

**MEDICO - HISTORICAL REVIEW OF
DRUG *KUSTHA*
(*Saussurea lappa* C.B. Clarke)**

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ABSTRACT

Kustha is well known for its cures since ancient times. *Atharvaveda* considers this as a potent plant next to *Soma* (a divine plant) in curing several diseases. It is also called as *Takmanashana* (which cures fevers) in *Atharvaveda*. It grows in Himalayas and Kashmir. In *Ayurveda*, root of *Kustha* is used for fevers, skin diseases, headache etc. Almost all *Nighantus* carry the description of *Kustha* with several synonyms. Some scholars consider two varieties of *Kustha* i.e. sweetish and bitter, but one with bitter taste is the real *Kustha*. *Pushkarmool* (*Inula recemosa* Hook.f.) is available in the market as sweet variety of *Kustha*. Thus its medico-historical importance and other details have been presented in this article.

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Introduction

Kustha (*Saussurea lappa* C.B.Clarke) is an important medicinal plant which was mentioned in ancient Hindu literature and Ayurveda. It was considered as next to Soma plant which is best among the plants. It grows in the regions of Himalayas and Kashmir and is used in Ayurveda for fevers, skin diseases, headache etc.

Kustha is well known for its cures since the ancient times. Etymologically the word “*Kustha*” is derived from “*Krushnaati rogam*”. It means, one that ploughs out or drags out the disease from the body.

***Kustha* in Non - Medical literature**

Atharvaveda

Among Vedas, *Atharvaveda* (AV) contains the description of drugs (plants) and their actions. According to AV, the place and origin of *Kustha* are Himalayas. They are considered as habitat of *Kustha*, which possess superfine qualities and destroys all types of fevers and all sorts of painful diseases. AV refers three synonyms viz. 1. *Nadhyamar* (removes all diseases caused by impure water from the rivers), 2. *Nadhyarisha* and 3. *Nadhy* (XIX.39.1&2).

The importance of *Kustha* was known through its synonyms viz. *Deva* (deity) and *Uttam* (best) (V.4.9.). *Kustha* is also called as *Takmanashana* (which cures fever). It is specific against all types of fevers and it is principal medicine for fever (V.4.1.).

Kustha was praised in AV for its qualities and it is best among the herbs. Most powerful like the high humped bull among the cattle; most furious like the tiger among the clawed beasts. It stands along with *Soma* (the very essence of all medicines). It destroys all kinds of *Takman* (fever) (XIX.39.4.).

Kustha is of three kinds because, it is being born from three kinds of waters (rain, river & sea); also due to three kinds of juices forming its parts; and also because it grows in three seasons i.e. hot, rainy and cold. It is thrice born from all natural forces. Hence *Kustha* is “*Vishwabheshaja*” (which cures all diseases) (XIX.39.9.).

The time of administration of *Kustha* was also mentioned in AV as three times a day. It should be administered early in the morning, middle of the day and in the evening (XIX.39.).

There is a request made to *Kustha* in AV to drive away all the diseases of the head and the fever attacking every third day; the constant fever or the year long disease or malignant fevers by bringing them low by various kinds of efficacious powers (XIX.39.10).

Acharyas (Physicians) of Vedic period, who know about the *Kustha* and its medicinal value were Ikshwaku, Kamyas Vastu, Atsya (XIX, 39.9). *Kustha* is the mighty source of quelling mental diseases, annihilator of the sufferings of the world, removes worldly sufferings (V. 4. 1.). *Kustha* is also useful in *Netraroga* (the diseases of eye) and cures all types of bodily ailments due to its miraculous properties (V.4.10).

Kaushika Sutra : It is mentioned that, *Kustha* is useful against fever, consumption and pain in body. It cures wounds, cough and leprosy also (35/21).

Kautilya Arthashastra : In this text *Kustha* has been mentioned at two places, in *Visha Varga* (6/16), and in *Netraghna Dhoomayoga* (14.1.177/14).(“Poisonous (*visha*) plants in Ayurveda” by Dr.L.B.Singh).

Kustha in Ayurveda : The drug *Kustha* was mentioned in *Samhitas* with synonyms like *Vyapya* (grows in watery area), *Utpala* (grows in watery land), *Amaya*, *Gada*, *Pakala*, *Ruk* etc.

Its place of origin is mentioned as Kashmir and part used is root. *Pushkarmool* (*Inula recemosa* Hook. f.) is available in the market as sweet *Kustha*. Properties of *Kustha* root are as follows:

Rasa (taste): *Tikta* (bitter) *Katu* (pungent) and *Madhura* (sweet)

Guna (properties) : *Laghu* (lightness), *Ruksha* (roughness) and *Tikshna* (sharpness)

Virya (potency) : *Ushna* (hotness)

Vipaka (taste after digestion): *Katu* (pungent).

Kustha in some important Samhitas (compendia)

Charaka Samhita

Charaka had mentioned *Kustha* at 125 places in *Charaka Samhita* and classified it in three groups Viz.

1. *Lekhaneeya* (emaciating) *Mahakashaya: Kustha* has been placed in second place among ten drugs. This group of drugs are useful for emaciation i.e. to reduce the unwanted fat from the body.
2. *Shukrashodhana* (semen–depurants) *Mahakashaya: Kustha* has been placed in first place in this group. It indicates its efficacy for particular action of purifying the semen.
3. *Aasthanopaga* (sub–corrective enemata) *Mahakashaya: In this group Kustha* has been placed in 4th place which is useful in disorders of *Vata* (*Sutra Sthana* 4/9, 12 & 13).

Charaka has said “*Kushtam Vataharabhyangopayoginam*” which means *Vata* alleviating and useful for *Abhyanga* (*Sutra Sthana* 25/40).

Sushruta Samhita

Kustha was mentioned at 113 places and classified as the following:

1. *Eladigana*: It is mentioned as third drug among 25 others. This group is useful in *Vata, Kapha* disorders and alleviate poison. Improves the bodily complexion, cures itching, boils/ carbuncles and other skin diseases.
2. *Mustadigana*: *Kustha* was mentioned as seventh drug among 16 others. This group of drugs are useful in *Kapha* diseases , disorders of women, indigestion and as *Sthanyashodhak* (purifier of breast milk) etc. (*Sutra Sthana* 38/24,25,54 & 55).

Ashtanga Hridaya Samhita

Vagbhata has mentioned *Kustha* at about 116 places under 4 groups viz.

1. *Niruhagana* – Useful for *Niruha Vasti*.
2. *Vayunashakagana*– Useful for alleviating *Vata*.
3. *Mustadigana* – Useful in disorders of women and breast milk.
4. *Eladigana* – Useful in *Vata, Kapha* disorders and *Visha* (poison). It enhances complexion and is useful in itching etc. (*Sutra Sthana* 15/3, 5, 40 & 43).

Astanga Samgraha Samhita

Viridha Vagbhata had mentioned *Kustha* at 220 places with synonyms like *Amaya, Gada, Tunga, Pakala* and *Ruk*. *Kustha* was classified in,

1. *Lekhaneeyagana* (scarificators) as forth drug.
2. *Shukrashodhanagana* (pacificators of semen) as first drug (*Sutra Sthana* 15/5 & 22).

Kustha in Nighantu

Nighantu means which carries synonyms. Almost all *Nighantus* have described *Kustha* in all aspects like synonyms, properties and actions. Some of them are quoted here:

Name of Nighantu	Varga (Group)
<i>Abhinava Nighantu</i>	<i>Haritakyadi varga</i>
<i>Bhavaprakasha Nighantu</i>	<i>Haritakyadi varga</i>
<i>Dhanvantari Nighantu</i>	<i>Chandanadi varga</i>
<i>Kayyadeva Nighantu</i>	<i>Aushadhi varga</i>
<i>Raja Nighantu</i>	<i>Chandanadi varga</i>
<i>Sodhala Nighantu</i>	<i>Chandanadi varga</i>
<i>Saligrama Nighantu</i>	<i>Karpuradi varga</i>

In *Nighantus* it is mentioned that, *Kustha* is useful in *Kapha, Vata* disorders and useful in skin diseases like erysipelas, ringworm infestation etc. It is also useful in poison, itching and in improving complexion.

The *Kustha* has been used in Hindu medicine from an early age and there are number of formulations which have *Kustha* as an ingredient. The following are examples.

1. *Agnimukha Churna*: It is a compound preparation which is useful in dyspepsia with loss of appetite *Udararoga, Arshas* (piles), *Gulma* etc. and this *Churna* fails nowhere (*Chakradatta* 6/27).
2. *Kusthadi kwatha* : Useful in *Kaphaja Jwara* (*Chakradatta* 1/103).

3. A liniment : It is prepared with *Kustha*, castor oil & *Kanjika* (fermented paddy water) and useful for headache (*Sarangadhara Samhita*).
4. Root of *Kustha* which is fried with mustard oil cures porrigo when used as external application to the scalp (*Bhavaprakasha*).
5. *Kustha* root and rock salt (equal parts) mixed with mustard oil and *Kanjika* when rubbed on joints relieves pain.
6. *Kustha Taila* : Useful for *Arshas* (*Charaka Samhita Chikitsa Sthana* 14/44).

***Kustha* in Unani System of Medicine**

Kustha is known as *Kust* and also as *Krushnah* in Persian. Its leaves are wide and root of *Kust* resembles root of apple plant. *Kust* is of 3 varieties. Viz.

1. *Shiri Safed* (sweet and white) or *Kust-e-Beheri* or *Kust-e-Arabi*.
2. *Talkh mael ba siyahi* (bitter and blackish): Its outer layer is black. Inside it is yellowish and slightly pungent in odour. It is also known as *Kust-e-Hindi* (Indian *Kust*).
3. *Surk* (red) variety: It is poisonous.

The first variety is to be taken wherever *Kust* is indicated. Scent is extracted from thick and rough roots with thin bark. Potency of *Kust* root will be intact for 10 years.

Uses

Kust provides strength to vital organs. Improves virility and cures old age problems; acts as anti-inflammatory and anti- flatulent.

Kust alone, in combination with some other drugs and honey is useful in all conditions caused by cold, convulsions, tetanus, tremors etc. It is useful in forgetfulness.

Chronic headache will be cured with *Kust* when administered along with water as nasal drops.

Kust along with olive fruit is useful in paralysis and pain in the ear. Smoke of *Kust* is useful in cold and its effects.

Kust, *Afsanteen* (*Artimesia absinthium* Linn.) and liquor is useful in chest pain, cough, dyspnoea etc. *Kust* is also useful in sciatica if administered internally and externally.

Review of Modern Literature

Botanical name	: Saussurea lappa C.B.Clarke
Family	: Compositae
Vernacular Names :	Arabic : Kush, Kust-a-behri, Kust
	Bengali : Kut, Kur, Pachak
	English : Costus
	French : Costus Eligant
	Germany : Practige, Kostwurz
	Gujarati : Upalet, Cuplate Kut
	Kannada : Kostha, Kosuta
	Kashmir : Kuth, Chob- I- qut, Post- Khai
	Malayalam : Seppuddy
	Malaya : Mook heong, Muhsiang
	Persian : Koshnaha, Kust, Kutshirim, Kuttalkh, Krushnah
	Punjabi : Kot, Kust, Kut, Kuth
	Sanskrit : Pushkara, Kushta, Kashmiraja, Kushtha, Agada Kashtam, Kushtam, Kushtam, Utpalam etc.
	Simhalese : Gadamahanel
	Tamil : Kostum, Gosthan, Jathi, Kostham, Chagal, Chutchk, Kottam
	Telugu : Changala Kustam, Kostu
	Trade : Kuth
	Urdu : Kut
Part used	: Root
Habitat	: Grows abundantly in the valley of Kashmir and neighbouring Himalayan regions.

Brief botanical description

Kustha is an erect robust perennial herb 1-2 metres tall, apparently endemic in the valley of Kashmir at altitudes of 2500-3000 metres and also is cultivated in Kashmir and neighbouring Himalayan regions for its roots which are used in medicine. Root is



Fig.1 - *Kustha* - *Saussurea lappa* Clarke



Fig.2 - *Saussurea lappa* - *Kustha* Roots

(Photo courtesy : K.M. Vaid)

stout often up to 60 cm long, possessing a characteristic penetrating odour; stem stout, fibrous; radical leaves with long lobately winged stalk, up to c.1 metre long; flower heads stalk-less, very hard, rounded, 3-5 cm in diameter; flowers dark blue-purple or almost black, in axillary's and terminal clusters; achne c.3 mm long, curved, compressed. *Kustha* which is also commonly known as costus in trade has however no connection with the botanical genus costus.

Fresh root of *Kustha* is stout, up to 60 cm long and 30 cm in girth, and carrot – like; sometimes a number of roots are found joined together at the collar zone. Its characteristic penetrating odour which can be smelt from a distance and sticks to the soil and even the handling apparatus. The dried roots of *Kustha* constitute the drug Saussurea which is official in India. They are strong and sweet; aromatic odour and a somewhat bitter taste. They are greyish to dull brown, thick, light, stout, fusiform to cylindrical, 7-15 cm long and 1-5 cm thick. Occasionally they are ridged and possess a short and horny fracture. In powdered form the drug is deep brown or rust coloured and contains not more than 2% foreign matter.

Kustha can be propagated either by root cuttings or by seed. Seeds for propagation purposes are collected in September. Seeds retain their viability for a year or more. In nature *Kustha* seed is shed in autumn, lies under the snow in winter and begins to sprout during April- June as the snow melts. Roots are harvested during October and cut into pieces of 10 cm long and dried in the sun.

Chemical Composition

Kustha root contain resinoids(6%), essential oil(1.5%) and alkaloid (0.05%), inulin(18%), a fixed oil and other minor constituents like tannins and sugars.

Actions

According to Ayurveda, the root is hot in nature, bitter, sweetish, pungent, fattening, aphrodisiac, alterative, improves the complexion, cures leucoderma, erysipelas, itching, ringworm, diseases of the blood and *Vata*, bronchitis, vomiting, scabies, epilepsy, headache, hysteria. Root and stem are prescribed in snake-bite and scorpion sting. In China the root of this is considered as carminative and stimulant. Pharmacologically *Kustha* is carminative, antiseptic, disinfectant against streptococcus and staphylococcus.

Synonyms of Kustha in some important Texts and Nighantus

<u>S.No.</u>	<u>Synonym</u>	<u>CS</u>	<u>SS</u>	<u>AH</u>	<u>AS</u>	<u>AK</u>	<u>DNi</u>	<u>BPNi</u>	<u>KNi</u>	<u>SGNi</u>	<u>SNi</u>	<u>RNi</u>
01	Agada	-	-	-	-	-	+	-	-	-	-	+
02	Amaya	-	+	+	+	-	-	-	-	+	+	+
03	Gada	-	-	+	+	-	+	-	+	+	+	-
04	Haribhadrak	-	-	-	-	-	-	-	-	+	+	-
05	Gyeya	-	-	-	-	-	-	-	-	-	-	-
06	Kapala	-	-	-	-	-	-	-	+	-	-	-
07	Kauberā	-	-	-	-	-	+	-	-	+	+	-
08	Kinjalka	-	-	-	-	-	-	-	-	+	-	-
09	Kustham	+	+	+	+	+	+	+	+	+	+	+
10	Kutsit	-	-	-	-	-	-	-	-	+	-	-
11	Padmak	-	-	-	-	-	-	-	-	+	-	-
12	Pakala	+	-	+	+	+	+	-	+	+	+	-
13	Patala	-	-	-	-	-	-	-	-	-	+	-
14	Paribhadrak	-	-	-	-	-	+	-	-	+	+	+
15	Paribhavya	-	-	-	-	+	-	+	-	-	-	-
16	Pavan	-	-	-	-	-	-	-	-	+	-	-
17	Proktha	-	-	-	-	-	-	-	-	+	-	+
18	Rama	-	-	-	-	-	+	-	-	+	-	-
19	Roga	-	-	-	-	-	+	+	-	+	-	-
20	Rogahvaya	-	-	-	-	-	-	+	-	+	-	-
21	Ruja	-	-	-	-	-	+	-	-	-	+	+
22	Rogahvaya	-	-	-	-	-	-	+	-	+	-	-
23	Ruja	-	-	-	-	-	+	-	-	-	+	+
24	Ruk	-	+	-	+	-	-	-	-	-	-	-
25	Tunga	-	-	-	+	-	-	-	-	-	-	-
26	Utpala	+	-	-	-	+	+	+	+	+	+	+
27	Vaneeraja	-	-	-	-	-	+	-	-	+	-	+
28	Vyadhi	-	-	-	-	+	+	-	+	+	+	+
29	Vyapya	+	-	+	-	+	+	+	+	+	-	+

CS = Charaka Samhita; SS = Sushruta Samhita; AH = Astanga Hridaya; AS= Astanga Sangraha; AK = Amara Kosha; DNi=Dhanwantari Nighantu; BPNi = Bhavaprakasha Nighantu; KNi = Kayyadeva Nighantu; SGNi = Saligrama Nighantu; SNI = Sodhala Nighantu; RNi= Raja Nighantu

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सारांश

“कूठ (सस्सुरिया लप्पा सी. बी. क्लार्क) नामक औषधी का चिकित्सा गुण एवं इतिहास पर एक पुनर्निरीक्षण”

पी.वी. वी. प्रसाद एवं पी.के.जे.पी. सुभक्ता

कूठ नामक औषधी द्रव्य प्राचीन काल से ही अपने चिकित्सा गुणों से परिचित है। अथर्ववेद ने इसे सोम (एक दिव्य औषधी) जैसा ही क्षमता युक्त पौधा माना है। अथर्ववेद में कूठ को ‘तक्मनाशक’ (ज्वर को ठीक करने वाला) भी कहा गया है, कूठ हिमालय और कश्मीर में पाया जाता है। आयुर्वेद के अनुसार कूठ (जड) ज्वर, चर्मरोग, सिरदर्द आदि रोगों में प्रयोग किया जाता है। लगभग सभी निधण्टुओं में कूठ का वर्णन कई विभिन्न नामों से किया गया है। कुछ विध्वानों ने कूठ दो प्रकार का मानते हैं - एक मीठा और दुसरा कडुवा, परंतु जो कडुवा है वही असली कूठ है। पुष्करमूल (इन्धुला रेसिमोसा हुक. एफ.) बाजार में मीठी कूठ के नाम से उपलब्ध है। इस प्रकार कूठ का चिकित्सा गुण एवं इतिहासिक महत्वों, कुछ और विवरण भी यह लेख में प्रस्तुत किया गया है।