



HERBAL MEDICINAL PLANTS OF RAJASHTHAN :MUSLI.

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ABSTRACT

Now the traditional Indian system of medicine can be broadly classified into the empirical forms of folk medicine which are village based, region-specific, indigenous herb based, local resources based and in many cases, community-specific. The other system called the Shastriya stream which includes the Ayurveda, Siddha and Yunani systems of medicine is more complicated and elaborate with theoretical and research findings. Musli is useful as aphrodisiac and nervine tonic. Tribal uses of plant are presented here.

Key words: Musli, Shatawari, Aprodiasic, Santhal, Lodha , Ayurveda, Dysentry, Asparagus spp.

INTRODUCTION

Initially, the knowledge about plants as a source of medicine was confined to dwellers of high mountains, tribal people, village folk and priests. Globally, the earliest origin of documentation about medicinal plants appeared for the first time in the vedic literature in Indian sub continent and subsequently, with the advent of Buddhism and Jainism, the documentation of medicinal plants was recorded systematically. Different system of medicine developed accordingly, which have been termed as Ayurvedic, Chinese, Korean, Malaysian, Japanese, Yunani and more recently Homoeopathic.

Several of the herbal drugs used by the traditional folk healers since long have proved to be of great biological significance and modern researches have convincingly established their medicinal property and restored their credibility which has been eroded with the coming of the modern synthetic medicines (Sastri, 1956; Sharma and Kumar 2001a, b) . Further studies on the

phytochemistry of other herbal drugs used by the traditional folk healers would reveal some more valuable chemical compounds of greater biological significance not yet known to the world of medicine. A particular herb which is being used by a traditional folk healers as medicine for the treatment of some ailment may be of considerable significance for other ailments also (Sharma and Kumar 2011, 2012). Further researches have revealed that a particular herb is not only useful in those ailments for which they were being used by them for long time, but also for other ailments about which was not known either to them or to the science of medicine.

The musli plant is used in curing sexual dysfunction and also as aphrodisiac. Details are presented here.

Musli (Asparagus adscendens Roxb.)

Asparagus adscendens (Liliaceae) is valued worldwide for its enormous potential in traditional medical system. Besides this, *Asparagus*

racemosus Willd, *Asparagus filicinust* Buch-Ham-ex. D. Don., *Asparagus gonoclados* Baker and *Asparagus officinalis* Linn. have been reported to have medicinal value.

Musli is a suberect prickly shrub, with white tuberous roots. It is distributed in West Himalayas and Punjab to Kumaon.

It is known by different names in different languages of the country

Common Name	:	Satavar
Hindi	:	Hazarmuli,
Satavar, Safedmusli	:	
Marathi	:	Satavar
Gujarati	:	Ujli-musli,
Dholi musli, Saphed musli,	:	
Garhwali	:	Jhirna
Sanskrit	:	Mula, Narayani,
Musli	:	
Tamil	:	Sattavari

It is also known by various names in different part of India.

Bombay	:	Dholimusli,
Sapheta musali	:	
North West provinces	:	Khairuwa

Lodhas know this plant by the name of Jogilati

- Lodhas prescribe root paste with red roots of Ramdatun (*Smilax zeylanica* Linn.) (3:2) in the treatment of constitutional disorders. They take fresh root extract as refrigerant and apply root paste on wounds caused by mollusca shell. They give dried root powder with goat's milk (3:2) to women as a galactagogue. They also use root paste as a demulcent for animals (Kirtiker and Basu, 1935).
- Santhals take root infusion as cure for sunstroke.
- Tharus tribe gives the decoction of root as galactagogue (Maheshwari *et al.*, 1980).
- Trbial and non-tribal people of Kumaon region of U.P. use the plant stem as an aphrodisiac.
- In states of Punjab, Haryana, Rajasthan and Gujarat, leaves are used for the treatment of dysentery (Jain, 1984).

- Brihors ground the root of Musli with water and this decoction is administered orally in fever and uraemia (blood in urine).
- The plant stem is used as an aphrodisiac and root bark as a tonic for promotion of strength and longevity in Kumaon region of Uttar Pradesh. Stem is eaten as vegetable (Shah and Joshi, 1971 and Singh *et al.*, 1980).
- The leaves of Musli are used for the treatment of dysentery in Punjab, Haryana, Rajasthan and Gujarat. The roots are used for preparing veterinary medicines in Morni and Kalesar district of Haryana (Jain, 1984).
- The underground part of *A. adscendens* and *A. racemosus* is dug out and eaten. The leaves, flowers and fruits are candied and pickled in different parts of the country (Jain, 1997).

Synonyms	:	Satavari, dvipisatrū, dvipaka, varakan taka, narayani, satapadi, satahva and bahupatrika
Taste	:	Sweet
Attributes	:	Heavy and unctuous
Potency	:	Cold
Specific action	:	Rejuvenating, promoter of strength, galactagogue and alleviator of Vayu and Pitta.
Therapeutic usage	:	Cures vitiation of blood and oedema (Dash, 1991)

According to Ayurvedic literature, the tuberous roots are used as demulcent and tonic; useful in diarrhoea, dysentery, general debility, tumours and inflammations. The whole plant is used as a vegetable. (Pathak, 1970 and Kashyapa and Chand, 1986).

The following Ayurvedic medicines are prepared solely by *Asparagus adscendens*.

1. ***Musli paka:*** It is a very good tonic and an aphrodisiac.
Dose: $\frac{1}{2}$ to 1 tola with milk
2. ***Musalyadi curna :*** It is used as an aphrodisiac and is given in a dose of 3-5 gm.

The following are the classical uses of Musli.

- (1) The root of Musli pounded with goat's milk and honey is applied on face for freckles.
- (2) Powdered rhizome of Musli is given in 12 gm dose with 100 to 250 ml milk twice a day for the treatment of epilepsy.
- (3) 25 g grounded root of Apamarga (*Achyranthes aspera* Linn.) is steamed in Tanduladapa (rice washing), 250 ml of goat's milk and 1 gm powdered root of Musli is added to it. It is given twice a day in bleeding piles.
- (4) Fresh juice (Svarasa) obtained from the root of Musli (14 to 28 ml) taken twice a day or powdered root of Musli 3 to 6 gm taken with 100 ml milk twice a day cures peptic ulcers.
- (5) Powder of Musli and Bakuci (*Psoralea corylifolia* Linn.) alleviates deafness.
- (6) Powder of Musli root combined with Giloe (*Tinospora cordifolia* (Willd) Miers), suspended in milk added with ghee is given as an aphrodisiac.
- (7) Paste of seeds of Kapikacchii (*Mucuna pruriens* (Linn.) DC.), Musli, grape fruit (*Vitex vinifera* Marsh), whole plant of Lotus (*Nymphaea stellata* Willd.) 6-12 gm, boiled with milk is given with 50 ml warm water or 100 to 250 ml milk twice a day for cure of heart diseases.
- (8) Decoction of equal part of stem of Guduci (*Tinospora cordifolia*), root of Musli and leaf of Patola (*Trichosanthes dioica* Roxb. Wall.), bark of Nimba (*Azadirachta indica* A. Juss.) and wood of Raktachandana (*Pterocarpus santalinus* Linn. F.) 28 ml is given twice a day for lacteal disorders.
- (9) Powder of equal part of dried ginger, root of Musli and flower of Jasmine (*Jasminum officinale* Linn.) 3 to 6 gm is given with 50 to 100 ml Tanduldaka (rice washings) twice a day in abortion or miscarriage.
- (10) Decoction of equal part of Triphala (*Phyllanthus emblica* Linn., *Terminalia arjuna* (Roxb.) Wt. and Arn., *Terminalia chebula* (Gaertn.) Retz., root of Musli, leaf of Patola (*Trichosanthes dioica* Roxb. Wall.), stem of Guduci (*Tinospora cordifolia*), whole plant of Parpata (*Hedyotis corymbosa* (Linn.) Lamk.) 14 to 28 ml is given twice a day in mercurial poisoning.
- (11) Fruit of Goksuru (*Tribulus terrestris* Linn.), seeds of Eranda (*Ricinus communis* Linn.) and root of Musli— 100-200 ml is given with Guda (jaggery) and ghee thrice a day for the treatment of retention of urine.
- (12) Ksira Siddha with Draksha (grape fruit), roots of Yastimadhu (*Glycyrrhiza glabra* Linn.), fruit of Goksuru, root of Musli— 100 to 200 ml is given twice a day in haematuria (the patient in this condition patient passes foetid, saline, warm urine with blood, pain in bladder region).
- (13) Ksirapaka prepared from the powder of equal part of roots of Musli, Bala (*Sida cordifolia* Burm.) and Draksa (grape fruit) 100 to 200 ml is given with Sarkara (raw sugar) thrice a day in syncope (Transient loss of consciousness and after sometimes the patient may become conscious even without treatment).
- (14) Root of Salmali (*Ceiba pentandra* (Linn.) Gaertn.) 4 parts, root of Musli 3 parts, Vanslochana (*Bambusa bambos* Druce.) $\frac{1}{2}$ parts are taken and powdered. Its 3 to 6 gm is given with 5 to 10 gm honey and Sarkara (raw sugar) three times a day for the treatment of neurasthenia and impotency.
- (15) Equal parts of Svaras (juice) of root of Musli and leaf of Brahmi (*Bacopa monnieri* (Linn.) Wetst) 7 to 14 ml is given with 100 to 250 ml fresh milk twice a day in loss of memory and lack of confidence.
- (16) Powder of equal part of decorticated seed of Kapikacchii (*Mucuna pruriens*) and Musli 3 to 6 gm is given with 100 to 250 ml milk and 25 to 50 gm Sarkara (raw sugar) twice a day in oedema and eruptions.
- (17) Decoction of equal part of roots of Asvagandha (*Withania somnifera* Linn.), Musli, Atibala (*Sida rhombifolia* Linn.), Ativisa (*Aconitum heterophyllum* Wall.) and stem of Guduchi (*Tinospora cordifolia*) 14 to 28 ml, is given three times a day for the treatment of mumps and parotitis.

(18) Powder of equal part of roots of Bala(*Sida cordifolia* Burm) Asvagandha, Musli and Punarnava (*Boerhaavia diffusa* Linn.) 1 to 3 gm is given with 100-250 ml milk, twice a day for the treatment of bleeding from lungs and haemoptysis (Dash and Kashyap, 1992 and Sharma, 1996).

Besides the above preparations, various other Ayurvedic medicines contain musli (*Asparagus adscendens*).

1. **Kusmandavaleha** : 12 to 24 gm is given with 100 to 250 ml milk twice a day for the treatment of haemorrhagic disease.
2. **Candravaleha** : 10 gm is given with 100 to 250 ml fresh milk thrice in a day in Syncope disease.
3. **Bala Taila** : 7 to 14 ml is given with 50 ml warm water twice a day in prolapsus uterus.
4. **Narsimha Curna** : Half pala is given daily. It is an excellent medicine for person sufferings from leprosy, fistula, baldness, wrinkles and urinary disorders.

Besides this, Amrta Ghrta, Amritparasavaleha, Asvagandha Ghrta, Garbha-Cintamani Rasa, Candravaleha, Cyavana Prasa Avaleha, Chagaladya Ghrta, Tikta Ghrta, Padmakadi Taila, Varunadi Ghrta and Visagarbha Taila are the medicines in which musli is main ingredient.

Asparagus racemosus Willd.

Common Name : *Shatavari*

Hindi	:	Bojhidan, Sadabori, Satawar, Satmuli, Shakakul
Sanskrit	:	Abhiru, Aheru, Ardhakantaka, Atmagupta, Bahumula, Bahusuta, Bhiru, Kanchanakarini, Karshi, Keshika, Mula, Pivari, Rangini, Shatapadi

Tamil	:	Sedamulam, Sadaveli, Sadaveri, Sandaveri
Telugu	:	Challagadda, Ettavaludutige
Uriya	:	Chootaru, Mohajolo

It is known by various names by different tribes

Lodhas	:	Gai-sira, Satawar
Mundas and Santhals	:	Finajaperi

- Mundas use root paste against dysentery and diarrhoea.
- Oraons prescribe root decoction as an aphrodisiac and give it to women against gleet (a discharge from uterus). They give dried root powder with ghee (Clarified butter) (5:2) to children for improving eyesight.
- Oraons and Santhals use roots to make Bichimander (a tablet for preparing rice beer). Santhal tribe uses the root for curing of bleeding urine. They use the whole plant to cure headache (Goel and Mudgal, 1988).
- Lodhas use the root paste for making Ranu-tablet (a tablet used for fermentation of country liquor). They put a twig in between cotyledons of mango and throw it away after touching the body of a person who is believed to be ghost affected, to cure the victim. After delivery Lodha women wear a twig in ears and as hairdo for magical guard against evil eyes (Pal and Jain, 1998).
- Some ethnic communities use roots for preparation of sweets for diabetic patients.
- Abujmaria use the tuberous root as an anthelmintic (Roy and Chaturvedi, 1987).
- Tribal people of Godavari district of Andhra Pradesh use the root as an aphrodisiac (Sudhakar and Rolla, 1985).
- Root is used for the treatment of rheumatism in Araku Valley, Vishakhapatnam district of Andhra Pradesh and Anaikotty hills, Coimbatore in Tamil Nadu.

- The root is used in tribal region of Hazaribagh district of Bihar for the treatment of bleeding nose (Tarfder and Chaudhari, 1981).
- Tribes of Rajasthan and Uttar Pradesh use the root for the treatment of diarrhoea and dysentery (Sharma *et al.*, 1979 and Sebastian and Bhandari, 1984).
- In Ranchi and Hazaribagh district of Bihar and Mount Abu of Rajasthan, plant is used for the treatment of gonorrhoea, leucorrhoea and menstrual complaints (Tarfder, 1983 and Hemadri and Rao, 1983).
- Dangs tribe of Gujarat use the root for gastric troubles (Joshi *et al.*, 1980).
- Bhoa tribe of UP and Rajasthan, use the plant part as a galactagogue (Sebastian, 1984; Maheshwari and Singh, 1984; Singh and Maheshwari, 1985 and Singh *et al.*, 1987).
- In Sudan, roots are used by Golos as demulcent, anti-dysenteric and diuretic.

Asparagus racemosus is widely used in many Ayurvedic and Yunani medicines.

- **Ayurveda** : The roots are bitter, sweet; oleaginous, cooling, indigestible, appetiser, tonic, aphrodisiac, galactagogue, useful in dysentery, diarrhoea, tumours, inflammations, biliaryness, diseases of the blood and eye and throat complaints.
- **Yunani** : The root is useful in diseases of the kidney and the liver, bleeding in urine, gleet and gonorrhoea.
- A mixture of honey and fresh juice of root is given as a demulcent in dyspepsia (Anonymous, 1956). Besides this, it forms part of Ayurvedic tonic used for various ailments.

(1) **Galactagogue tonic** : Satawar 175 mg with *Centella asiatica* Linn. 250 mg, *Cuminum cyminum* Linn. 75 mg, *Cyperus rotundus* Linn. 50 mg, *Gossypium indicum* Lamk. 100 mg, *Leptadenia reticulata* W. and A. 75 mg is given twice daily with milk.

(2) **Tonic for Non specific Leucorrhoea-A** : Asparagus 75 mg, *Butea monosperma* Lamk. (Taub). gum 25 mg, *Cinnamomum zeylanicum* Blume Bijdr. bark 25 mg, *Ficus*

bengalensis Linn. bark 75 mg, *Mesua ferrea* Wight. Arn. Prdr. 25 mg, *Mimosa pudica* Linn. 25 mg is grounded and filled in capsules which are given thrice a day.

(3) **Anti-Ulcerogenic tonic** : Asparagus 150 mg, *Emblica officinalis* Gaertn. 150 mg, *Musa paradisiaca* Linn. 200 mg is given twice or thrice daily.

Asparagus officinalis Linn.

Common Name : Sparrow grass

Hindi	—	Nag down, halyun
Dutch	—	Asperge
English	—	Grass, Sparagrass
French	—	Asperge
German	—	Spargel, Schwamerwartz
Greek	—	Asparagia, Asparagonia
Italian	—	Cornudo
Rusian	—	Sparja
Spanish	—	Esparrago

- The root contains diuretic virtues, which are more abundant in shoots. An infusion made from these roots assist against jaundice and congestive inactivity of the liver.
- In England, a medicinal tincture is made from the whole plant, which allays urinary irritation and does well against rheumatic gout.
- Syrup of Asparagus is employed medicinally in France and Air-les-Bains for cure of rheumatic patients.
- In the United States of America, Asparagus is undeniably sedative and a palliative in all heart affections attended with excited action of the pulse.

Asparagus filicinus Buch-Ham-ex. D.Don

Kashmiri and Punjabi – Allipalli

- In Kanawar, a sprig of this is put in the hands of small pox patients as a curative measure.
- The root is considered vermifuge and taenifuge in Annam. It is given in cholera and acts as a powerful diuretic. It is also used as a cure for rheumatism due to dampness.

Asparagus gonoclados Baker

Hindi	:	Shakabul
Marathi	:	Satavarimul,
		Zatar
Tamil	:	Kilavari
Telugu	:	Challagaddalu, Pillipichara

- Tribes of Cannore district of Kerela use the leaf for muscular pain.
- According to ancient literature, the root is considered nourishing and aphrodisiac. Boiled with oil, it is applied to cutaneous diseases. It is also given in gonorrhoea in 15 grains per dose.

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CONCLUSION

During the present investigations attempts were made to find out use of traditional medicinal system including tribal and non tribal to cure different ailments in various ways by use of roots and different parts of this plant. Asparagus commonly known as Musli has several species which are used directly or in various combinations by different tribal groups.

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