

## Ethnobotanical Studies of Few Under-utilized Plants of Sheohar Distric, Bihar

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### ABSTRACT

There are numerous plants having rich ethnobotanical & medicinal values present in Sheohar district located in northern part of Bihar, are under-utilized due to lack of adequate information and proper investigation.

In this paper an endeavor has been made to study the ethnobotanical significance and classification of four underrated plants. LINACEAE (Common name Tisi), VITACEAE (Common name Harjora), COMBRETACEAE (Common name Maltilata) and MOLLUGINACEAE (Common name Dhupia) are having rich ethnobotanical and medicinal values. Various parts of these plants are being used to cure many ailments by the locals.

**Keywords:** - *Vitaceae, Combretaceae, Linaceae, Molluginaceae*

### INTRODUCTION

The plants were collected in the flowering state from various parts of Sheohar district. The observation related to plant habit, habitat, length of plant, phyllotaxy of leaves, colour of flowers and their mode of arrangement were recorded. An attempt was made to identify the plants from fresh specimen in the laboratory with standard floras. It was then followed by medicinal uses. Local people were interacted in order to know the ethnobotanical use of plants.

### DESCRIPTION

#### 1. LINACEAE (Linum Linn.)

*L. usitatissimum* Linn. Sp.Pl. 277.1753; FBI. 1: 410; BBO. 1:150.

An erect, much-branched, annual herb, 30-40 cm tall, with tap-root stock. Stems: terete, solid, woody below and herbaceous young shoot, with erect branches. Leaves: 2 – 3 × 0.2 – 0.4 cm alternate, rotate, simple, exstipulate, linear – lanceolate, entire, acute, and 3 – nerved at base. Flowers: 2 cm across, blue solitary in leaf – axil. Sepals: 5. Petals: 5.

Stamens: 5, epipetalous. Ovaries: 5 – carpellary and – locular; locule: 2- ovuled on axile placentae. Capsule: 1 cm across, septicidal.

Commonly grown as oil-yielding plant on the edges of wheat crops and occasionally found growing as an escape in waste place.

**Common Name:** Tisi

**Fls. & frs.:** January – March;

**Ethnobotanical uses:** The oil cakes are served to milching cattle for the cause of lactation. The infusion of dried seeds is laxative and used in the treatment of constipation. The decoction of flowers are cardiac tonic and taken in the treatment of heart problems. The infusion of dried roots is used in the treatment of colic pains. The infusions of entire dried plants are used in the treatment of dysentery among cattle.

#### 2. VITACEAE (Cissus)

*C. japonica* (Thunb.) Gagnep. in Not. Syst. 1:349.1911; var. *mollis* (Wall. Ex. Laws) Momiyama in Hara, Fl. E. Himal. 199. 1966.

A much-branched, annual to perennial climber, with long quadrangular internodes. Leaves: pedately 3 – to 5-foliolate; leaflets: crenate-serrate, acute; tendril leaf-opposed. Flowers: 2mm across, bisexual, tetramerous, in paniculate, umbellate cymes. Sepals and petals: pubescent outsides. Ovaries: 2-carpellary and-locular; locule: 2-ovuled on axile placentae. Berries 5-7 mm across, 2 to 4-seeded, with trigonous, tubercled seeds.

Commonly found growing on fencing walls of fruit – orchards and houses.

**Common Name:** Harjora

**Fls. & Frs:** May – August;

**Ethnobotanical uses:** The decoctions of roots are applied externally in joint pains. The juices of fresh young stems are used in the treatment of irregular menstruation among women and scurvy among older person. It contains calcium oxalate and ascorbic acid. The leaves and young shoots are stomachic which are used in the treatment of indigestion.

### 3. COMBRETACEAE (*Quisqualis* Linn.)

*Q. Indica* Linn. Sp. Pl. 556.1762; Bailey, Man cult. Pl. 724; Bor & Raiz. 178, Pl. 66.BBO. 3:359 Maheswari, Fl. Del.157.1963.

A much branched twiner, with long internodes. Leaves: 5-9.5 × 2 – 4.5 cm, opposite, superposed, elliptic lanceolate, entire, acuminate, rounded and 1-nerved at base. Flowers 2-2.5 cm across, bracteates, tubular with salver-shaped lobes; hypanthium 7 cm long formed by the fusion of calyx and corolla as one unit, in corymbose spikes; Sepals: 5, gamosepalous. Petals : 5, deciduous, gamopetalous. Stamens : 5+ 5, diplostemonous i.e. larger opposite the petals and shorter opposite the sepals, epipetalous; anther dithecous, deep brown, dorsifixed; filaments : linear, white-Ovaries : 5-carpelaries and unilocular, inferior ; locule : 2-ovuled on axile placentae; style : linear embedded up to 3/4th of hypanthium; stigma ; green and gets dilated at the tip.

Commonly grown as an ornamental plant in the kitchen gardens particularly on the terrace of houses. The colour of corolla changes with ageing i.e. first white which changed to deep red.

**Common Name:** Maltilata

**Fls. & Frs. :** August – Nov;

**Ethnobotanical uses:** The paste of roots is applied externally in joint pains. The infusion of leaves is applied externally in cutaneous affection. The decoction of flowers is used in the treatment of kidney problems and promotes urination in the patients.

### 4. MOLLUGINACEAE (*Mullugo* Linn.)

*M. pentaphylla* Linn. Sp. Pl. (ed.1) : 89, 1753; FUGP 1: 387; Backer in Fl. Males. 4(3) : 268, 1951.

An erect to diffused slender annual herb, 7-30 cm high. Stems: quadrangular, dichotomously branched. Leaves: 1.8 -3.25 × 0.7 cm, linear – lanceolate, spatulate or obovate, acute or apiculate, in whorls of 2- to 7- at a node. Flowers: green, in terminal paniced cymes. Capsules: sub-globose, thin-walled. Seeds: numerous, reni-form, bright chestnut in colour, distinctly granulate.

Commonly found growing on the walls of ruins and on the edges of orchards and pasture-grounds, often hidden amongst grasses.

**Common Name:** Dhupia

**Fls. & Frs.:** September – December;

**Ethnobotanical uses:** The pastes of entire plants are applied externally in arthritis. The infusions of dried roots are taken in constipation. The paste of entire plants is applied externally in joint pains. The infusion of dried roots is taken in gastric problems and colic pains. The infusion of dried plant is used by women which promote menstrual discharge.

### Conclusion

The current study paper presents overview of four aforementioned underutilized plants in Sheohar district having high medicinal and ethnobotanical importance. Due to lack of information and proper investigation these plants are on the verge of extinction. This help to extend the traditional medicinal use of these plants and its preservation.

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