiaceae).
3. **Caesalpinia bonduc** (L.) Roxb. Kantikaranja (Cesalpiniaceae).
4. **Curcuma longa** L. Haldi, Turmeric (Zingiberaceae).

The pericarp of **Areca catechu** is boiled so as to make decoction, the decoction is applied very gently to blisters, it is also given orally 50 ml twice a day.

Stem of **Jatropha curcas**, seeds of **Cesalpiniaceae bonduc** and **Rhizome** of **Curcuma longa** is washed repeatedly and made into paste. The same is given one tea spoonful thrice daily along lukewarm water.

The plants used for cure of disease belongs to different single families Angiosperms.

## CONCLUSION

The perusal of the list reveals that roots of 13 plants are being used to cure Herpes whereas leaf is being represented with 7 plant species. Stem bark by 6 plant species the whole plant with 4 plant species fruit with 2 plant species and Pericarp, stem, seed, and rhizome with single plant species each is being used to cure Herpes.

The study offers a great deal and scope for ethnobotanical research not only because of richness of the flora but also because of good population of Tharu tribals in the studied area. The study represents a contribution to the existing knowledge of folk remedies that are in current practice for the treatment of Herpes which occurs in the studied area especially in the rural population because of their unhygienic conditions.

It is hoped that this information will be a useful lead for Phytochemists and pharmacologists for further study. Once the efficacy of the flora in treating the Herpes is scientifically established the popularization of these remedies can be recommended in Indian health care system for wider application.

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