

LASHUNA: AN AYURVEDIC BOON FOR NATURAL CURE**Nirmala Chandrabhanji Apaturkar¹, Kiran Deshbhratar², M.N.Suryawanshi³**¹Senior Research Fellow, ²Research Officer, Scientist-3, ³Assistant Director Incharge
Ayurveda Mental Health Research Institute, KDK College Road, Nandanvan, Nagpur,
Maharashtra, India.**ABSTRACT**

In Sanskrit, garlic is commonly known as lasuna or rasona. The species that is commonly available in India is botanically known as *Allium sativum*. Apart from its medical use, it is commonly used as a condiment in the kitchens of Indian houses. As a medicine, it has a significant position. It has many therapeutic properties like Anti-inflammatory, Gastro-protective, Anti-cancerous, anti-oxidant and skin glow enhancing etc. Garlic's antidiabetic, antibiotic and perhaps anticancer effects are well-accepted world over because of the many of scientific literature supporting these effects. Garlic also has hepatoprotective, antioxidant, and antihelmentic effect. The other pharmacological effect which required more attention of researcher includes the anticoagulant, anti-inflammatory, immunomodulatory and wound healing action of garlic. The wide range of Garlic, health benefits come mainly from its main ingredient, Allicine. This widely researched component of garlic is highly therapeutic and is used in various drugs and pharmaceuticals. This article briefly reviews the pharmacological and various therapeutic aspect of garlic.

Key words: Lasuna, *Allium sativum*, Garlic.

INTRODUCTION

Garlic (*Allium sativum*) has played an important dietary as well as medicinal role in human history. It has more than 45 species which are used as medicine in different parts of the globe right from Siberia to tropical countries like India. Depending upon the geographical condition, its colour and taste varies. But all the therapeutically useful species of this plant have the characteristic odour of garlic. Ayurvedic texts are replete with references to its therapeutic excellence. This plant is extensively used as medicine all over the world. In spite of its therapeutic excellence for which it is compared to ambrosia, as a common ingredient of food, it is not held in high esteem in smriti Shasta's (text on religious rites), perhaps, because of its bad odour and sex stimulating property. Manu Samhita which is one of the premier Smriti Shastras of India, has treated this as abhakshya (a thing which

should not be eaten). Even though its use is permitted with reservation for common men, for Brahmins and those who are engaged in spiritual practices, it is strictly prohibited.

Yogic classics have strict instructions not to use this for food because it stimulates passion and emotion, which are the attributes of rajasa and which go against satva-guna.

This plant, which is of great medical importance, takes place inside many foods, especially meat ones due to its sharp odour, appetizer property and bitter taste and gives flavour to them. Garlic, its calorie value is 140, has 63.8 g water, 28.2 g carbohydrate, 5.3 g protein, 0.2 g oil and 11 g cellulose in its 100 g (Baytop, 1999; Kutevin and Turkes, 1987). Garlic can be consumed as fresh and has also its pills, capsules and extracts. While, it is safe, when taken in careful amounts, it can lacerate stomach, when consumed in excessive

amount. Garlic, with >200 chemical substances in its body, has the capacity of protecting human body against many illnesses. (Ayaz and Alpsoy, 2007).

This great bulb has a lot of benefits, because no other plant has been held out for so long as a cure for so many human ailments. That's why garlic has been considered as the "Wonder Drug".

Family- Rasona kula [Liliaceae].

Latin name: Allium sativum. Linn.

Regional names –

Marathi - Lasun.

Hindi - Lahasuna.

Guj. - Lasan,

Tam. - Vella pundu.

Telgu - Velluli,

Mal. - Velluli.

Eng. - Garlic.



SYNONYMS: In ancient Indian medical texts, several synonyms of this drug are furnished. Some of them indicate botanical characteristics and some the therapeutic properties of this plant.

SYNONYMS	IMPLICATIONS OF THESE TERMS
<i>Rasona, Rasuna, Rasonaka, Lasunana</i>	Which is short of one taste(sour)
<i>Ugragandha</i>	Having strong odour
<i>Mahoushadha</i>	Having great medicinal value
<i>Mlecchakanda, Yavaneshta</i>	A bulb liked by yavanas
<i>Mahakanda, Sthulakanda</i>	Having a big bulb
<i>Vatari</i>	Which alleviates vayu
<i>Dirghapatrakka, Pruthucchanda</i>	Having long thick leaves
<i>Sikhimula, Sikhakanda</i>	Having branched bulb
<i>Jugupsita</i>	Which is hated by saints

CLASSIFICATION:

SAMHITA & NIGHANTU	VARGA
<i>Astang Hridaya</i>	<i>Rasayana kalpa</i>
<i>Bhavaprakash</i>	<i>Haritkyadi varga</i>
<i>Kaiyadev Nighantu</i>	<i>Aushadhi Varga</i>
<i>Kasyapa samhita</i>	<i>Rasayana kalpa</i>
<i>Nighantu Aadarsh</i>	<i>Lashunadi varga</i>

BOTANICAL DESCRIPTION:

A scapigerous herb with underground bulb, bulbs 2-4 cm in diameter with many fleshy, creamy, ovoid bulblets or cloves having peculiar alliaceous pun-gent odour, bulbs covered by outer white thin scales. Leaves 20-40 cm long, flat, linear, hol-low. Leaf sheaths

half as long as blades, sheathing the lower half of stem. Scopes 60cm long, slender, smooth, shining. Flowers are small, white in rounded terminal umbels, enclosed in membranous spathaceous bracts. Capsule is small.

Flowering and Fruiting: February- April

It is cultivated throughout India.

CHEMICAL CONSTITUENTS: Steamed distillation of crushed fresh bulbs yields 0.1-3.6% of a volatile oil some sulphur-containing compounds that make up this oil are thought to be responsible for most of garlic's pharmacological properties.

- Allicin - Natural antibiotic - fights bacteria, mainly responsible for pungent odor. When garlic cells are "injured," (i.e. cut, crushed, etc.) the enzyme alliinase converts alliin contained in raw garlic to alliin - the garlic produces alliin to protect itself from bacteria & other disease-causing organisms. Extremely unstable & decomposes rapidly at room temperature

(half-life only slightly more than a few hours)

- Alliinase - Inactivated by heat – cooked garlic does not have as strong an odor as raw garlic (nor nearly as powerful physiological effects)
- Ajoene - Decreases blood cell clumping.
- Selenium - Antioxidant contained in high quantities in garlic. Antioxidants fight oxidation & free radicals inside the body that wear out the body & may lead to cancer
- Saponins - Lowers blood pressure, decreasing chance of stroke
- Fructans - May stimulate the immune system.

AYURVEDIC PHARMACOLOGY OF RASONA:

Rasa	Guna	Virya	Vipaka
Pancharasa, mainly tikta and madhur. Different parts have different tastes.	Snigdha, tikshna, pichchila, guru, sara;	Ushna	Katu

RASA ACCORDING TO DIFFERENT AUTHORITIES:

PART OF RASONA	RASA ACCORDING TO BHAVAPRAKASH	ACCORDING TO KASHYAPA SAMHITA
In the root of this plant	Pungent	Sweet and Pungent
In the leaf of the plant	Bitter taste	Astringent
In the stem of the plant	Astringent	Saline and Bitter
In the tip of the its stem	Saline	-
In the seed of the plant	Sweet	Pungent
In the bulb of the plant	-	Saline taste

USES OF GARLIC:

Digestive system:

It should be used in low fire, tastelessness, indigestion, constipation, pain, worms and *Kapha - Vata* diseases due to condensed *doshas*, being fire stimulant, digestive and analgesic due to pungent and hot qualities, laxative due to oily and heavy qualities and liver stimulant and wormicidal due to tastes. Should be used in *Kapha - Vata* piles being laxative, anti-pruritic and anti-spasmodic as it is liver stimulant and removes stasis in the portal circulation should not be used in haemorrhoids.

Kapha aggravation caused in stomach causes low fire, indigestion and spasm due to *Kapha* covered *samanavayu*. *Rasona* baked with ghee eliminates *Kapha* and causes onward movement of *samana vayu* to give relief. *Kapha-Vata* condensation is eliminated by removing accumulated *Kapha* and causing *Vata* onward movement by the use of *rasona* medicated milk. *Rasona* medicated buttermilk is used in diarrhoea, cholera, sprue and colitis to pacify *samana vayu*.

Water metabolism:

Generalised Edema caused by lateral movement of vitiated micro wastes and Kapha by aggravated vyanavayu is eliminated by the use of rasona which removes vitiated micro wastes and pacifies vyana.

Respiratory system:

It should be used in cough, asthma, hoarseness of voice, rhinitis, tuberculosis and hiccups to cause Kapha liquefaction and expectoration by its oily, penetrating qualities. The oil prevents the growth of tuberculosis bacteria. Medicated milk should be used in Chest trauma (internal/external) to heal the cavity. Rasona causes prana onward movement and pacification in Vata-Kapha diseases of the chest. Rasona and pippali gives immediate relief in rhinitis associated with tuberculosis. It should be used as diet and a garland made of it be worn by children to pacify dormant Kapha present in the chest.

Circulatory system:

It stimulates Heart and circulation due to its hot and penetrating qualities and eliminates edema. It pacifies Vata and Kapha by its hot and penetrating qualities and helps nourishment of heart and increases its strength.

Hypertension:

Accumulation of vitiated meda and Kapha in the vascular walls is cleared by rasona and thus, it reduces blood pressure by reducing peripheral resistance. It digests meda also.

Arteriosclerosis & Cholesterol:

Numerous clinical trials have shown garlic to be good for your heart by lowering total cholesterol and blood pressure. Garlic has the ability to combat plaque formation in the arteries. Its ability to lower serum cholesterol in the blood can in turn reduce the risk of cardiovascular disease. Garlic lowers total cholesterol, LDL cholesterol (the Bad cholesterol) and triglycerides. Garlic can not only prevent, but also reverse the signs of arteriosclerosis

Rheumatoid arthritis -

It digests ama circulating in the body and lodging in the joints. It pacifies vyanavayu and

removes joint edema and pain. Digestion of rasa penetrated ama reduces fever also.

Sciatica and similar diseases:

In these diseases initially apana onward movement is carried out by dissolution of Kapha by its pungent taste and hot and penetrating qualities and later on apana is pacified by hot and penetrating qualities. However, it should not be used in Pitta covered apana.

Skin disease:

It should be used in kilasa, vicharchika, shvitra, etc. as it causes Digestion of skin penetrated vitiated Kapha and pacifies vyanavayu. Complexion improvement - Bluish black pigmentation appearing on the face due to obstruction of channels caused by Kapha to the movement of udana is cleared by its juice given with ghee. It gives strength to bhrajakapitta also.

Nervous system:

Vata diseases –

It removes obstruction of channels by its hot and penetrating qualities and causes onward movement and pacification of pranavayu and nourishes it. Hence, used in bell's palsy, paralysis, monoplegia etc.

Hysteria, Epilepsy: These are caused by weakness of intellect and memory. Causative *tamas* is removed by rasona which should be ingested with Sesame oil.

Coma: Its juice be given to arouse the patient by removing *Kapha* cover and causing vyan onward movement.

Convulsions: They are produced by excitation of *vyana*. To pacify, its juice should be given. *Rasona* should be used after breakfast in *vyana* diseases.

Reproductive system:

It should be used as *shukra* producing as it causes *shukra* aggravation by its oily, sticky and heavy qualities and prevents premature ejaculation by pacifying *vyanavayu*. Its hot and penetrating qualities dilate decidual blood vessels and hence it should be used in dysmenorrhoea as menstrual stimulator.

Urinary system:

Should be used in Vata dysuria as diuretic and as antispasmodic as it acts as diuretic by stimulating kidney function by its hot and penetrating qualities and by pacifying Vata.

Nutrition and Oja aggravating:

It eliminates strength & oja depletion by causing shukra and oja aggravation and pacifies Vata.

CLINICAL RESEARCHES & STUDIES:

ANTIMICROBIAL EFFECTS

Small studies have shown that garlic exerts antimicrobial activity against gram-positive and gram-negative bacteria, viruses, fungi, and parasites. Topical and dietary garlic traditionally has been used in the treatment of infections—particularly digestive, respiratory, and derma-tologic infections—ranging from diarrhea and vaginitis to colds and warts, but few good clinical studies support this use.

BEST RECOMMENDED IN:

Rasona specially pacifies the Kapha Dosha which makes it useful to regulate the blood cholesterol levels and also removing toxins from the body.

Doses and Useful parts:

Garlic bud paste – 1 to 6 gms. Oil -1 to 2 drops, Bulb. Oil.

Mode of administration:

Since rasona is devoid of sour tastes, it should be ingested with buttermilk. Since wine is the best sour stuff. Rasona should be ingested with wine, meat soup in Vata diseases.

Contra-indications/precautions:

- Do not consume more than three to four raw cloves of garlic a day.
- Patients having heart and other problems should take medical advice before consuming it.
- It's best to avoid garlic before any surgery because it could probably disturb Anticoagulants.
- If patient is on any medication, always check with doctor first before taking raw garlic.

- Asthma patients should not use it as it worsens the symptoms of Asthma.
- Do not use in sensitive skin. Raw garlic can burn delicate skin! Do not use directly on skin if skin is sensitive or susceptible to rashes or other skin reactions without consulting doctor first. People who are or may be allergic to garlic or any of its sulfur compounds shouldn't try direct garlic application on skin too.

SIDE-EFFECTS:

Although, garlic is a natural Anti-biotic but a very small number of people have been known to exhibit Hypersensitivity to garlic. Garlic allergy includes skin rash, temperature and head-aches. Garlic intolerance could result in Heartburn or Flatulence.

CLASSICAL PREPARATIONS OF RASONA:

Lasuna yoga, Lasunadya taila, Lasuna ksheerpaka, Rasona kalka, Rasona sarpi, Rasona panda, Lashunadi vati.

CONCLUSION:

The use of herbal drugs is increasing. One of these plants used the most intensively and wide-spread is garlic. Fresh shape, powder state and garlic oil has been effectively used all around the world again

Garlic, *Allium sativum* L. is a member of the Alliaceae family, has been widely recognized as a valuable spice and a popular remedy for various ailments and physiological disorders. It is effective against bacterial, viral, mycotic and parasitic infections.

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CORRESPONDING AUTHOR

Dr. Nirmala Chandrabhanji Apaturkar

Senior Research Fellow, Ayurveda Mental Health Research Institute, KDK college Road, Nandanvan, Nagpur, Maharashtra, India.

Email: drnirmala21f@gmail.com

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