

LITERATURE REVIEWS OF SHWETA JEERAK

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ABSTRACT

Jeerak is one of the spices which is used in daily food. Jeerak mainly has three types, namely shweta-jeerak, krishna jeerak, shaha jeerak. Jeerak has Dipan, Pachan, Grahi and Krimighna karma also Rakta shudhikar, Vrushy, Stanyajanana and Garbhashay shudhikar.

INTRODUCTION

Ayurved is the 5000 years old science that is having all the knowledge of life.

In our samhita and nighantu having all the knowledge of medicinal plants. Aahardravya's also have very essential medicinal constituents which are used in day to day routine. Those dravya are explained in dravyaguna vigyan. Ayurveda having trayupastambha i.e. Aahar, Nidra & Brahmacharya.

Aahar plays a very important role in lifestyle. Healthy life depends on consuming healthy food. Indian food is incomplete without spices. Jeerak is one of the spices of daily use. Jeerak has various nutritional & medicinal

values. In India production of Jeerak is in Bangal, Rajasthan & Punjab.

आयुरस्मिन् विद्यते. अनेन वाऽऽयुर्विन्दन्ति  
इत्यायुर्वेदः॥ सु . सू . १५

Ayurveda is a branch in which explains the importance of ayu and factors which are useful to maintain a healthy life, removes the health issues by following Dincharya, Ritucharya and Yoga very specifically.

The other major amounts at Jeerak producing countries are Syria, Turkey, UAE and Iran.

Classification

	Shweta-Jeerak	Krishna Jeerak	Shaha Jeerak
Kingdom	Plantae	Plantae	Plantae
Division	Tracheophyta	Tracheophyta	Spermatophyta
Class	Dicotyledones	Magnoliopsida	Magnoliopsida
Order	Apiales	Apiaceae	Ranunculales
Family	Umbelliferae	Umbelliferae	Ranunculaceae
Genus	Cuminum	Carum	Nigella
Species	Cuminum Cyminum	Carvi	N. sativa
Latin Name	Cuminum Cyminum	Carum carvi	Nigella Sativa Linn
<b>Ras Panchak</b>			
	Shweta-Jeerak	Krishna Jeerak	Shaha Jeerak
Ras	Katu, Madhur	Katu	Katu, Tikta
Gun	Laghu, Ruksha	Laghu, Ruksha	Laghu, Ruksha
Veerya	Ushna	Ushna	Ushna
Vipak	Madhur	Katu	Katu
Karm	Dipan, Pachan, Garbhashay Shudhikar, ShulPrashaman	Dipan, Pachan, Vatanuloman	Dipan, Pachan, Stanyavardhak

**Drug Details: Shweta Jeerak****Vernacular Names**

Marathi - Pandhare JireHindi - Jira, Safed jeera  
 English - Cumin Seed, JiraBengali - Jira, Sadajira  
 Kannada - Jirage, BilejirageKashmiri - Safed Zoor  
 Malayalam - Jeerakam  
 Oriya - Dhalejeera, Dalajira, Jira Punjabi - Safed Jira,  
 Chitta Jira  
 Tamil - Sheeragam, Chirakam, Jeerakam Telugu -  
 Jilakarra  
 Urdu - Zirah, Zirasafed

**Morphological classification**

Height-The height of cumin plant -20-30 cmRoot - Root is tap root system which is mostly confined to 10 - 20 cm depth of the soil.

Flower - mostly Pink, Sometimes white Leaf type - The leaves are compound, simple, long divided and deep green color.

Fruit type - Fruit is dry but does not split open when ripe.  
 Fruit Length - at least 4 mm. The crop is diploid.

**Habitat**

Cultivated

**Chemical composition**

The main chemicals that are present in shweta jeerak seeds are volatile oil, fixed oil and protein. The Volatile oil is colorless to pale yellow in color. Cuminaldehyde is the main constituent of the volatile oil. Other minor constituents are  $\alpha$ -pinene,  $\beta$ -pinene, cuminic alcohol, phellandrene.

Roasted Shweta-jeerak contains pyrazines, 2 ethoxy, 3 isopropyl- pyrazine, 2 methoxy- 3 sec butyl-pyrazine and 2 methoxy 3 methyl pyrazine. Other components include -terpinene, safranal, p - cymene & -pinene.

1 Tbsp of Cumin Spice contains the following nutritional information according to the USDA

Calories - 22 Fat (g) - 1.34

Carbohydrates (g) - 2.63 Fibers (g) - 0.6

Proteins (g) - 1.07

**Uses of Shweta jeerak**

Shweta jeerak has Dipan, pachan properties hence mainly used in Agnimandya, Aampachan. Jeerak is one of the spices so it is used to give taste to the food. Daily meals are incomplete without the bursting of shweta jeerak. In Sutika paricharya jeerak is used with jaggery to increase breast milk. Kwath of jeerak used for Garbhashaya shuddhi. Shweta jeerak used to treat diarrhea. Researchers reported extract of jeerak used as antidiabetic.<sup>[14]</sup> Study of jeerak extract take place on albino rat, Anticancer,<sup>[15]</sup> antioxidant,<sup>[14]</sup> anti-inflammatory. Studies also taken by researchers in the treatment of dysmenorrhea, jeerak are used. Ancient texts described various properties of shweta jeerak seeds

such as Dipan, pachan, Grahi, Garbhashaya shudhikar, Balya, Krumighana, Chakshushya, Ruchikar etc.

**Textual Review****Charak Samhita**

According to Charak Acharya, Jeerak is used in Sirovirechaniya dravyas.<sup>[1]</sup> Sirovirechaniya dravyas are explained in Apamargtanduleeya adhyay. Jeerak is explained in Shulprashan makashay in shadvirechan shatashritiy adhyay.

पिप्पलीपिप्पलीमूलचव्यचित्रकशृङ्गवेर  
 मरिचाजमोदाजगन्धाजाजीगण्डीराणीति  
 दशेमानि शूलप्रशमनानि भवन्ति ||४५||

**Sushrut Samhita**

Sushrutacharya explains the treatment of Aadhaman in mahavat vyadhi chikitsa.<sup>[2]</sup> Langhan and Dipan are given in Aadhama. Jeerak is one of the dipan dravya. Hingwadi churna used for dipan & pachan jeerak is one of the constituent of hingwadi churna.

तीक्ष्णोष्ण कटुकं पाके रुच्यं पित्ताग्निवर्धनम्।  
 कटु श्लेष्मानिलहरं गन्धाढ्यं जीरकद्वयम् ॥सु.सू.  
 ४६

Sushrut explained guna of jeerak of tikshna Virya is ushna, Vipak is katu, Jeerak is having properties such as Uata shamak & Kapha Shamak and Pitta & agni vardhan and ruchya. Jeerak is explained in pippalyadi gana in dravyasangrahiya adhyaya.<sup>[2]</sup> In panatta chikitsa jeerak is used. Trishna chikitsa done by trishnashamak madya.<sup>[3]</sup> Jeerak is one of the contents of trishnashamak madya.

**Ashtanga Sangraha**

In vividha dravya Sangraha adhyay pipalyadi gana dravyas explored. Jeerak is explained in pipalyadigana dravya.

Pipalyadi gana dravya are used to remove Kapha and treats pratishya, vatavyadhi, Aruchi, Gulma, Shul and does the amapachan.

**Bhavprakash Nighantu**

In Bhavprakash Nighantu, shweta jeerak is explained in Haritakyadi Varga.<sup>[5]</sup> Jeerak is having properties such as Pachak, vatanulomak, mutravirenjaniya, vedanahar, uttejak and sangrahi.<sup>[5]</sup>

जीरको जरणोऽजाजी कणा स्याद्दीर्घजीरकः | ३१

Synonyms of jeerak explained by Bhavprakash such as jeerak, aajaji, jaran, kana & dirgha-jeerak. Jeerak having ruksha guna, katu ras and ushna viray

**Dhanvantari Nighantu**

In Dhanvantari Nighantu jeerak is explained in shatpushpadi varga. Jeerak has a ruksha guna and katu rasa. Jeerak is used to in chikitsa of aadhaman gulma, Atisar Grahani and krumi.<sup>[6]</sup>

जीरकं कटु रूक्षं च वातहृद्दीपनं परम् |  
गुल्माध्मानातिसारघ्नं ग्रहणीकृमिहृत्परम् ॥७०॥

Gourajaji is a symptom of shweta jeerak. Shweta jeerak is having sheet guna (Him), Katu, Madhur ras. Jeerak having properties such as Dipan, Krimighna, Ruchikar, vishghna, chakshusha and Aadhaman nashak.<sup>[7]</sup>

**Kaiydev Nighantu**

In Kaiydev Nighantu jeerak is explained in Aushadhi varg.

गौराजाजी हिमा रुच्या कटुमधुरदीपनी।  
कृमिघ्नी विषहन्त्री च चक्षुष्या अदमान  
नाषिनी ॥५८॥

Jeerak has katu and tikta ras and Ushna, ruksha, laghu guna. Dipan Pachan, Ruchya sangrahi, Chakshukshya, medhya, Hrudya, sangrahi, Chchardinighrah, Gulma adhamanashan. Atisarghna properties explained in Kaiydev Nighantu.<sup>[8]</sup>

**Chakradatta**

अजाजी गुडसंयुक्ताविषमज्वरनाशिनी।  
अग्निसादं जयेत् सम्यग् वातरोगांश्च  
नाशयेत् ॥२११॥

Chakradatta explained in jwara chikitsa prakaran, Jeerak is used with jaggery useful in treatment of vishamjwar. Shweta jeerak used to treat agnimandya & vatrog also.<sup>[5]</sup>

जीरकस्य कृतः कल्को घृतसैन्धवसंयुतः।  
सुखोष्णो वृश्चिकर्तृणां सुखलेपो वेदनापहः ॥२२॥

**In Raj-nighantu jeerak is explained in pipalyadivarg**

Chakradatta explains in visha chikitsa prakaran kalka of jeerak with ghrita & saindhav used to apply on scorpion bite sites. Lep is hot in nature. Lep at the scorpion bite site decreases the pain.<sup>[9]</sup>

**Nighantu Ratnakar**

In Nighantu Ratanakar explains Shweta jeerak having katu, madhur ras, Ushna viray and laghu & Ruksha guna.

Shweta jeerak is having properties as Dipan, Pachan, Chakshushya, Garbhashay shudhikar, Balya, krimighna, Atisarghan, vishamjwar nashanam Gulmarog nashak.<sup>[10]</sup>

**Madan Pal Nighantu**

In Madan Pal Nighantu jeerak is explained under the shuntyadi varga.<sup>[12]</sup>

जीरकत्रितयं रूक्षं कटूष्णं दीपनं लघु।  
सङ्ग्राहि पित्तलं मेध्यं गर्भाशयविशुद्धिकृत्।  
चक्षुष्यं पवनाध्मानगुल्मच्छर्दिबलासजित् ॥३२॥

Three types of jeerak have ruksha, Laghu and ushna properties.

**CONCLUSION**

Jeerak is one of the daily useful spices in the food, having very useful properties so its further studies are needed.

It is used in many conditions like adhaman, mukhapak, atisar, in sutika paricharya for stanyojanan, garbhashay shudhikar, shulprashaman etc.

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