HULBAH (TRIGONELLA FOENUM-GRAECUM): A REVIEW

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Abstract: The Hulbah, Trigonella foenum-graecum of family Legumenaceae which is commonly known as Methi, in traditional system of medicine including Unani Medicine. Hulbah is an annual herb, 1-2 fit long contains the seed in long, narrow sickle shape pods called Tukhme Hulbah. Hulba leaves are yellowish green, petiolate, usually 2-5cm long called Burge Hulbah. The Hulbah contains alkaloids e.g. trimethylamine, neurin, trigonelline, choline, gentianine, carpanine. amino acids e.g. Isoleucine, 4-Hydroxyisoleucine, Histidine, Leucine, lysine, valine tryptophan, argenienis, tyrosine, cystine, threonine, diosgenin, smilagenin, neotigogenin, gitogeninne. graecunins, fenugrin, fenugreekine, trigofoenosides. neogitogenin, yuccagenin, saponaretin, gum, neutral detergent, fiber, lipids, Vitamins, minerals. 28% mucilage; 22 % proteins; 5 % bitter fixed oil. Therapeutic uses of Hulbah (Trigonella foenum-graecum), mentioned in the Unani Medicine are zof-e-medha (Indigestion), nafakh-e-shikam (flatulence), qulanj, waj-ul-mafasil (arthritis), waj-ul-qutn (backache), paralysis. Furthermore, it is also used for headache, nazla (cough), asthma, skin eruption, diabetes mellitus, epilepsy, hyperlipidemia etc. The present article reviews the pharmacological actions and therapeutic uses of Hulbah (Trigonella foenum-graecum) present in Unani literature supported with the available clinical and animal studies.

Introduction: Hulbah is an Arabic word and applied for the common name ‘Methi’. Its scientific name is Trigonella foenum-gracum 1, 2, 3, 4 belongs to the family Legumenaceae 5. The two fairly separate types of plants are recognized; the dwarf type grown for cooking purpose and tall-growing type known as Methi in Punjab which are grown for fodder. The drug Barge Hulbah is the leaf of Trigonella foenum graecum and the name comes from “Foenum- grecum” meaning Greek Hay.

Keywords: Methi, Trigonella foenum-graecum, Hulbah, Unani Medicine

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The name of genus “Trigonella” is derived from the Greek name denoting “three angled” from the form of its corolla. 34 The historical references to these plants are also found in some of the oldest religious and medical texts. In the Islamic literature, it is mentioned as a Prophetic Medicine and Prophet Muhammad Mohammad (SAW) mentioned its therapeutic efficacy and potential of cure. It is stated in books of Hadith that Prophet Muhammad (SAW), said, ”Get cure from Methi (Hulbah)” 6 (Ibn-al-Qayyam) Therefore Hulbah has occupied special place for its medicinal value since centuries in the Middle East and Southeast Asia. It has been traditionally used in the treatment of a number of ailments such as respiratory diseases, stomach problems, intestinal disorder, bladder and kidney diseases, liver disorder, spleen disorder, circulatory and immune system problem and for general...
overall well-being. In the present review, an attempt has been made to cover the major therapeutic uses of Hulbah mentioned in Unani system of medicine and supported with the recent studies on *Trigonella foenum-graecum* in human and animal models. Brief introduction of Unani system of medicine.

Unani system of medicine was originated in Greece and developed by Arabs into an elaborated medical science based on the framework of teachings of great Greek Philosopher & Physician Buqrat (Hippocrates) and Jalinoos (Galen). Unani System of Medicine was introduced in India by Arabs in 13th Century. Afterward its holistic approach is utilized and adopted by thousands of people. Unani System of Medicine is applied for almost all diseases and provide traditional approach for their prevention and cure.

**Vernacular names:**

Aasami: Mithiguti
Arabic: Hulba,
Bengali: Meetu
Chinese: Hu Lu Ba
Dutch: Fenegrick
English: Bird foot, Greek hayseed
French: Fenugreek
German: Griechischten
Hindi: Methi, Kasorimethi
Italian: Fieno Greco
Kannada: Menta
Malayalam: Vethian
Marathi: Methi
Punjabi: Methiri
Persian: Shambelile
Sanskrit: Methika
Spanish: Alnolva
Swedish: Bockhoransklover
Tamil: Vandayam
Telgu: Methikura

**Scientific classifications:**

Kingdom: Plantae
Sub-kingdom: Tracheobionta
Super-kingdom: Spermatophyta
Division: Magnoliophyta
Class: Magnoliopsida
Sub-class: Rosidae
Order: Fabales
Group: Dicot
Duration: Annual
Family: Leguminosae/Fabaceae
Genus: Trigonella
Species: *T. foenum-graecum* 11, 12

**Plant description:** Hulba is an important medicinal crop of India which is found in North India and mostly cultivated in Panjab, Himachal Pradesh, Bihar, and Kashmir. In India it is raised as a cold season crop. 5, 9, 13, 14 The plant is an annual herb, 1-2 fit long contains the seed in long, narrow sickle shape pods, leaves and flowers. The seed are removed by thrashing when the pods attain ripe stage. Hulba leaves are yellowish green, petiolate, usually 2-5cm long but sometimes up to 10 cm, ovate, deeply divided into five or occasionally seven segments, each with a coarsely crenate margin and obtuse apex; both surfaces downy and the midrib prominent on the lower surface. Leaflets are 2.0 to 2.5cm long, oblanceolate along obscurely dentate; flowers are white or yellowish white in colour. Seeds are rhomboidal in shape and with a deep yellow colour compressed, truncate at both ends, 3.0-7.0 mm in length, 2.8-4.0 mm in breadth and 2.2-2.5 mm in thickness. The testa is smooth and is bitter pungent odour and agreeable, difficult to break 15, 16, 17

**Chemical constituent:**

**Alkaloides:** Trimethylamine, Neurin, Trigonelline, Choline, Gentianine, Carpaine and Betain.

**Amino acids:** Isoleucine, 4Hydroxyisoleucine, Histidine, Leucine, lysine, Valine Ltryptophan,
Argeniens, tyrosine, cystine, Yamogenin, Threoin, diosgenin, smilagenin, sarsasapogenin, tigogenin, neotigogenin, gitogeninne.

**Saponins:** Graecunins, fenugrin B, fenugreekine, trigofoenosides A-G.

**Steroidal sapinog:** neogitogenin, yuccagenin, saponaretin.

**Flavonoids:** Quercetin, rutin, vetixin isovetixin.

**Fibers:** Gum, neutral detergent, fiber.

**Other:** Coumarin, lipids, Vitamins, minerals 28% mucilage; 22% proteins; 5% of a stronger swelling, bitter fixed oil.

**Temperament (Mizaj):**
Hot & Dry 2 C; Hot 2 & Dry 1 C; Hot & Dry 1 C; Hot & Dry 3 C; and Hot & Dry without degree

**Therapeutic Dosage (Miqdar-e-Khurak):**
3-5 masha, 4-6 gm

**Pharmacological Actions:**

- **Munzij** (Concoctive) 1, 22, 23, 25, 26
- **Jali** (Detergent) 21, 22, 23
- **Musakkine Alam** (Analgesic) 1, 4, 25, 21, 22, 23, 24
- **Mudirr-e-Haiz** (Emmenagogues) 2, 4, 25, 26, 22
- **Mudirr-e-Baul** (Diuretic) 2, 4, 25, 26, 22
- **Muqavvi-e-Medah** (Stomachic) 22, 23
- **Mohallil-e-Waram** (Anti-inflammatory) 1, 2, 3, 4, 26, 22, 23
- **Mulayynn-e-Shikam** (Laxative) 1, 2, 4, 25, 26, 22, 23
- **Kasire-Riyah** (Carminative) 2, 25, 22, 23, 24
- **Mosakhhin** (Anaesthetic) 21
- **Muharrrik** (stimulant) 4, 24
- **Antispasmodic Activity** 24
- **Antidiabetic Activity** 24
- **Analgesic Activity** 1, 4, 25, 21, 22, 23, 24
- **Nephroprotective** 20
- **Neuroprotective Activity** 21, 22, 23

**Muqavvi-e-Shar** (Hair tonic) 25, 11
**Munaffis-e-Balgham** (Expectorant) 2, 4, 25, 22, 23, 24
**Mulattif** (Demulcent) 4, 24
**Muallid-e-Dam** 4
**Musaffi-e-Khoon** (Blood purifier) 26
**Muqavvi-e-Badan** (General body tonic) 4, 25
**Muqavvi-e-Bah** (Aphrodisiac) 4, 22
**Anti-bacterial Activity** 31
**Anti-oxidant Activity** 31
**Anti-fungal Activity** 33
**Anti-hyperlipidemic Activity** 30
**Anti-cancerous Activity** 32

**Therapeutic Uses:**
Hulbah is mostly used in Diabetes, Ihtebas-e-Baul wa Haiz (Ammenorrhoea), Istisqaa (ascites), Yerqaan (Jaundice), Zof-e-Meda (Gastric upset), Nafakh-e-Shikam (Flatulence), Qulanj (Intestinal colic), Bawaseer (Piles,) Qillatud Dam (Anemia) Izm-e-Tehal wa Kabid (Hepatomegaly and splenomegaly), Warm-e—Rahem (Endometritis), Inteshar-e-Shar, Wajaul-qutm (Backache), Falij (Paralysis) Mirgy (Epilepsy) Taqteerul Baul (Incontinence) 1, 4, 24. It is also used in Nazla (common cold), Suaal (cough), Asthma and also used in Dard-e-Chashm (Ophthalmgia). 21 It is also used in skin eruption & Fasad-e-Khoon (Bahaq, Bars) 4, 26.

An infusion of the leaves is used as a gargle for recurrent mouth ulcers. A gargle made from the seeds is best for ordinary sore throat. Fresh Fenugreek leaves paste applied over the scalp regularly before bath helps hair grow, preserves natural color, keeps hair silky and also cures dandruff. Fenugreek seeds made in gruel if given to nursing mothers increases the flow of milk. 18 Qasim bin Abdur Rahman narrated that the Prophet Mohammad (SAW) said, "Mix fenugreek in your medicines and Get cure from Methi (Hulba).” (Ibn-al-Qayyim) It is also documented in the collection of Hadith that the Prophet Mohammad’s (SAW) visited one of his blessed companions, Sa’ad bin Abi Waqqass, who had contracted an illness during his stay in Mecca, and then requested that a
physician examine him. After a diagnosis was made, the Prophet (SAW) said, "He will be fine. Give him the soup of a decoction of dates and fenugreek (Hulbah)."

**Muzir Asraat (Adverse effects):**
Hulbah is harmful for testis (*unsiaine*). Hulbah is also harmful for people of hot temperament. It is harmful if taken empty stomach in large quantity and regular usage causes headache and nausea and it is also harmful for Pregnant Women.

**Musleh (Corrective):**
Palak, Khurfa, Sikanjabeen

**Badal (Substitute):**
Bizre Katan, Ikililul Muluk.

**Murakkabat (Formulations) in Unani Medicine:**

**CONCLUSION:** Hulba (*Trigonella foeman-gracum*) being a prophetic medicine has been studied and tested vigorously esp for its pharmacological actions of the seeds & leaves and has been proven for its usage in various systemic diseases. Hulba (*Trigonella foeman-gracum*) is widely acceptable due to its antibacterial activity, antidiabetic activity, anti carcinogenic, antioxidant activity, analgesic activity, antifungal activity, antifertility effect, immunomodulater, hepatoprotective activity, nephroprotective & neuroprotective activity, and anti hyperlipidemic activity.

This drug is used in traditional System of medicine since long time and reference goes to Hippocrates and Dioscorides. Now it has been proved through various clinical and animal studies that it can be used in a number of diseases.

So, present paper particularly provides pharmacological actions and uses of Hulba (*Trigonella foeman-gracum*) which are mentioned in Unani system of medicine and proven through various studies.

**CONFLICTS OF INTEREST:** None declared.

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