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Hulba (*Trigonella foenum graecum* Linn.): the blessed medicinal herb of Unani System of Medicine

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ABSTRACT

Hulba is one of the oldest known medicinal herbs in the recorded history. According to Unani Physicians *Hulba* has dafae tashannuj, mudirre haiz, mulattif muhallil and munzij properties. The drug is globally distributed, easy available and one of the proved analgesics. It is pharmacologically proved for anti-inflammatory, analgesics diuretic and immunomodulatory activities. These properties are attributed to the presence of saponins, tannins and flavonoids. To gather the literary description regarding the *Hulba*, a potent Unani herbal drugs. For getting reference for *Hulba*, author search the classical Unani Text and the research done on the said herb. Author also uses Google Search, Google Scholar and Google Search pdf as search engine to get the information from internet.

Keywords: Hulba; *Trigonella foenum graecum* Linn; Unani medicine, Herb, Tibb, AYUSH.

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INTRODUCTION

Hulba is an aromatic annual herb.¹ It is one of the herbs whose seeds and leaves are used not only as food but also an ingredient in traditional medicines.² It has been cultivated as a condiment and a pot herb.¹ Prophet Mohammed (PBUH) said ‘get cure from *hulba* and if you know the value of *hulba* you pay its weight in gold.’³

Historical background:

Hulba is one of the oldest known medicinal herbs in the recorded history, dating back to the ancient Egyptians,⁴ Romans and Greeks for medicinal and culinary purposes.^{4,5} The Egyptian Ebers Papyrus (c.1500 BCE) records a prescription for burns that includes *hulba* seeds. It was also used to induce childbirth.⁶ Applications of fenugreek were documented in ancient Egypt, where it was used in incense and to embalm mummies.⁷ Buqrat considered *hulba* as a valuable soothing herb where as Descuridus recommended it as a remedy for all types of gynecological problems including infections of the uterus and inflammation of the genitals.⁶

In the past, *hulba* was considered a cure for many ailments and was the major ingredients in the Lydia pinkhams vegetable compound, a popular 19th century patent medicine used for menstrual problems.⁶

Family	:	<i>Leguminosae</i> ^{2,8} or <i>Fabaceae</i> ⁹
Botanical name	:	<i>Trigonella foenum graecum</i> Linn. ¹
Synonym	:	Greek hay, Birds foot, <i>Trigonella</i> ¹⁰
Common name	:	Methi, ¹¹ <i>Hulba</i> ⁸
Arabic	:	Shamliyyat, Fareequa, Qamussaur, Qamul unz ^{11,12}
Urdu	:	<i>Methi</i> ¹³
Unani	:	<i>Tails, Fareequa, Shaleen, Teelas, Tilas,</i> ¹² <i>Shamlita</i> ¹¹
Sanskrit	:	Methica, Chandrica ¹
Bengali	:	Methi, Methuka ¹
Marathi	:	Methi ¹
Gujrati	:	Methi, Methini ¹
Telugu	:	Mentulu ¹
Tamil	:	Vendayam ¹
Malayalam	:	Venthiam ¹
Latin	:	Semen trigonelle ¹³
French	:	Graine de fenugrec ¹³

Mahiyat: It is an erect annual herb. It has compound leaves; flowers are yellowish white.¹² It has got somewhat bitter taste and strong aroma. *Hulba* refers to “*Tukhrne hulba*” or *Methi Dana*, which are yellowish in color.¹⁴ Leaves of the plants are known as Barge Hulba.¹⁵

Mizaj (Temperament):

Dry 1, Hot 1¹⁶ (*Garam 1, Khushk 1*)

Dry 2, Hot 2^{11, 17} (*Garam 2, Khushk 2*)

Nafae Khas: Munzij, *Muhallil, bah, Munaquqiae seena, Mudir boul wa haiz.*¹⁷

ACTIONS (AF'AL)

Mudir boul wa haiz,¹⁸ Muqavvie bah¹⁷, Mudirre labn¹⁵, Muzayyade labn,¹⁵ Muhalli¹² Dafaedard,^{12,15} Munzij,^{17,19}, Mulayyan^{17,19}, Mulattif,¹² Hazim³, Kasire riyah³, Muhasine laun,¹⁶ Mushtahi,¹⁵ Muqavvie badan,³ Muqavvie daM,^{12,20} Muqavvie qalb, Mukhrije balgham,^{12,15} Muqavvie riya,¹⁷ Mulayyane taba,¹⁵ Dafaed humma^{21,22} Dafaed bafa.¹³

USES (ISTEMAL)

Warme rehm,^{12,14} Darde rehm,^{1,13,14,22,23,24} Fame rehm ka band hona^{13,14,18} Usre habl,¹³ Sakhtiye rehm,¹⁸ Ayyam ka ruk jana,¹ Haiz ka kam aana,¹⁴ sara,¹² isterkha,¹² Amraze sha'ar,¹⁴ Bafa,^{1,25,26} Amraze chashm,¹ Sulfa,^{1,12,13,14,23} Darde pahu,¹³ Dama,^{1,13,14,24} Halaq ki soozish,¹ Saans ki ghutan,¹ Suale kohna,¹ Mukhrije balghame seena,¹³ Darde seene wa zakhme seena,²⁴ Zofe ishtehar,¹ Bad hazmi,¹ Aanton ki jalan,¹ Quruhe ineda,^{1,24} Qabz,²⁷ Riyahi,^{1,13} Istisqua,^{1,18} Bawaseer,^{12,13,14,27} Darde jigar,¹³ Warme tihal wa jigar,²⁴ Azme jigar wa tihal, Sozish aurda¹ Masaneeki osardi,^{13,14,18} Taqteerul boul,^{1,13,14,18} Darde push!,^{13,18} Muhsine bun,¹³ Kalaf²⁵ Bums^{3,14,25,28} Khaish,¹ Chavq,¹ Dumbul²⁴ Amraze barda,¹⁴ Awram ;aade bat gham Batina¹⁴, amraze Safravi,¹⁶ Inhidare rutubate ghaliza,¹⁶ Dard wa warm,¹ Darde pusht^{3,18} Darde uzn,²⁵ Zofe badan,¹ Qillate dam,^{1,26} Zofe asab^{1,22} Hummayat,¹ Kasah,¹ niqras.¹⁴

THERAPEUTIC USES

Az'ae Tanasuliya:

Safoof: 4grams Safoof hulba with water is useful in relieving usre tams.¹⁴

Joshanda: Joshanda hulba is useful in usre tams.¹⁹ It stimulates milk flow in breast feeding mothers.⁵ Joshanda with majeeth is used in amenorrhea and to regularize the menses.(Ibne masoya).¹³ It can be used in usre habl which it is due to khushkiaehrn.(Ibne sina).¹³ It is used as a douche for excessive vaginal discharge.⁵ Infusion of the aerial parts and sprouted seeds are used for abdominal cramps, labor and menstrual pain.¹³

Abzan: Its abzan is useful in darde rehm and fame rehm ka band hona (Cervical Stenosis). (Desquidus).^{13,25}

Humul: Humid made with murghabi ki charbi is used in fame rehm ki sakhti (Desquidoos).¹³ In china seeds are used as a pessary to treat carcinoma of the cervix.⁵ A humul made with breast milk or powdered salt or mazu can be used.²⁹

Farzaja: Farzaja with kaaz ki charbi is useful in sailanur rehm.³⁰

Douch: It is used as a douche for excessive vaginal discharge)³¹

Roghan: Roghane badam or roghane gui with kunjad is beneficial in all types of uterine pain.²⁹

OTHER USES IN DIFFERENT DOSES FORMS & DISEASES

Amraze asab: Joshanda: It is useful in zofe asab.²⁴

Amraze Tanaffus:

Joshanda: Joshanda with honey is effective in *sual*. It removes *balghame lateef* from *seena*, it can be given in amraze halaq, and in difficulty in breathing.(Ibne sina)^{13,24}

Sharbat: Sharbat with honey is used in seene ke zakhm wa dard.¹

A paste made with fenugreek and wax used in chest pain as a local application.¹ Internally as mucilage in catarrh of respiratory passages and the powder taken by tablespoonful several times a day, as a roborant.²³

Arnraze hazima:

Joshanda: Joshanda with *kanji* acts as a laxative when taken on empty stomach. (Ibne masoya)¹³ With honey it is used in *bawaseer*, it cleanses intestine, and relieves spasm or colicky pain. It is also useful in stomach upset, *zofe meda*, *quruhe amaa*, *ishaal*, and *pechish*.²⁵ Joshanda made with vinegar is useful in *istasqua*.¹⁸

Huqna: It is useful in colic or maroor.²⁴ The flower is used, in rectal injections for diarrhea, dysentery, bilious and inflammatory colics.¹⁶

Safoof: *Safoofe hulba* cooked with *ma'ul asl* acts as a *mulaiyane shikam* and *mulayyane auram*.¹³ It helps to restore a dulled sense of taste.⁵ It can be taken with milk in bleeding piles.¹⁴ Mucilage has a soothing effect on inflamed mucus membrane and used as a mouth wash or gargle, sore throat and mouth ulcers.⁵ With water it is used in diarrhea and dysentery. With *Gule surkh* and sugar it is given in dysentery.¹ The seeds freshens bad breath. (Ibne masoya).¹³

Luab: It is used in intestinal worms.¹ Aqueous extracts of fenugreek seeds have been shown to stimulate the uterus and intestines and to have a positive chronotropic effect on heart.²³

Roghan: With roghane gul it is used in *warme maqad*²⁵ The flower is recommended for aphtha, chapping, haemorrhoidal tumours and Amraze *jild*.³²

Roghan: Roghane methi is useful for hair growth, dandruff, and in reducing the scar marks. With roghane gul it is used in kalaf, and burns.¹ It acts as a skin softener, and emollient.⁵

Lu'ab: Lu'abe methi with roghane gul is used in burns, cracked hands and feet, and for dandruff (Ibne sina).¹³

Poultice: A poultice can be employed for cosmetic purposes as well as in various skin inflammatory conditions such as to resolve boils, abscesses, cellulitis, ulcers, furuncles, caruncle, phlegmons, whitlows, swollen glands, wounds, tumours, eczema and Adurations.^{2,5,16,23,32}

Amraze warmi:

Joshanda: joshanda is effective in warme ahsha²⁵

Zimad: In warme tihal it can be applied as zimad.²⁵

Safoof: Its safoof with borae armani is used in warme tihal Despridu¹³ It is also used in aurame bcilghami wa saudavi.²⁵

Amraze aam: It has got properties like cod liver Oil¹ Fresh fenugreek is a good source of iron (Hauz).¹³

Lu'ab: It is useful in fever.¹

DOSAGE (MIQDAR)

Internally: 6 grams or more.²⁴

Externally: 50 grams with 0.4 liters of water.²³

Adverse effect (Muzir): For hot temperament people, and for ovaries.^{14,24}

CORRECTIVE (MUSLEH)

Anisoon, anare maikhush, barge kasni, sikanjabeen, sard ashिया.^{14,24}

SUBSTITUTE (BADAL)

Barg methi, Aklilul mulk.¹⁴

IMPORTANT COMPOUND FORMULATIONS

Marhame dakhliyun,¹¹ Habbe khabsul hadeed,¹¹ Zimade teene salabat,³³ Majoone murauhul arwah.²⁵

ETHNO BOTANICAL DESCRIPTION

It is an aromatic annual herb widely cultivated in many parts of India. It has compound leaves; flowers are white or yellowish white. Seeds are brownish yellow with a deep groove across one corner giving the seeds a hooked appearance. Its pods are 58cms long,³⁴ It is native to the area from the Eastern Mediterranean to the central Asia and Ethiopia.⁷ It is found in Kashmir, Punjab and upper Gangetic plains. In India it is raised as a cold season crop. The crop is sown in all types of soils but does best on loamy soils.³⁴

Two fairly distinct types of plants are recognized the dwarf type, grown for culinary purposes and the tall growing type known as Metha in Punjab grown for fodder. Leaves are pirmate, 3foliate; leaflets 2.0-2.5 cm long, flowers white or yellowish white, 12 axially, pods 315cm

long.³⁴ Seeds are very hard, light brown, reddish to yellowish grey seeds are rhombic or flat diamond shaped, irregularly rounded, 35 mm long and 23 mm wide and thick. The somewhat sunken light colored hilum is situated at about the middle of one of the long narrow sides and from it runs a flat diagonal groove which divides the seeds into two unequal halves, the radical is in the smaller half and cotyledons of the curved embryo are located in the larger half. When placed in water seeds swell up rapidly.³⁵

Odor: Characteristic and spicy.³⁴

Taste: Somewhat bitter, and on chewing mucilaginous.³⁴

Origin: The drug comes exclusively from cultivated plants and main suppliers originate in India, Morocco, China and Turkey.³⁴ India is the leading fenugreek producing country in the world.³⁶

Propagation: *Hulba* is propagated by seeds. It is grown either pure or as a mixture with other crop.

Parts used: Whole plant.

Route: Internally as well as externally.²³

Contraindications: None Known.²³



(A) Seeds of Hulba



(B) Leaves with a flower of Hulba

Interaction with other remedies: Not known.²³

Chemical composition:

The seeds contain 30% proteins, 68% fatty oil with a foetid odour and bitter taste. The unsaponifiable matter contains a location stimulating factor.³⁴ It also contains fibrous and starchy material, and flavonoids. The furostanol glycosides taste bitter and are presumably the bitter principle of the drug.²³ Besides that other constituents are dioscin, cystine, choline, aspartic acid, diosgenin, fenugrekin, glutamic acid, glycin, cystine, choline, aspartic acid, diosgenin, fenugrekin, glutamic acid, glycin, histidine, trigifoenoside AG, yamogenine, mucilage, tannic acid, albumin acid, steroid, volatile oil, minerals, alkaloids, Flavonoids, fixed oil, vitamin A,B,C, moisture, fat fibre, calcium, Fe, Na, K, Caotene, thiamine, riboflavin, nicotinic acid, folic acid. Germinating seeds contain also pyridoxine, cyanocobalamine, biotin, viamicn C.^{1,34}

ACTIONS

Aromatic,³⁴ Flavouring agent,³² Carminative,³⁴ tonic,^{5,34} Galactogogue,^{2,7,34} Antibiotic activity,¹⁶ Hypoglycemic,^{16,23} Cardiotonic,^{7,16,23} Antipellegral,²³ Emenogogue,⁷ Anti-inflammatory,³² Aphrodisiac,⁷ Nutritive,¹ stimulant,¹ expectoran,^{1,7} Nutritive,¹ Stimulant,¹ Demulcent,¹ expectrant,¹ antipyretic,^{1,7} rejuvenative,¹ Anti-ulcer activity,⁷ immunomodulatory activity,⁷ resolvent,^{7,32} digestive emmolient,³² antifungal.¹⁰

ETHNOBOTANICAL USES

Fenugreek is used in gout, neurosis, swollen glands tumors sores, various skin irritations,² fever, dysentery, heart diseases. Boils, ulcers, intestinal inflammation.¹⁶ It is also used in inflammatory tumors as carbuncles, phlegmoans, boils, inflamed indurations, eczema, catarrh of upper respiratory tract, diabetes,³² whitlows.³² The drug is an infrequent component of prepared gastrointestinal, bronchial remedies and cholagogues.²³

PHARMACOLOGICAL STUDIES

Anti-inflammatory effect:

- N. M. Ammar and his coworkers in their study reported that the petroleum ether and the aqueous methanolic extract of fenugreek powder in a dose of 200 mg/kg in white female albino rats exhibited a significant reduction in the volume of inflammation with variable degrees.
- The same active dose also inhibited prostaglandins E2 levels in a range of 55- 64%.
- This anti-inflammatory activity may be attributed to the presence of the flavonoids and saponins bioactive compounds and different unsaturated acids of linoleic and linolenic acid series. It was reported previously that essential fatty acids may have an anti-inflammatory therapeutic activity.
- Dihomo-gamma linolenic acid (DGLA) competes with arachidonate for oxidative enzymes, thereby reducing production of cyclooxygenase products derived from arachidonate. DGLA cannot be converted to inflammatory leukotrien by 5 lipoxygenase, instead it is converted to 15-hydroxy-DGLA, which can inhibit 5-lipoxygenase activity.³⁶

Analgesic effect:

A study done by Kapil G. and his coworkers in rats, have reported that the, extracts of TFG seeds were administered 1 hour prior to pain induction in dose range of 50, 100 and 200mg/kg orally, showed that the animals reaction time were significantly increased. Ethanol extract might be present more saponins, tannins and flavonoids which are responsible for showing analgesic potential of TFG seeds.³⁷

Anti-bacterial and anti-fungal properties:

Fatty oil and unsaponifiable matter of its seeds were found to possess antibacterial and antifungal properties. The aqueous and ethanol extracts of its seeds showed significant antibacterial activity against organism tested. It has insect repellent properties. The dried mucilage has remarkable swelling properties and may find application as an adjuvant in pharmaceutical preparation,¹⁶ as a tablet, disintegrator.³⁴ Flavonoids present in the extracts were considered to be responsible for this activity.¹⁰

Anti-cancer property:

Ashwini Prabhu and M. Krishnamurthy in their study reported that ethanolic extract of *Trigonella foenum graecum* leaves viz., 100, 200 and 400mg/kg body weight *per oral* for ten consecutive days in Line bred female Swiss albino mice showed anticancer activity. Presence of

phytochemicals in Fenugreek leaf extract might have played a possible role in the mediation of antineoplastic activity of the extract.²⁷

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