



RASONA (ALLIUM SATIVUM) – A PRECIOUS HERB

Ayurveda

Dr. Geeta Parulkar D* M.D. (chikitsa)(mum), PHD(chikitsa)(mum), Professor(chikitsa), R.A. Podar (govt.) Medical College (ayu), Attached To M.A. Podar Hospital, Worli, Mumbai, Maharashtra.
* Corresponding Author

Dr. Nileshkumar Tiwari (M.D. Scholar 2nd Year), R.A. Podar (govt.) Medical College (ayu), Attached To M.A. Podar Hospital, Worli, Mumbai, Maharashtra.

ABSTRACT

Rasona (Lasuna, Allium Sativum) is a precious herb described with its qualities in different Ayurvedic classical texts. It is also becoming popular day by day in this modern era. In OPDs and IPDs in M.A Podar Govt Hospital from Mumbai, Maharashtra. Observations made for its advantages to eradicate or get the relief in different ailments. This is an attempt to aware the public for its benefits.

KEYWORDS

Rasona, Lasuna, Allium Sativum, Ayurveda Literature, Modern Literature.

INTRODUCTION

Lasuna is described in Atharva Parisista and other contemporary texts. The term 'Lasuna' is more used than 'Rasona' by the Bruhatrayi, where it is extensively described for Vataroga Chikitsa and as Rasayana. However, it is not included in the ganas and Vargas of Bruhatrayi. Its synonym Yavanesta probably indicates that it is an exotic plant.

Acharya Vagbhata considered Lasuna as the best among the Vatahara dravyas. He emphasized the role of Lasuna Rasayana in the treatment of Vata Avaranas. However it should not be administered in case of Pitta and Rakta Avaranas.

Acharya Bhavamishra forbidden the following while consuming Garlic: Madya (Alcohol), Matsya (Fish), Amla (Sour food articles), Atapa (exposure to sunlight), Ati Vyayama (heavy exercise), Rosha (anger), Ati Jal sevan (Excessive intake of water), Payah (Milk) and Guda (Jaggery).

He also described about the distribution of five Rasas in various parts of the plant:

1. Katu Rasa in Root
2. Tikta Rasa in Leaves
3. Kashaya Rasa in Stem
4. Lavana Rasa in Stem tip / terminal bud
5. Madhura Rasa in Seed

Botanical Name- Allium Sativum Linn.

Family – LILIACEAE

Vernacular Names

Hindi – Lahasan, **English** – Garlic, **Marathi** – Lasuna

Synonyms–

Uragandha, Yavanesta, Lasuna, Mahousadha, Mlechakanda.

Classification:

Ashtanga Hrudya described as a Rasayana kalpa
Bhavaprakash Nighantu described in Haritkyadi varga
Kaiyadev Nighantu described in Aushadhi Varga
Kasyapa samhita described as a Rasayana kalpa
Nighantu Aadarsh described in Lashunadi varga

Different Varieties

Acharya Kashyapa mentioned two varieties viz., Girija and Kshetraja means Garlic grown in the mountain areas and that cultivated in the plains respectively. Usually the Nighantus quoted two kinds of Lasuna viz., Lasuna (A. sativum) and Maha Kanda (A. ascalinium linn.)

Botanical Description

A bulbous herb, 60 cm high. Leaves – long, flat, acute, sheathing the lower half of stem. Flowering scape slender, smooth with shining; spathers long, beaked. Flowers – small, white, prolonged into leafy points. It Flowers during winter.



Distribution

Cultivated throughout India. Mainly in Ludhiana, Karnataka, Tamil Nadu, Andhra Pradesh, Uttar Pradesh and Gujrat.

Major Chemical Constituents

Alliin; Carbohydrates (Arabinose, Galactose, etc); Vitamins (Folic acid, Niacin, Riboflavin, Thiamine, Vit.C); Amino acids (Arginine, Asparagic acid, Methionine Etc); Enzymes (Allinase); Volatile compounds (Allyl alcohol, Allyl thiol, Allyl propyl disulphide etc.); Thioglycosides (Scordine, Scordinine A, A₂& B etc); Prostaglandins A₂, D₂, E₂& F₂; Allyl methyl selenide, Ajoene, Proteoruboside B.

Properties

Rasas-Madhura, Lavana, Katu, Tikta, Kashaya
Gunas -Snigdha, Guru, Tikshna, Sara
Virya-Ushna
Vipaka -Katu
Karmas -Vata–Kaphahara, Balya, Bruhana, Rasayana, Vrishya, Netrya

Indications-

Vatavyadhi, Shula, Ajirna, Shwasa, Kasa, Rajayakshma, Shotha, Krumi.

Therapeutic Uses

1. Amavata (can be correlated to Rheumatoid Arthritis)–Lasuna, Sunthi and Nirgundi in decoction (Acharya Bhavmishra)
2. Plihavruddhi (can be correlated to Spleenomegaly)–Lasuna, Pippalimula and Haritaki with cow's urine (Vrunda Madhava)

Part Used – Bulb, oil

Dosage – Paste 3-6 g; oil 1-2 drops

Important Preparations

Lasunadi Vati, Rasona Pinda, Hingutriguna Tailam, Rasona Sura, Lasuna Kalpa, Rasona Rasayana, Rasonashtaka, Rasona Vatka, Lasuna Kshira, Lasunadi Ghruta.

BENEFITS

May help lower high blood pressure and elevated blood cholesterol. May prevent or fight certain cancers. Antiviral and Antibacterial properties help prevent or fight infection. May alleviate nasal congestion.

Drawbacks

Causes bad breath. Can cause indigestion, especially if eaten raw. Direct contact irritates the Skin and mucous membranes. Herbalists and folk healers have used Garlic to treat Myriad diseases for thousands of years. Ancient Egyptian healers prescribed it to build physical strength, the Greeks used it as a Laxative, and the Chinese traditionally used it to lower blood pressure. In the Middle Ages, eating liberal quantities of Garlic was credited with providing **immunity to the Plague**. Of course, just because Garlic has been used for a long time does not mean that it has been used effectively for a long time. Current research on Garlic has curbed the optimism fostered by earlier studies. Louis Pasteur, the great 19th-century French chemist, was the first to demonstrate Garlic's **Antiseptic** properties, information that was put to use during World Wars I and II by the British, German, and Russian armies.

Since then, numerous studies have confirmed that Garlic can be **effective against Bacteria, Fungi, Viruses, And Parasites**. Today, many proponents of herbal medicine prescribe Garlic to help to **Prevent Colds, Flu, and other infectious diseases**.

The Study Of Garlic

Garlic has been intensively studied in recent years, with more than 500 papers having been published in medical journals since the mid 1980s. The subject of most of these studies has been the Sulphur compounds that form when Allicin undergoes a variety of chemical reactions. Allicin is not found in fresh Garlic but forms when cells are disturbed by cooking, cutting, or chewing. Ajoene, Allyl sulfides, S-Allyl Cystein (SAC), and other products of this Allicin cascade have been associated with Anticancer, Anticlotting, Antifungal, Antihypertensive, Antioxidant, and Cholesterol-lowering effects.

Some Garlic supplements tout their Allicin content." This is not accurate because Allicin is an unstable substance. Claims about "Allicin yield" or "Allicin potential" are somewhat more appropriate, but not by much. Manufacturers usually determine "yield" by mixing crushed tablets with water and measuring the amount of Allicin released. This is not an appropriate model for what happens in the body.

Garlic supplements must be protected from contact with stomach acid since it would immediately destroy alliinase and make the release of Allicin impossible. This is usually done by encapsulating in Gelatin or coating the pill with Cellulose or Polyacrylic acid derivatives that dissolve only in the less acidic conditions of the intestine. A fitting test for Allicin release is one sanctioned by the U.S. Pharmacopoeia (method 724A), which simulates the conditions encountered by a pill as it travels through the digestive tract. When this test is applied to Garlic supplements, the results are astounding. More than 80 percent of products tested release less than 15 percent of their claimed Allicin potential. Clearly they do not deliver a therapeutic Allicin dosage.

Whether Garlic is therapeutic at all can only be determined by human trials. It may be impressive to learn that some Garlic extract retards Cholesterol oxidation in cells; but that does not mean this happens in the body.

Numerous studies of Garlic's effects on health have been carried out. Early studies suggested a Cholesterol-lowering effect and received much publicity. Unfortunately more sophisticated studies curtailed the initial optimism.

When researchers analyzed the results of the Garlic studies, they found, much to their disappointment, that Garlic's ability to reduce Cholesterol was minimal, and the effect on blood pressure was insignificant. Still, some companies keep promoting supplements based on the early studies.

Effect On Heart Disease

While Garlic may not reduce Cholesterol, it may still have an effect on heart disease. "Ajoene," one of the breakdown products of Allicin, may reduce the risk of heart attacks by preventing the formation of blood clots.

Promising Studies On Garlic And Cancer

The situation is more encouraging with respect to cancer, perhaps because most studies investigated the effect of raw or cooked Garlic instead of supplements. A meta analysis showed that consuming an

average of six or more cloves a week lowered the risk of Colorectal cancer by 30 percent and Stomach cancer by 50 percent when compared with the consumption of less than one clove a week. Even the risk of Prostate cancer may be reduced. A National Cancer Institute study of men in Shanghai showed that eating a clove a day reduced risk by more than 50 percent.

There is no consensus on how much Garlic should be consumed to make use of its Anticancer effect and neither is there agreement on whether cooked or dried Garlic confers the same benefits imparted by eating Garlic raw. **It does seem clear though, that to activate Garlic's full nutritional power, it should be chopped or crushed and then left to stand for 10 minutes before cooking. This allows Allicin and its potent derivatives to be activated.**

An Edible Antibiotic

Garlic contains compounds that act as powerful natural Antibacterial, Antiviral, and Antifungal agents. It has been shown to inhibit the Fungi that cause Athlete's foot, Vaginal yeast infections, and many cases of Ear infection. It may be as effective against certain Fungi as Antifungal medications. Laboratory studies have shown that Garlic extract can neutralize Helicobacter pylori, the bacterium that causes most Ulcers. (It's unclear, however, whether Garlic has this effect in the body.)

Research works on Garlic

1. Alliin was found to be useful clinically in the treatment of RA (N=45). 32 patients had relief from symptoms. A change in the mucoprotein levels and ESR was observed (Sreenivasa Murthy et al., 1962)
2. Allisatin (200 mg / 100 g / day) showed slight inhibitory activity against formalin – induced Arthritis (Prasad et al., 1966)
3. The alcoholic extract of bulbs showed anti-inflammatory activity against, Carrageenin-induced rat hind paw Oedema in Albine rats (Bhakuni et al., 1969)
4. The effect of juice of Garlic on glucose utilization was studied in rabbits by using GTT. The Hypoglycemic effect was compared with that of Tolbutamide and control groups (on distilled water) – (Jain et al., 1973)
5. Garlic juice and essential oil extract were found to have significant protective action against fat-induced increase in serum Cholesterol and plasma fibrinogen and decrease in fibrinolytic activity as well as coagulation time (Bordia & Bansal, 1973; Bordia et al., 1974 b).
6. Blood Cholesterol level was significantly decreased in all human subjects after two months of ingestion of Garlic (Ind. J. Physiol. Pharmacol. 1979, 23, 1979)
7. Enhancement of Phospholipid metabolism, an initial action caused by Tumor promoter 12-O-tetradecanoylphorbol-13-acetate, inhibited by plant extract; it also suppressed carcinogenesis in vivo (Oncology 1989, 46, 277)

Our research work in (Government) Hospital on Garlic

In OPDs and IPDs in M.A Podar Govt Hospital from Mumbai, Maharashtra observations made for its advantages to eradicate or get the relief in different ailments like Abdominal gaseous distention, Rheumatoid Arthritis and Osteoarthritis. So, this is an attempt to aware the public for its benefits.

Articles in International Journals

1. A Review : Pharmacological And Therapeutic Action Of Rason (Allium Sativum) Or Garlic In Different Diseases by Dr. Shailendra kumar and Dr. Sadanand V. Deshpande, Indian Journal Of Research Volume-7 | Issue-9 | September-2018
2. Critical Analysis of Lasuna (Role of Lasuna in Different Branches of Ayurveda) by Dr. Rajimunnisa Begam Shaik and Dr. S. Ramalingeswara Rao, IOSR Journal of Pharmacy and Biological Sciences, Volume 11, Issue 5 Ver. I (Sep. - Oct.2016), PP 46-80
3. Rasona (Allium Sativum) A Wonder Drug From Ancient To Modern And Kitchen To Medicine by Usha Patil, Rajendra H.M. and Geetha Kumar, IJAAR Volume II Issue I May-Jun 2015
4. Lashuna: An Ayurvedic Boon For Natural Cure by Nirmala Chandrabhanji Apaturkar , Kiran Deshbhratar and M.N.Suryawanshi, IAJM: Volume 3; Issue 5; May- 2015
5. Ayurvedic And Modern Review Of Rasona (Allium Sativum) by Dr Jadhav Kalyani Kunjan, ayurpub.com, Jul-Aug 2017 Vol II, Issue 4
6. A Cross Sectional Survey On The Practice Of Rasayana Drugs In Neuro Degenerative Conditions by Devpriya Soman & N. Subhash Babu, Int. J. Res. Ayurveda Pharm. 8 (Suppl 1), 2017

REFERENCES

1. Dr. J.L.N. Sastry, Illustrated Dravyaguna vijnana, Reprint edition Published by Chaukhamba Orientalia, Varanasi, 2017; 152-155
2. Foods that harm foods that heal published by Reader's Digest, 2008 edition, 185-186
3. <http://www.iosrjournals.org/iosr-jpbs/papers/Vol11-issue5/Version-1/H1105014680.pdf>
4. https://www.ijrap.net/admin/php/uploads/1860_pdf.pdf
5. <http://ayurpub.com/wp-content/uploads/2016/08/497-501.pdf>
6. http://www.iamj.in/posts/images/upload/1420_1426.pdf
7. http://www.iamj.in/posts/images/upload/1420_1426.pdf
8. http://ijaar.in/posts/images/upload/VOL_II_I_MAY_JUN_2015_33_38.pdf