



SUDHAVARGA DRAVYA; A COMPREHENSIVE REVIEW

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ABSTRACT

Rasashastra is specialized branch of Ayurveda that deals with rasa dravyas. *Sudha varga dravya* is one among the rasa dravyas. The literal meaning of the word “*Sudha*” is nectar, honey of flowers, comfort, water, milk etc. The term *Sudha* here means lime stone. All the drugs which predominantly contain calcium are enlisted under the heading *Sudhavarga*. Calcium is the most abundant mineral in the body and performs vital role. It is necessary for bone health, cardiovascular and muscle function and nervous system signaling. Proper knowledge in *sudhavarga* helps in treating calcium deficiency and other diseases efficiently. In this article we discuss about *Sudha varga dravya*, features, types, *Shodhana* and therapeutic uses.

Keywords- *Sudhavarga*, Rasashastra, *Rasadravya*, Limestone

INTRODUCTION

The literal meaning of the word ‘*Sudha*’ is ambrosia, nectar, honey, comfort, water, milk etc. But here *Sudha* means lime stone which contains calcium.¹ The group of drugs containing calcium as main component is grouped under *Sudha varga*. There are minerals and also animal products included in this *varga*. The word *Sudha varga* was first introduced by acharya Yadavji trikamji in his book rasamritha. Charaka acharya has considered *sudha* as *Parthiva dravya*. Acharya Susrutha has used *Sudha* to prepare *Prathisaraniya kshara* in Susrutha samhitha. Rasarnava and rasarathnakara has entitled this *varga* as *Shukla varga*.

Table 1 : Classification of sudha varga

Sl no	Types	Examples
1	Mineral sources	<i>Badarasma</i> <i>Godanti</i> <i>Khatika</i> <i>Sudha</i>
2	Animal sources	<i>Mrigasringa</i> , <i>Ajasthi</i> <i>Kukkutanda twak</i> , <i>Kurmasthi</i>
3	Marine sources	<i>Mukta</i> , <i>Pravala</i> , <i>Shanka</i> , <i>Shambuka</i> , <i>Shukti</i> , <i>Varatika</i> , <i>Samudraphena</i>
4	Plant sources	<i>Vamsalochana</i>

Sudha (Lime)

Description about *Sudha* is available in samhitha period. Charaka has considered *Sudha* as *Parthiva dravya*. Acharya Susruta has used *Sudha* to prepare *Pratisaraniya kshara*. Sri Sadananda Sharma has described process to prepare *Churnodaka*. Lime is obtained by heating limestone in strong heat. (Fig. 1)

Synonyms – *Churna, Churnaka, Sudha, Saudavilepanam, Shilaksharam.*

Churnodaka preparation

Five Tola of water should be added to 2 *Ratti* of lime in a bowl and left for 12 hours. Later filter the fluid through filter paper. Keep in a coloured bottle and cork it.

Karma -*Krimighna, Vishaghna*

Dose of Churnodaka- 30 to 60 drops in 1 year child

2 *Tola* (24gm) in adults

Anupana – *Jala*

Therapeutic uses- *Krimi Athisara, Amlapitta, Shula, Grahani, Mukhapaka, Kshata*

Khatika (Pipe clay)

Bhavaprakasha and Ayurveda prakasha has included *Khatika* in *Uparasa*. Chalk is found in the form of marble, limestone calcite or island spar. It is soft fine grained limestone formed as mud on ancient sea. It differs from pure, fine grained lime stone as it is soft and did not change into hard rock. (fig. 2)

Synonyms- *Khatika, Khatini, Khati, Lekhana-mrttika, Kathini, Kathinika, Varnika, Varna-lekhika.*

Types- *Khatika* – contains impurities

Goura khatika- white in colour, heavy in weight, useful for medicinal purpose

Shodhana- Take the powdered *Khatika* in a bowl and add water. After mixing leave the bowl settle *Khatika*, later decant the water and make the residue dry and use

Pharmacological properties-

Rasa- *Madhura tikta*

Guna- *Sita*

Virya – *Sita*

Karma- *Grahi, Dahahara, Netrya, Lekhana*

Dosagnata- *Kaphagna, Pittaprasamana*

Anupana- *Sita jala, Madhura jala, Ssarkara*

Dose- *1 Masha* (1 gm)

Therapeutic uses- *Daha, Raktadosa, Netryaroga, Vishanashaka, Shotha, Raktapitta, Vrana, Harita varna atisara,*

Formulations- *Khatikadipeya, Mugdha rasa, Khatikadi choorna, Dasanasamskara choorna*

Godanti (Gypsum)

Gypsum is a very soft mineral composed of calcium sulphate dihydrate. Description about *Godanti* is not available in ayurvedic classic till 20th century. It was first mentioned in the book *rasatarangini*. Acharya Yadavji Trikamji has also mentioned about *Godanti* in *rasamrita*. It is found during low tides in ocean and also found as a mineral in mines. (fig.3)

Synonyms- *Godantika, Godanta*

Types- *Kanarupa, Talakruti, Pindakruti, Kausheyakruti*

Grahyaargyata- A good quality *Godanti* is having multiple thin layers, smooth, whitish, and clean as moon and shiny.

Shodhana- *Swedana* with *Nimbu swarasa* and *Dronipushpi swarasa* for one and half hours.

Marana- *Shudha godanti* is rubbed with *Kumari swarasa* and subjected to *Putra*.

Pharmacological properties

Virya- *Sita*

Karma- *Deepana, Balya*

Dose – 1-3 ratti(125 to 325mg)

Anupana- *Madhu, Godugdha, Grita, Tulsi swaras, Sita*

Therapeutic uses- *Agnimada, Pitta jwara, Jirna jwara, Swasa kasa, Sweta pradara, Pandu, Uraskshatavataroga, Balroga, Shirasoola*

Fornulations-*Kasisa godanti basma, Kalagni bairava rasa, Shanka dravaka rasa, Mukta divati, Shudha shataka yoga, Balapanchabhadra rasa, Trailokyachintamani rasa.*

Mrigasringa (Deer horn)

Most deer have antler which are not true horn. When fully developed antlers are dead bone without a horn or skin covering. They are born only by adults and are shed and regrown each year. Discarded antlers are source of calcium phosphorous and other minerals. It is known since vedic period. Chemically it is calcium phosphate.(fig.4)

Synonyms- *Mrigashringa, Enasringa, Mrigavishanaka, Harinasringa*

Grahya- *Mrgasringa* should be effected by germs, long heavy hard and having many branches of small horn.

Shodhana- *Ashudha mrgasringa* is purified by *Swedana* with *Takra* or *Kanji* for 3 days

Marana

1.*Anthardhooma*- *Sudha mrigasringa* cut in to small pieces and subjected to *Putra*. The powder material is rubbed with *Arka kshira*. This is then subjected to *Putra* 3 times.

2.*Bahirdhoomavidhi* – *Sudha mrgasringa* is heated in open air and heated into powder form which is then rubbed with *Arkakshira*. This is then subjected to *putra* three times.

Therapeutic uses- *Hritsoola, Parswasoola, Jwara, Kasa, Swasa, Balya, Kanthivardaka, Hikka, Sirasula*

Anupana – *Dugha, Navaneetha, Gritha, Madhu*

Dose- 2-6 Ratti(250-750mg)

Formulation- *Trinetra rasa, Jwarahara moharavati, Jwarankusa rasa, Trigunakhya rasa, Sarveswara rasa, Grahavarjrapakala rasa*

Shukti (Oyster)

The word oyster is used as a common name for a number of distinct groups of distinct group of bivalve molluscs which live in marine or brackish habitats. The valves are classified. Oysters are excellent sources of zinc, iron, calcium, selenium, as well as vitamin A, and vitamin B12. Oysters are low in food energy. Traditionally oysters were considered to be an aphrodisiac. They are rich in aminoacids that trigger increased level of sex hormones.(fig.5)

Synonyms-

Shukti- *Shuktika, Muktamata, Muktagraha, Mahashukti, Mouktika mandira*

Jala shukti- *Varishukti, Krimibhu, Khudrashukti, Sambuka, Jaladimba, Putika, Toyashukti*

Types

Mukta shukti -that which forms the pearl

Jala shukti- that which does not form pearl in it

Shodhana- *Shukti* will be subjected for *Swedana* in *amladravya* or *Jayanthi swarasa* in *Dola yantra* for 3 hours

Marana- The purified *Mukta shukti* is made into powder form and *Chakrikas* are made and dried by giving *Bhavana* with *Gritha kumari swarasa* after that *Gaja puta* is given. After two *Gajaputa* fine *Bhasma* will be prepared.

Pharmacological properties

Mukta shukti- *Madhura rasa, Snigdha guna, Dipana, Ruchikara*

Jalashukti- *Katu rasa, Snigdha guna, Dipana, Balya, Ruchikara Vishahara, Gulmahara, Sulahara*

Dose- 2 Ratti

Anupana- *Madhu, Gritha, Godugda, Nimbuswarasa*

Therapeutic uses-

Mukta shukti- *Sula, Hritroga, Swasa, Mutrasharkara, Pliharoga, Udararoga*

Jala shukti- *Sula, Gulma, Vishadosa*

Formulation- *Grahani sardula rasa, Prava panchamritha rasa, Maha gandhaka, Ashtamritha bhasma, Visamajwarantaka loha, Muktapanchamritha rasa, Sarweshwara rasa.*

Shanka (Couch shell)

Couch shell is the shell of marine creature called *Turbunella rapha* belonging to mollusc group. This is available in deep sea. Its name can be readily traced from the stories of Mahabharatha and Srimadbagabada. It has references in Bruhat Trayees. Rasarnava and Rasaratnakara have included the drug in *shuklavarga*. Chemically it is calcium carbonate.(fig.6)

Synonyms-*Shanka, Shankaka, Kambu, Trireka, Samudraja, Sunanda, Dirghanada, Kamboja*

Types

1. *Dakshinavatha*- rare variety, auspicious, coils expand in counter clockwise if viewed from the apex of the shell, used in *Devapujana*. It is *Tridosahgna* and *Daridryanashana*
2. *Vamavartha*- abundantly available, coils expand opposite to *Dakshinavarta shanka*

Grahyaagrahyata- round, smooth, small hole, clean, porcelaneous white, big and heavy

Shodhana- *Shanka* is made into small pieces of 1-2inches and tied into polutice. The polutice is subjected to *Swedana* in *Dolayantra* with *Nimbu swara* or *Jayanthi swarasa* or *Tanduliyodaka* or sour gruel for 3 hours.

Marana- The purified *Shanka* are kept in a *Sarava* closed with another one, sealed, dried and subjected to incineration in a *Gajaputa*. *Shanka* becomes white *Bhasma* by 2 such incineration.

Pharmacological properties

Rasa-*Kshariya*

Guna-*Sita*

Virya- *Sita*

Karma- *Grahi, Varnya, Balya*

Dose- 250 to 300mg

Anupana- *Nimbu swarasa*

Therapeutic uses- *Grahani, Pidaka, Amlapitta, Agnimandya, Parinamasoola, Yakritplihavidhi, Visa, Ajirna*

Formulations- *Shankavati, Kaphaketuras, Mahashankavati, Pravalapancamritarasa, Shankadrava, Shankagarbhapottali, Trirekha vartika, Arjunaharashanka choornam, Shanka varti, Agnikumararasa.*

Sambuka(Pila)

This is also the shell of a mollusc living in water (Pila ampullaceae). The external shell part is generally burnt and made into calcium. It is found in river, lake, and sea.(fig.7)

Synonyms- *Kshudra sankha, Shankanaka, Sambhuka, Swalpa Shanka, Ksullaka, Nakha shanka*

Shodhana- *Shambuka* tied in to polutice which is suspended in any sour liquid in a dolayantra and subjected to *Swedana* for one and half hours. On cooling down the shells are taken out and washed with warm water.

Marana- pieces of *Kshudra shanka* Are placed in the pulp of *Ghrtakumari*, enclosed in *Sarava samputa* and subjected for one *Gajaputa*. White colored *Bhasma* will be obtained.

Pharmacological properties

Sita, Tikshna guna, Sita virya,

Karma- Grahi, Dipana, Pacana

Dose- 2 Ratti (200mg)

Anupana – *Nimbu swarasa, Ushnodaka, Madhu, Gritha, Tulasi swarasa*

Therapeutic uses- *Netraroga, Sphota, Sitajvara, Grahani, Raktatisara, Udarasoola*

Samudraphena (Cuttle fish bone)

This is marine product reminesence of a creature called cuttle fish bone which is available on the seashore. Since this is found in the sea and looks like froathy mess it is named as *Samudraphena*. It is known since samhitha period and has got many therapeutic uses.(fig.8)

Synonyms- *Samudraphrena, Phenena, Suphena, Phenaka, Abdhiphena, Dindira, Abdhikapha, Abdhija, Samudraja*

Shodana- *Ashudha samudraphena* is scraped and kept in *Khalva yantra* to be powdered. The it is triturated with *Nimbu swarasa* for 1 day.

Pharmacological properties

Kashaya rasa, Sara guna, Sita virya, Kaphanashaka, Chakshushya

Karma-Chakshushya, Lekhana, Pachana, Dipana

Ashudha samudraphena Sevanajanya Dosha- Angabanga

Dose- 2 Ratti (250mg)

Anupana- *Madhujala*

Therapeutic uses- *Karna srava, Karna vedana, Karnaguda, Visha dosa, Kushta*

Formulation- *Sukhavarti, Drishti pradhana varti, Danta varti, Maha nila gutika, Samudraphena varti, Shankadravaka rasa.*

Varatika (Cowrie)

Cowrie is a group of small to large sea snails, marine, gastropod molluscs. It is whitish to yellow in colour. The knowledge about the therapeutic utility of these marine shell can be traced since the period of charaka samhitha. Since this drug is useful in *Parada jarana* it has been included in *Sadharana rasa* group. Chemically it is calcium carbonate.(fig.9)

Synonyms- *Varataka, Varata, Varati, Kapardaka, Kaparda, Kapardi, Kapardika, Balakridanaka, Chara, Charachara*

Types**Table 2:** Acc to rasatarangini

<i>Pita</i>	<i>Gulmayuta, prushta</i>	<i>Uttama</i>
<i>Sweta</i>	<i>Tiksna, chakshusya</i>	<i>Madhyama</i>
<i>Dhusara</i>	<i>Hima, Vranashaka, Balagrahanashaka</i> Have spots and lines	<i>Adhama</i>

Table 3 : Acc to rasaratnasamucchaya

<i>Varatika</i>	Yellowish tinge, has nodules on the back, oval in shape
<i>Varata</i>	<i>Guru,</i> Increases <i>shleshma</i> and <i>pitta dosha</i>

Table 4: Based on weight

<i>Shrusta</i>	1 and half <i>nishka</i>	One and half <i>shana</i>
<i>Madhyama</i>	1 <i>nishka</i>	One <i>shana</i>
<i>Kanishtika</i>	One fourth <i>nishka</i>	Half <i>shana</i>

Shodhana

Varatika can be purified by subjecting it to *Swedana* in *Kanji* or *Jambira swarasa*, *Kulatta kashaya* or *Amladrava* or *Nimbukamla* for 3 hours.

Marana- *Shudha varatika* subjected to 1 *Gajaputa* and triturate after self cooling form *Varatika* bhasma.

Kapardika bhasma- Sharadinduniba, smooth, soft, does not irritate tongue

Pharmacological properties

Katu rasa, Usna virya, Vatakaphahara

Karma- Dipana, Vrishya, Rasendra jarana

Anupana- honey, water

Dose- 2 *Ratti* (250mg)

Therapeutic uses- *Agnimadhya, Grahani, Netraroga, Karnasrava, Kshaya, Sphota, Udarasoola*

Formulations- *Lokanatha rasa, Ratnagarba pottali pravala panchamritha rasa, Pradarantaka lauh, Grahani kapata rasa, Lavangati vati hemagarbapottali*

Kukkutanda tvak (Egg shell)

It is the external covering of hen's egg. These also contain calcium carbonate. It is known since samhitha period. *Susrutha* has mentioned it under *Avasadana dravya* and he also used it for *Pratisarana karma* to treat *Vrana*. *Bhavaprakasha* has mentioned few yogas containing *Kukkutanda tvak* for eye diseases. In *rasamritha* *Kukkutanda tvak* is mentioned for *Vanga marana*.(fig.10)

Synonyms- *Swetha bhasma, Swethanda bhasma, Kukkutanda kapala, Kukkutanda tvak, Kukkutadimba tvak*

Shodhana – *Kukkutanda tvak* is soaked in any sour liquid (*kanji* or saline water) for 3-4 hours. Later the sticky sheath at the inner side of the shell is removed and dried under sun . The dried shells are stored as *Sudha kukkutanda tvak*.

Marana- The purified shell pieces are pounded to powder, added with *Kumari swarasa* or *Changeri swarasa* and triturated thoroughly. The mass is made into *Chakrikas*, dried and subjected to *Gaja puta* to obtain soft white *Bhasma*.

Dose- 1-4 *Ratti* (125-500mg)

Anupana- *Navaneeta*, *Sharkara*, *Dugdha*, *Amlaki swarasa*, *Dadima swarasa*

Karma- *Rasayana*, *Balya*, *Mamsa vardhaka*, *Dipana*, *Pacana*, *Vajikarana*

Therapeutic uses- *Hridya*, *Balya*, *Vajikara*, *Pushtidayaka*, *Shukravikara*, *Prameha*, *Kaphaprakopa*, *Vatavikara*, *Swapnadosh*, *Raktapradara*, *Swetapradara*, *Bahumutrata*, *Somaroga*.

Formulations- *Muktadi mahanjana*, *Sukhavati*, *drsti pradhana varti*

Kachchhapasthi (Tortoise shell)

This is tortoise shell. It is hard and rich in calcium. After the death of tortoise these bones can be used as a source of calcium. This drug has no classical reference.(fig.11)

Synonymns- *Kurmaprishta*, *Kurmasthi*, *Kurmakavacam*

Shodhana

The shell is made in to small pieces and and kept in buttermilk for about 12 hours. Later these pieces are cleared of the fleshy part and washed with warm water and dried.

Swedana of small pieces of *Ashudha kachchhapasthi* with *Nimbu swarasa* for 2 yama.

Marana- *Shudha kurmasthi* is made into small pieces and placed inside the pulp of *Kumari*, enclosed in *Sarava samputa* and subjected for 1 *Gajaputa*. When self cooled white coloured soft *Bhasma* is obtained.

Dose- 2- 4 *Ratti* (250 – 400 mg)

Anupana- *Madhu*, *Navaneetha*, *Sitha*, *Guduchi satwa*

Badarashma (Silicate of lime)

Acharya yadavji has mentioned *Badarashma* for the first time in his book *rasamritha*. It is used commonly by the unani physicians. It is in the size of big badara fruit or almond. It is also having a stalk like structure. It is brownish in colour externally and the inner part is greenish white. It is obtained from stones. It is imported from arab countries and commonly used by Unani phycians.(fig.12)

Synonyms- *Asmabhit*, *Badarasma*, *Badari pasana*

Shodhana- *Badarasma* is purified, if it is heated and immersed in *Mulaka swarasa* for 7 times.

Marana- *Badarasma* powder is to be steeped in *Mulaka swarasa* and pounded till it becomes a smooth paste. The smooth paste is made into cakes and dried. They are subjected to *Gajaputa* for 7 times to obtain whitish *Bhasma*.

Pisti- its *Pishti* can be prepared by grinding it with rose water or *chandana* water for 3 days. It can also be prepared with *Kadali stamba* juice or raddish juice by grinding it for 7 days.

Pharmacological properties

Karma- *Pitta nashaka*, *Vamana nashaka*, *Mutrala*

Dose- 500-1000 mg

Anupana- *Kadalimula swarasa*, *Madhu*, *Ksheera*

Therapeutic uses- *Mutrakrchra*, *Mutrasmari*, *Mutraghata*, *Mutradaha*, *Upadamsa*

Swetanjana (Calcite) This is a white coloured, lustrous, layered, smooth, hard and quadrangular crystals. It is chemically calcium carbonate. Calcite is a carbonate mineral and the most stable polymorph of calcium carbonate. This drug has no classical reference.(fig.13)

Shodhana – not required

Marana- The dry *Swetanjana* is powdered in a *Khalvayantra*. It is added with required quantity of *Ghrtakumari swarasa* and triturated thoroughly to prepare *Chakrikas* which is dried under sun. It is then enclosed in *Sarava samputa* and subjected for 1 *Gajaputa*.

Pharmacological properties

Sita guna, Balya, Dipana

Dose- 1-3 *ratti* (125 -375 mg)

Anupana- *Madhu, Sitha, Gritha or Ksheera*

Therapeutic uses- *Pittaja jwara, Jirna jwara, Swasa, kasa,*

Mukta (pearl)

The *Muktas* are obtained from sea . These are of 2 types natural and cultured. Natural pearls are rare. It is included in *Ratna varga* on account of its shining, beauty and high cost. It is also included in *Sudha varga* as it contains calcium carbonate.(fig.14)

Synonyms- *Muktapahala, Mouktika, Mouktikeyaka, Suktija, Souktikeya, Sasiratna, Sasipriya.*

Shodhana- *Shodhana* is not considered necessary however if it is purified it becomes more useful. *Shodhana* is done by subjecting it to *Swedana* in *Dolayantra* with *Jayanthipatra swarasa* or *Nimbu swaras* and then washed with hot water.

Marana- purified *Mukta* is first powdered and triturated with *Kumari swarasa* or *Godugda*. It is then enclosed in *sarava samputa* and subjected to *Laghuputa*. Repeat the process 3 times to obtain *Bhasma*. *Bhasma* obtained will be white like moon.

Pisti- purified *Mukta* is powdered and triturated with rose water for 21 days in a very hard stone mortar. It should be made very fine like collyrium. After drying it should be powdered and preserved. Its colour will be light pink.

Pharmacological properties

Madhura rasa, Sita laghu guna, Sita virya, Kaphapittahara

Karma-Brhmhana, Vrisya, Ayushya, Asthidanta vivardana, pushtikara, Tushtikara, Visapaha, Dahashamana, Medhya, Dipana, Bedana, Kantiprada, Balya, Chakshushya, Viryaprada.

Dose- half to 1 *ratti*

Therapeutic uses- *Kshaya wasa kasa, Dantodbedajanya jwara, Agnimandya, Daha santapa, Kshata, Dristiroga, Unmada, Prameha, Vatavyadhi, Chandragraha prakopa*

Pravala (Coral) Corals have their origin from sea animals. When these animals drink sea water for their survival the calcium present in the sea water is absorbed in their body and get deposited in various parts of the body. As it is a continuous process hence after some time when the quantity of calcium becomes excess the animals die and their body is called *Pravala*. Anthozoan polyps are the main animals which make *Pravala*. It is also a calcium carbonate compound and included in *Ratna varga*.(fig.15)

Synonyms- *Vidruma, Abdilata, Latamani, Raktakanda and Bhauma ratna*

Shodhana- *Pravala* is purified by subjecting it to *svedana* in *Dolayantra* with *Kshara drava* or *Tanduliya rasa* and then washed with hot water.

Marana- Purified *Pravala* should be powdered and triturated with *Kumari swarasa* or *Godugdha* which is made in to pellets . This is then enclosed in *Sarava samputa* and *Gajaputa* is applied 2 to 3 time to obtain white colour *Bhasma*.

Pisti – *Shudha pravala* is pounded grounded with rose water for 21 days

Pharmacological properties

Kashaya Madhura Amla rasa, Laghu Snigdha Sitha guna, Sita virya, Kaphapittanut, Tridoshaghna

Karma-Dipana, Pacana, Vrisyā, Balya, Pushtikara, Kantikara Chakshushya, Grahadosahara, Bhutadi samana, Mangaladayaka, Svedanirgamahara.

Dose- 2 Gunja (250mg)

Therapeutic uses – *Kshaya, Kasa Swasa, Raktapitta, Drishtiroga, Raktaroga, Bhutonmada, Visajaroga, Mangala graha prakopa.*

Ajasthi (Goat's bone)

It is the bone of goat which is rich in calcium. After the death of goat, its bone can be used as a source of calcium. It has got no classical reference.

Shodhana- Bone of goat soaked in sour liquid(Kanji) for 12 hours. Later it is washed dried and stored as *Shudha ajasthi*.

Marana- *Shudha ajasthi* is made into pieces and placed in pulp of *Kumari* and enclosed in *Sarava samputa*. It is then subjected one *Gajaputa*

Dose- 2-4 Ratti

Anupana- *Madhu, Navaneetha, Sitha*

Therapeutic uses- strengthens bone, growing children, lactating mother, *Kshaya roga*

Discussion

Description of *Sudha varga* is available since samhitha period. In charaka samhitha sudha has been comprised under *Bhauma aushadha* and in chikitsa sthana these drugs are broadly used in various conditions. Acharya sushruta has used *Sudha* to prepare *Pratisaraniya kshara*. Rasarnava and rasaratnakara has classified the drugs *Sudha, Kacchapasthi, Shanka, Mukta, Shukti, and Varatika* under *Shukla varga*. In the book rasatarangini the drugs *Khatika, Sudha, Godanti* has been quoted under *Talakadi vijnaniya* and *Shanka, Sambuka, Sukti, Varatika, Mrigasringa, Samudraphena* has been quoted under *Shankadi vijnaniya*. Acharya Siddinandana mishra in his book Ayurvediya Rasashastra, mentioned 14 drugs under *Sudha varga*. Acharya Yadavji Trikamji in Rasamritha described *Sudha, Khatika, and Godanti* in *Sudha varga*.

Of these *Sankha, Sukti, and Varata*, are obtained from sea and are mostly acting on digestive system.⁶ *Shankha bhasma* is indicated in gastrointestinal disorders like *Amlapitta, Parinamasoola, Grahi* and *Agnimandhya*. It is useful in hyperacidity, dyspepsia and gastrointestinal reflux. *Sambuka bhasma* is useful in abdominal colic, hyperacidity and diarrhoea. *Shukti* is useful in abdominal colic. *Varatika* is useful in dyspepsia.⁹ *Sudha* which is rich source of calcium carbonate is also useful in digestive problems. Calcium carbonate is widely used in the treatment of peptic ulcer. It is a fast acting antacid and reduces the gastric acidity resulting in an increase in pH of stomach. *Khatika* and *Samudraphena* are both *Netrya* and *Lekhana*. *Khatika* is given in *Pravahika, Pitasra* and *Grahani*. *Badarasma* is indicated for *Mutrajavikaras*. *Sringa, Godanti* and *Swetanjana* is used in cases of fevers. *Godanti* as it is *pittahara* acts on hyperacidity and *Raktathisara*. *Kukkutanda tvak, Kacchapasthi* and *Ajasthi* which are of animal origin are rich sources of calcium helps in bone strengthening and *Kshaya roga*. *Mukta* and *Pravala* which also comes under *Ratnavarga* is useful in *Kshayaja vikaras*.

Conclusion

Sudha varga dravya contain calcium compounds chiefly calcium carbonate, calcium oxide and calcium silicate. Calcium is a mineral often associated with healthy bones and teeth although it play an important role in blood clotting, helps muscle to contract and regulating normal heart rythms and nerve functions. *Sudha varga* has also results on many gastrointestinal diseases like *Ajeerna, Amlapitta* etc. Therefore proper study and research is need of hour to analyze the pharmacological properties of these drugs.



figure 1: Khatika



Figure 9: Varatika



Figure 2: Khatika



Figure 10: Kukkutanda tvak



Figure 3: Godanti



Figure 11: Kacchapasthi



Figure 4: Mrigasringa



Figure 12: Badarashma



Figure 5: Shukti



Figure 13: Swetanjana



Figure 6: shanka



Figure 14: Mukta



Figure 7: Sambuka



Figure 15: Pravala



Figure 8: Samudraphena

References

1. Umrethia Bharti, Kalsariya Bharat. A textbook of rasashastra:the mystical science of alchemy. 3rd ed. Varanasi:choukhambha prakashak;2021.p.250-261
2. Angadi Ravindra. A textbook of rasasastra. 1st ed. Varanasi:chaukhamba surbharati prakashan;2014.p.491-518
3. Joshi Damodar, Rao Prabakara. Rasamritam: of vaidya yadavji trikamji acarya.1st ed. Varanasi:chaukhambha sanskrit sansthan;2007.p.118-122
4. Murthy chandra himasagara p. Rasasastra: the mercurial system. 2nd ed. Varanasi:chowkhamba sanskrit series office;2011.p.404-416
5. Nishteswar k, Vidyanath R. Ayurvediya rasashastra.1st ed reprint. Varanasi:chaukhamba surbharti prakashan;2010.p.259-264
6. Joshi Damodar. Rasa sastra. 1st ed reprint. Varanasi:chaukhamba orientalia;2010.p.315-326
7. Reddy chandra rama k. Textbook of rasa sastra. 3rd ed. Varanasi:chaukhambha sanskrit bhawan;2014.p.415-432
8. Deepak Kumar Tiwari et al:Critical Review on Sudhavarga and its therapeutic uses.www.ijaar.in:IJAAR,2023;5[12].
9. Vivek Thakur,Khemchand Sharma,Kiran Vashisht.A Therapeutic Approach of Sudhavarga Dravya wsr to Gastrointestinal disorder. AYUSHDHARA,2016;3[2]:602-606.
10. Rajendra Prasad ML.Review on Sudhavarga Dravyas.World Journal of Pharmacy and Pharmaceutical Sciences,2022;11[5]:479-487.