A Review Article on Species used as Musali (Curculigo orchioides) and Salam (Eulophia compestris)

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Abstract

In day to day practice when we see the market samples of Musali it creates confusion in mind; which type Musali is sold by the vendor. These days various species of plants are used as Musali in different parts of India. Traditionally, Salam and Salam panja are also used as Mushali. To rule out all these differences and arrive to a definite conclusion. This is an attempt to collect the reference from samhitas and nighantus about musali. Botanically classify the species which are used as musali. Describe all the species which are in use as musali in a systematic manner.

Keywords

Mushali, Shweta Musali, Salam, Talmuli
INTRODUCTION

The term *musali* is famous in traditional Indian system of medicine. Medicine with *musali* name is known to many household in India. Most commonly used as a tonic, aphrodisiac, rejuvenator for increasing vigour and stamina. There are two types of *musali* that are in use *Shveta* and *Krushna*. In nature both Musli prefer same habitat and commonly grows side by side. The traditional healers prefer the Musli herbs growing side by side for preparing the herbal formulations. It is a bitter fact that in indigenous systems of medicine, Kali (Black) Musli is used more frequently as compared to the Safed Musli. Krishna musali (*Curculigo orchiodes*) is a plant grown in asian countries like india, pakistan, malaysia. *Curculigo orchiodes* is a herbaceous tuberous perennial with a short or elongate root stock bearing several fleshy lateral roots. The plant can grow up to 10-35 cm tall. Leaves sessile or petiolate 15-45x1.3-2.5 cm, linear or linear lanceolate, tips sometimes rooting, scape very short, clavate. It has hardy leaves and can take shade: the leaves will just get a bit longer in the shade than in full sun shine. During flowering period it opens a golden yellow flower at the leaf base every day. With name *shwveta musali* few species of asparagaceae family are in use and also roots of *salam mishri* and *salampanja mishri* are used as *musali*. The word *mishri* is derived from *musali*, so few people call it as *salam musali, salam panja musali*. So, in this review article it has been tried to get all details of *musali* and *mishries* from various references.

MUSALI -

The word *Musali* is not mentioned in Charaka samhita whereas *Sushruta* mentioned the word *Talmuli* in *shwas chikitsa* which is synonym of *krushna musali*. With the name *musali* we get two drugs. One is *shwet musali* and another *krishna musali*. Both type of *musali* that is shwet and *Krishna musali* possess similar property but in *Samhitas* it is rarely used in formulations except *Pakas*.

The word

\[
\text{Musali means } = \text{मुसली खन्डने}.
\]

\[
\text{दोषान् इति मुस्लिति खन्डयति } ।
\]

\[
\text{मुस्लिति खन्डयति गुरुरोगम अनिलम् च ॥}
\]

*Krishna musali*-  
Hindi name: *Kali mushali*
Latin name: *Curculigo orchioides*

Family: Amaryllidaceae

According to *Bhavprakasha*, Talmuli is the synonyms of *krishna musali*. The properties of *Krishna musali* explained in *bhavpraksha nighantu* are Madhura and Tikta Rasa, Ushna Virya, and Guru Guna, Vrushya, Brihana, Rasayana, Arshoghna, and Vatanashana. According to Acharya Sushruta *Musali* is useful in treatment of *shwasa*. Traditionally it is used in management of various disorders like *arsha*, *kamala* and *shula*. Due to Madhura and Tikta Rasa, Ushna Virya, and Guru guna it performs various action (karmas) in the body like Vrushya, Vajikara, Bruhana, Rasayana, Shramahara, Agnivardhaka, Sthairyakara, Mardavkara, Vatapitta shamaka.

According to *Raja nighantuka Musali, Talmuli, Suvaha, Talpatrika, Godhapadi, Hemapushpi, Bhutali, Dirghakandika* are synonyms of *Musali*.

**Etymological derivation of synonyms**-

<table>
<thead>
<tr>
<th>Sanskrit Term</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>तालमुली - Roots are similar to Tal (Palm tree).</td>
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<tr>
<td>सुवाहा - Possess beautiful odor.</td>
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<tr>
<td>त्रांगकानक - Leaf are similar to Tal (Palm tree)</td>
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<tr>
<td>गोदामपत्री - Roots are similar leg of Godha (a reptile – monitor lizard)</td>
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<tr>
<td>हेमापुष्पी - Flowers are golden color.</td>
<td></td>
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<tr>
<td>तालमुली दुर्भारुङ्क - similar to palm tree but short in height</td>
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</table>

**Following are some of the medicinal uses of Krishna musali according to Ayurveda**-

**Shandhatwa** (Male libido): Crush root of black musali and make it into powder form. Take 250gms of this powder and mix 50ml of honey to it. Take ½ tsp of this solution 2 times a day for 1-2 weeks.

**Shwetapradara** (Leucorrhoea): Mix 5gm. of powder made out of its roots with jaggery and take it 2 times a day.

**Kamala** (Jaundice): Mix 5grms of root powder in warm milk properly and take is once every day. You could continue your regular medication and take this solution for faster relief. This could aid in fast recovery from the ailment

**Mutrakrichha** (Dysuria): In case you are suffering from this ailment where the urination is painful and difficult then consume a mixture of 3grms of dried root
powder of black *musali* with warm milk 1 time of your choice in a day

*Amlapitta* (Hyperacidity): Take 3gms of black *musali* powder and mix it in milk. Take is once a day. It would help in getting rid of heartburn and stomach gas and other digestion related problems

*Twakavikar* (skin diseases): Crush the roots and prepare a past out of powder. Apply this on skin to get rid of pimples and rashes. You could also use it as a face pack to get glowing skin

**Constituents of Krishna musali**

*Krishna musali* contains following active compounds –

- Starch – 43.48%
- Tannins – 4.15%
- Ash – 8.6%
- Enzymes – 14.18%
- Glycoside
- Syringic acid
- Curculigoside
- Flavone glycoside-5
- Alkloid lycorine
- Palmatic acid

**Scientific classification of C. orchioides -**

Table 1 Showing scientific classification of *C. Orchiodi*. 

<table>
<thead>
<tr>
<th>Kingdom</th>
<th>Plantae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order</td>
<td>Asparagales</td>
</tr>
<tr>
<td>Family</td>
<td>Hypoxidaceae</td>
</tr>
<tr>
<td>Genus</td>
<td>Curculigo</td>
</tr>
<tr>
<td>Species</td>
<td><em>C. orchioides</em></td>
</tr>
</tbody>
</table>

**Shweta musali**-

**Hindi name:** Safed Musali

**Sanskrit Name:** Shweta musali
Latin name: *Asparagus adscendens*

Family: Liliaceae (Asparagaceae)

Habitat: it is found in E. Asia, Afghanistan, Himalaya and forest of Uttarpradesh.

Description: It is an evergreen shrub, the flowers are dioeciously either male or female but only one sex is to be found on any one plant so both male and female plant must be grown and are pollinated by bees.

Useful part: Root and Stem

Principle constituents: It has several principle constituents like steroidal Glycosides, several compounds like 3-heptadecanone, 8-Hexadecenoic acid, methyl pentacosanoate, palmitic acid, steric acid.

Medicinal Uses:
Roots are used in diarrhoea, haematuria, leucorrhoea, general debility. It is used as an aphrodisiac as well as to increased sperm count. Effectively used in erectile dysfunctioning and premature ejaculation. It is useful in dubieties related debilities. Its use as general tonic is also well known all over India, it has been found very effective in increasing male potency and is considered as an alternative to Viagra. It offers significant protection against stress induced changes, it is used for increasing general body immunity, cures physical illness and weakness, can be taken as a milk decoction, powder, confection (*musali paka*).

Following Species of liliaceae Family are also used as *Shweta musali* –
1. *Chlorphytum tuberosum*
2. *Chlorphytum borivillanum*
3. *Chlorphytum arundinaceum*

1 Chlorphytum tuberosum -

<table>
<thead>
<tr>
<th>Scientific classification</th>
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</thead>
<tbody>
<tr>
<td>Kingdom:</td>
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<tr>
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<tr>
<td>Family:</td>
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<tr>
<td>Subfamily:</td>
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<td>Genus:</td>
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<tr>
<td>Species:</td>
</tr>
</tbody>
</table>
Following Species of liliaceae Family are also used as *Shweta musali* –

4. *Chlorophytum tuberosum*
5. *Chlorophytum borivilianum*
6. *Chlorophytum arundinaceum*

1 *Chlorophytum tuberosum* -

Table 2 - Showing scientific classification of *C. tuberosum*.

<table>
<thead>
<tr>
<th>Scientific classification</th>
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</thead>
<tbody>
<tr>
<td>Kingdom:</td>
</tr>
<tr>
<td>Plantae</td>
</tr>
<tr>
<td>Order:</td>
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<td>Asparagales</td>
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<tr>
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<tr>
<td>Asparagaceae</td>
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<tr>
<td>Subfamily:</td>
</tr>
<tr>
<td>Agavoideae</td>
</tr>
<tr>
<td>Genus:</td>
</tr>
<tr>
<td><em>Chlorophytum</em></td>
</tr>
<tr>
<td>Species:</td>
</tr>
<tr>
<td><em>C. tuberosum</em></td>
</tr>
</tbody>
</table>

Image No. 5- *Chlorophytum tuberosum*

Hindi name is Safed musali (also commonly known as musali). It is cultivated and eaten as a leaf vegetable in some parts of India, and its roots are used medicinally as a sex tonic under the name Safed musali. The medicinal value is thought to derive from its saponin content, up to 17 percent by dry weight. It has also recently been suggested that it may produce an aphrodisiac agent. As medicinal demand has increased, the plant has been brought under cultivation. The saponins and alkaloids present in the plant are the source of its alleged aphrodisiac properties. In traditional Indian medicine it is used as 'Rasayan' or adaptogen.

Table 3 Showing scientific classification of *C. borivilianum*

<table>
<thead>
<tr>
<th>Scientific classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kingdom:</td>
</tr>
<tr>
<td>Plantae</td>
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<tr>
<td>Order:</td>
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<tr>
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<tr>
<td>Family:</td>
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<tr>
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<tr>
<td>Subfamily:</td>
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<tr>
<td>Agavoideae</td>
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<tr>
<td>Genus:</td>
</tr>
<tr>
<td><em>Chlorophytum</em></td>
</tr>
<tr>
<td>Species:</td>
</tr>
<tr>
<td><em>C. borivilianum</em></td>
</tr>
</tbody>
</table>

2) *Chlorophytum borivilianum* -

It is a herb with lanceolate leaves, from tropical wet forests in peninsular India. The
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Image No. 6 - Chlorophytum borivilianum
3) Chlorophytum arundinaceum –

Image No. 7 - Chlorophytum arundinaceum

Table No. 4 - Showing scientific classification of C. arundinaceum

Scientific classification

<table>
<thead>
<tr>
<th>Kingdom</th>
<th>Plantae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order</td>
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<tr>
<td>Family</td>
<td>Asparagaceae</td>
</tr>
<tr>
<td>Subfamily</td>
<td>Agavoideae</td>
</tr>
<tr>
<td>Genus</td>
<td>Chlorophytum</td>
</tr>
<tr>
<td>Species</td>
<td>C. arundinaceum</td>
</tr>
</tbody>
</table>

Salam mishri:

Eulophia campestris - it is known as Salam Mishri or Salam Musali and it is mentioned as Munjataka in Charaka Samhita.

Table No. 5 - Showing scientific classification of - E. campestris

Scientific classification

<table>
<thead>
<tr>
<th>Kingdom</th>
<th>Plantae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division</td>
<td>Magnoliophyta</td>
</tr>
<tr>
<td>Class</td>
<td>Monocots</td>
</tr>
<tr>
<td>Order</td>
<td>Asparagales</td>
</tr>
<tr>
<td>Family</td>
<td>orchidaceae</td>
</tr>
<tr>
<td>Genus</td>
<td>Eulophia</td>
</tr>
<tr>
<td>Species</td>
<td>campestris</td>
</tr>
</tbody>
</table>

Other Names
- English name - Salep
- Hindi name – Salam
- Sanskrit name – Munjatak

Habitat
It is found the levels of 8000 to 12000 feet. It is more common in the western Himalayan region. It is also found in Tibetan region, Nepal, Kashmir, and Baluchistan.

Morphology
The stem of the plant is 1 to 3 feet. At the apex of the stem there arise the 2 to 6 inch long ovate shaped leaves. Flower presentation 1 to 6 inch long that has 2/3
inch long flowers which are of purple color. The rhizome is round which is yellow to brown in colour.

**Chemical Constituents**
The rhizome contains a bitter compound and a volatile oil. It contains moisture which constitutes 14% and ash that is 3%. The leaves of the plant contain loroglossin.

**Pharmacology**
It is *Vata pitta* suppressant it strengthens the nervous system and also brain. It improves the peristaltic movements of the gastro intestinal tract. It is aphrodisiac in nature. It helps in gaining strength in the body and avoids the weakness.

**According to Ayurveda -**

- **Gunna** (properties) – *Guru* (heavy) and *Snigdh* (slimy)
- **Rasa** (taste) – *Madhura* (sweet)
- **Vipaka** - *Madhura*
- **Virya** (potency) – *Sheet* (cold)
- **Dosha** - *Vata-pittashamaka*.

According to Acharya Vrinda, *Talmastakam* that is *Krishna musali* can be used in absence of *Munjataka*.

**Pharmacological action and properties of *Munjataka***

बल्य: - The term *Balya* stand for action that enhance the “*Bala*” and the word *Bala* refers to the strength and ability of the body with the help of *Guru* and *Snigdha Guna* and *Shita Virya* it enhance the strength and ability ( t.e. *bala*) of the body.

लर्पण: - The term *Tarpana* stands for nourishment of *Rasadi Dhatus* quickly.

बृहण - *Brihana* is the process of nourishment of *Mamsadi dhatus* and improves tone of body

बृष्य - The term *Vrushya* means Aphrodisiac.

With above *Gunas* and *Karmas* this drug act as *Saptadhatu Vardhaka* and result into increase in *Shukradhatu* which causes Aphrodisiac action.

**Indication**

- **Powder** – it is being used mainly as the aphrodisiac agent and improves the general health condition of the body.

- **Dose** - 2 to 3 gm

**Image No. 8* Eulophia compestries* plant**

Following Species of plants are used as *Salam mishri* –
Eulophia nuda
Eulophia vera
Eulophia larbacea
Eulophia pratensis
Alium macleanii
Orchis mascula
Orchis latifolia
orchis laxiflora

**Eulophia nuda** -
Amarkanda is mentioned by Raja nighantukara. He explained its synonyms and properties.

**Sanskrit name** – Malakanda
**Marathi and Hindi name** – Amarkanda
**Habitat** – Dang forest (Gujarat) and Kokan.
**Useful part** – Kanda (Rhizome)
**Dose** – 5-10 Rati (up to 1gm)

Raja nighantukara explained the synonyms and property of Malakanda are as follow:

The tubers or Rhizome of Amarkanda used in VataShleshmaja Vikara. It has Tikshna Guna, Dipana Karma and Vata-Kaphahara action on dosha. Tubers are used for Bronchitis, tumours, (गुल्मगारी) and scrofulous glands. Traditionally tubers are used in inflamed joint diseases; lumbar pain and it also used in the form of lepa in Gomutra (external application) for anti-inflammatory action on joint diseases and inflamed scrofulous glands. It exerts tonic action on body that’s why useful in degenerative disorders and fatigue.
**Semal musali:**

Fresh young roots of *Shalmali* t.e. *Bombax ceiba* are called as *Semal Musali*. It increases semen, and promotes vigour and vitality. After making scar to young root, there oozes liquid which is collected. This liquid is take as it is or after drying, mixing with *Tila* [Sesame], for *Rasayana karma* t.e. *Rejuvinatition* and *Vajikarana* t.e. aphrodisiac action.

![Image No.18- Shalmali, Bombax ceiba](image)

**DISCUSSION**

The word *Musali* is not mentioned by acharya *charaka*. Acharya *sushruta* mentioned it as *Talmuli* in *shwas vyadhi chikitsa*. Later on acharya *bhavprakasha* describe it by name *Musali*. *Shodhala* and *Raj Nighantukara* also describe it. All of the *Smahitakara* explained Only *Musali* t.e. *Krishna musali*. So in samhita and Nighantu the word *musali* is used for *Krishna musali* (Talmuli) that is *Curculigo orceiod*.

In today’s era we get two types of *musali* in market that are *Shweta* and *Krishna Musali*. By name *shweta mushali* different plant roots are used such as *Asparagus ascendens*, *Chlorphytum borivillanum*, *chlorphytum tuberosum*, *chlorphytum arundinaceum*. These all species belong to family Asparagaceae all are having similar properties and action. Now a day’s few of them are commercially cultivated.

The property of *Krishna Mushali* mentioned in Ayurvedic literature is *Tikta Madhura Rasa*, *Snigdha Guna*, *Ushna virya* and *Brihanka*, *Balya Karma*. Due *Tikta rasa* it helps to increase *Dhatwagni* of *Saptadhatu* and with the help of *Ushna virya* it act as nervine stimulants’ hence it is useful in management of erectile dysfunction and Libido. It increases Vigour vitality and tone of body. Clinically *shweta musali* possess similar properties and action as that of Krishna musali and it is one of the types of *Shatavari* (*Asparagus racemosus*) and also belongs to family Liliaceae.
Munjataka is one of the plants mentioned in Charaka samhita. According to various commentators’ Munjataka means Salam Mishri. In Indian subcontinent traditionally Salam and Salam panja mishri are used for their Bhrihana Balya Vrushya karma. Both are having Sheeta virya and Snigdha, Picchila gunas due that it increases Saptadhatus, vigour vitality and tone of the body. Also various species of Eulophia are used as salam Like E. compestris, E. nuda, E. vera, O. mascula and O. latifolia. Among them Eulophia nuda is called as Amarkanda which is describe by Raja Nighantu and it possess similar properties like Salam and used by local community of Western ghata and Kokan for Brihana and Aphrodisiac action. The root of E. latifolia is used as Salam Panja. The logical reason behind the word Panja is, when E. latifolia roots dries it attained shape Like Panja t. e. palm. Also the roots of Allium macleanii are called as Badshahi Salam or Lashuniya salam. In kokan area of Maharashtra E. partensis roots are used as salam while in western Himalaya E. larbiaceae are used as salam.

As above discussed all these species are used for Brihana karma and Aphrodisiac action in different parts of India and they are having similar properties and action. But considering their Viryas and Gunas we can selectively use them according to Agni of Rugna. Clinically Krishna mushali is easy to digest due to its Ushna virya and Shweta mushali, Salam mushali, Salam panja mushali are somewhat Guru guna hence they are used in a person having proper digestive fire (Agni).

CONCLUSION

Musalies t.e. Krishna musali and shveta musali including its different species, all are having similar properties and uses. Commonly they are used as tonic, aphrodisiac, rejuvenator. They are used as Rasayana, Vajikara, for increasing vigour and vitality. Also used in oligospermia and to treat libido. According to Aacharya vrunda Talmuli t.e. Krishna musali can be used in absence [abhave] of munjataka t.e. salam musali. Both are belong to same family that is orchidaceae. Safed musali also poses similar properties and action as well as uses as that of Krishna musali. Hence all types of musalis and mishris are used in abhave [absence] of each other, after observing all these references I want to conclude that with the term musali we should use Krishna musali t.e. curculigo.
orchoidies. Salam and salam panja are heavy to digest, hence it is used in Diptagni purusha t.e. person having good digestive capacity and appetite. Krishna musali poses ushna veerya, hence it can be given to person having Mandagni or to improve Agni and Bala.
REFERENCES