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Review

## ***Lavandula stoechas* linn: Scrutiny of phytoconstituents, ethno medicinal and pharmacological ramification action.**

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### Abstract

*Lavandula stoechas* linn (Ustukhuddus) act as a recovery mediator from earliest period. Famous Unani physicians “Jalinus” and “Desqueredus” located numerous therapeutic potentials of the plant. They encouraged the use of this drug, especially in cerebral disorders. *Lavandula stoechas* Linn belongs to “Labiatae” family. This is an evergreen plant generally grows upto 30-100 cm in height. The leaves are 1-4 cm long, greyish and to mentose. This plant is crimson to purple in color grows in end of spring and the early summer season. The essential oils were separated by hydro distillation and then analyzed using GC and GCMS. Various researches on its impact on nervous system had been explored by researchers which can also additionally attribute to its bioactive compounds like; glycosides, steroids, phenols etc. Many medical researchers had been proved that Ustukhuddus is drastically beneficial in numerous neurological problems inclusive of anxiety, convulsions, cerebral ischemia, depression. The current review article provides detailed knowledge on the medicinal importance and therapeutic value of Ustukhuddus. The data was collected using various data basis such as Google Scholar, Pub med, Sci Hub.



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## Introduction

*Lavandula stoechas* Linn (Ustukhuddus) is one of the vital plants of the circle of relatives "Lamiaceae". Fragrance found in this herb. Its leaves be similar to SA'tar Farsi. However, lighter and extended in connection. The branches be similar to *Cuscuta reflexa*. Flowers are grey blue in color, determined in cluster and odor like camphor, taste is sour (1). This is an perennial shrub normally grows to 30-100 cm tall leaves are 1-4 cm long, species are extensively selected in the Mediterranean vicinity and it can be cultivated in France, Italy, Spain it is far-off because of *Stoechas* institution of island at the south coast of Gaul close to Marseilles. Desquredus (Dioscorides) (40 – 90 A.D.) diagnosed laxative and inspiring potential of Ustukhuddus and advocate it to apply as decoction in chest illnesses. "Jalinus" (Galen) introduced this plant in the list of antidote to apply in intoxication. Additionally, neuro-physicians protected this plant into the formulation of these drugs which have been utilized in the remedy of poisoning. In Middle age it changed into utilized in mixture with many different herbs together with valerian, wormwood, and fennel and so forth in England. John Gerard. A doctor advocated that this drug can be used in Epilepsy, palpitation, migraine, Parkinson disease, giddiness migraine, panic attack, but few physician recommended that the plant life of "Lavender" are a lot powerful in a headache and related all illnesses predispose from bloodless temperament consequently. It changed into jumbled in all composition which have been made towards a continual headache and apoplexy(2). Numerous researches raised the pharmacological effects of "*Lavandula stoechas* extract and L", vital oils, for its antioxidant, anti-inflammatory, sedative, insecticidal, antibacterial, antifungal property. The essential oils of "*Lavandula pedunculata* (Miller)Cav" Were studied after they were gathered in North and Central Portugal. Hydro distillation was used to separate the essential oils, which were then

evaluated using GC and GC/MS. The antifungal activity of essential oils and their primary constituents was evaluated using the minimal-inhibitory concentration (MIC) and minimal-lethal concentration (MLC) against the different strain of fungi occupied in candidiasis, dermatophytosis, and aspergillosis (3). This oils had a significant percentage of oxygenated monoterpenes, with the primary constituents being 1,8-cineole (2.4-55.5%), fanchonette (1.3-59.7%) camphor (1.3-59.7%).(3.6-48.0 percent).These were distinguished by statistical analysis.

## Scientific classification

Species	<i>L. stoechas</i>
Family	Labiatae
Class	Magnoliopsida
Kingdom	Plantae
Order	Lamiales
Division	Magnoliophyta
Genus	<i>Lavandula</i>
Binomial name	<i>lavandula stoechas</i> linn(4)

## Vernacular names

Arabic:	Aans-ul-Arwah, Mumsik –ul- Arwah
Unani:	Hafiz-ul-Arwah.
Urdu:	Ustukhuddus
Siryani:	Sanjawis.
English:	Arabian or French Lavender
French:	<i>Stoechas</i> Arabique.

## Habitat and Distribution

This herb is located in Mediterranean area and Asia. It is likewise located in India, Italy, Pakistan, Spain. It can grow in Himalaya and some regions of Kashmir (Fig-1). Dried out plant and vegetation are import to Mumbai from Persian Gulf. More ever It is located in eastwards, Canaries, Portugal and the Mediterranean area to Constantinople and Asia Minor (5).

## Description of Drug

This herb is about about one ft tall and having several branches of Stems. Stems contain severa blue-white fragrant flowers. It is barely sour in taste. Seeds are small and bowl-shaped.

**Sides Effect (Mazarrat):** long time use of Ustukhuddus in bilious produced nausea, vomiting, irritability (6).

**Temperament** (Mizaj): hot in 1<sup>st</sup> order dry in 2<sup>nd</sup> order

**Dosage** (Miqdar-e-khurak): 7 to 17 gm.

### Therapeutic Uses

Ustukhuddus can be used to treat many neurological diseases such as,

- Zof-e-Dimagh ,
- Tashannuj-e-Azlat,
- Sara (epilepsy).
- Suda-e-Muzmin (chronic headache).
- Laqwa (facial paralysis)
- Saudawi Amraz-e-Dimagh (brain disease)(9)

It can be used for the treatment of

- Dama (asthma)
- Warm-i-Jigar Sard (greasy liver),
- “Jarub-i-Dimagh” (broom of brain)
- Waj’ al-Mafasil (rheumatism)
- Istisqa (ascites)(10)

### PHARMACOLOGICAL STUDIES

Different study on *Lavandula* can report its numerous property these are antiaging, Blood purify, Antibacterial etc.

#### Sedative and Anticonvulsant activity

Anticonvulsant and sedative activity can be found in the extract *Lavandula* flowers but Antispasmodic and hypnotic activity cannot be found in mice. In additional its extended pentobarbital sleeping time is same as compare to diazepam (11).

However it can be show positive effect in stress.

Lavender flower tincture {1: 5 in 50% alcohol} “60 drops every day” used for 1month in Western herbal for the treatment of depression (12).

#### Anti-ulcer activity

Extract of *Lavandula* confirmed major anti-ulcer pastime in ethanol cause duodenal [P < 0.01] and gastric [P < 0.001] ulcer in Wistar rats, while as compare with manage group (13).

#### Neuroprotective activity

A notice has been referenced that lavender oil on the portion phase of fifty, hundred and 200 mg/kg outline weight in mice affirmed reperfusion of cerebral tissues in cases of

caused rot of cerebral tissues. Yet, the final product changed into size capable on the portion phase of 2 hundred mg/kg outline weight (14). Another notices said that breathed in lavender oil is essentially further developing memory in scopolamine accelerated dementia in rodents (15). Hritcu L et al, furthermore said that inward breath of lavender oil has affirmed size capable improvement in memory power on scopolamine actuated spatial memory weakness in research facility rats. A investigate has been found that lavender oil on the portion level of hundred to 200 and 400 mg/kg outline weight through method of method for intra peritoneal course (ip) is definitely diminished cerebral edema in occurrences of mind stroke in trial rats (16).

#### Anti-oxidant activity

Malik et al, can mentioned that crucial oil of *Ustukhuddus* reveals antioxidant activity with inside the presence of six energetic chemical materials which had been diagnosed as camphor,  $\gamma$ -terpinene, linalyl acetate, linalool, 1-eight cineole.

#### Conclusion

*Ustukhuddus* has been notably used with inside the Unani system of medication considering that time immemorial for diverse neurological problems along with epilepsy, dementia, paralysis, this drug is likewise utilized in different physical system problems along with breathing system problems, digestive system problems and urogenital system problems etc. *Ustukhuddus* belongs to Lamiaceae family. It is a fragrant shrub normally grows to thirty to one hundred cm in height; plants seem in past due spring and early summer time season. Since historic time many Unani physicians declare its surprise impact in neuro-cerebral problems. Their declare concerning *Ustukhuddus* as a mind scavenger amply testifies the neuro protective nature of the herb that is corroborated with the aid of using diverse medical research noted on this article. The awareness of the physicians has once more been vindicated with inside the mild of the above research. More pre-

scientific research need to be executed to in addition give a boost to the validity of this precise drug.

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Figure-1

<b>Table 1. Phytochemical constituents (7, 8)</b>		
<b>No</b>	<b>Objects</b>	<b>Example</b>
1	Triterpenic acid.	Rosmarinic acid, Luteolin, Apigenin, Ursolic acid, B-sitosterol
2	Essential oil.	Camphor, Eucalyptol, Fenchone, Myrthenol, Pinocarvyl acetate
3	Organic substance	Carbohydrates, Glycosides, Phenols, Terpenes, Resins, Steroids.
4	Inorganic substances	Aluminum, Calcium, Iron, Magnesium, Potassium and Strontium.

<b>Table 2. Compound preparation of <i>Lavandula stoechas linn</i>(Ustukhuddus)</b>
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No	Compound drugs	Dosage	Signs
1	Habb-e-sara-khas	One tab BD	Usefull in epilepsy .Nervine tonic
2	Ayarij Loghazia	Five to ten grams	Treat epilepsy, Gout, sciatica, Bell's palsy
3	Itrifal Ghudadi	Seven to nine gram	To treat morbid matter of stomach and brain
4	Itrifal Kishnizi	Seven to nine grams	Headache ,Treat the disease of ear and eye, constipation and hemorrhoids
5	Itrifal Sanai	Five to seven gram	Head ache, constipation
6	Itrifal Haamaan	Five to ten gram	Blood purifier , Useful in Pytriasis
7	Habb-e-Ustukhuddus	Two to five gram	purifier of brain, helpful in bell's palsy and flaccidity
8	Majun Murawwahul Arwa	Five to seven gram	General tonic , Nervine tonic, Sexual tonic ,Liver tonic, digestive tonic
9	Qurs Mulayyin	One to two gram	Colitis, Chronic headache, Constipation.
10	Sharbat Mushil	24-48 ML	Purgative, Constipation, Melancholia