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# AYURVEDIC AND MODERN REVIEW OF RASONA (ALLIUM SATIVUM

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### **ABSTRACT**

Rasona (Allium sativum) is a potent drug prescribed in Ayurveda. Rasona contains five out of six existing tastes and has snigdha (unctuous), tikshna (intense), pichchila (slimy), guru (heavy), sara (laxative) properties. The daily consumption of Rasona is excellent for general health. Rasona pinda is used in Rheumatoid Arthritis. It contains antiviral, anti-cancerous property. (Rasayana: The Fountain of Life by Dr. Mayank S. Vora) There are many applications of rasona in Ayurveda from being used singly as a drug as well as in processing of drugs in Rasashastra. It is mentioned a cure from cancer to tuberculosis. Garlic is a laxative plant and can have frequent side effects such as diarrhoea if taken in higher amount. These effects disappear once consumption is stopped. Decoction prepared in milk, mentioned by Acharya Sharangadhara is easy method for preparation and is used in amavata. Rasona has a specific smell due to sulphur present in it. Rasona is not only used as a medicine but as a processing drug also in Rasashastra i.e. shodhana of Parada. In Ayurveda those kalpa which are prepared by parada are safe when Sulphur (Gandhaka) is added in it. Rasona is used in parada. Shodhana (Purification of Mercury) because gandhaka (organic Sulfur) is present in Rasona. This article contains utpatti (mythological origin), properties, uses, latest researches, applications of rasona, which gives proper information to avoid hazards according to Ayurvedic and contemporary view.

KEYWORDS: Allium sativum, Garlic, Rasayana.

## INTRODUCTION

Rasona Utpatti-<sup>1</sup>when Garuda (the king of birds) was taking away Amruta (divine nectar) from Indra few drops spilled on earth, from which, Rasona grew.

**Botanical Description** –Garlic is abulbous variety of plant. It is 30-60 cms. In height .Its stem is tender, Leaves flat, thin and long. **Infloresence** - arise from the top.

**Bulb**- white, pinkish with 5 to 12 buds in it. Cold weather is the season for flowering and fruits. Different parts have different rasa. Seeds are sweet in taste. Its roots are

pungent, leaves are bitter, stem is astringent; apex of the stem is salty.

**Habitat**: All over India.

**Properties:** Properties of *Rasona* are snigdha (unctuous), tikshna (intense), pichchila, (slimy) guru (heavy), sara (laxative)

Rasa- panch rasa mainly tikta (bitter) and madhur (sweet)

Vipaka- Katu (pungent)

Veerya- Ushna (hot)

**Karma-** *Kaphaghna* by pungent and *ushna*, *vatashamak by snigdha*, *pichchila*, *guru* and

ushna, raktapitta vardhak by ushna and tikshna.

External uses-<sup>2</sup>It is an anti-inflammatory, pain killer and removes toxicity. In childhood cough a necklace of garlic buds is worn. Garlic paste is used for swelling in rheumatoid arthritis, paralysis, sciatica, facial palsy and pain in the ribs. Juice is also used. Garlic juice is used in skin disorders like eczema. Swellings due to insect bites almost disappear on rubbing garlic juice or oil of garlic. A bud of garlic, inserted in the ear also relives pain. If the uvula is elongated, juice of garlic brings it to normal.

#### **Internal uses:**

**Nervous system<sup>2</sup>-** Used in paralysis, arthritis, sciatica and weak memory. Garlic juice is given internally in diminished vision.

**Digestive system** –In indigestion, low appetite, pain, constipation, worm infestation, piles. All diseases of *vata* and *kapha*, garlic is useful. Flatulence caused by food like rice can be avoided easily if cooked in garlic water.

**Circulatory system-** Odema due to cardiac disorder is decreased by garlic.

**Respiratory system-**Being *snigdha* and *tikshna*, It decreases cough. Milk boiled with garlic reduces chronic cough, asthma, tuberculosis, and hoarseness of voice. The volatile oil kills *Mycobacterium tuberculi*. Healing properties are therapeutic to inflammation patches in lungs. In a persistent cough, agarland of garlic buds is put round the neck. In diseases of *vata* and *kapha*, garlic oil is rubbed on the chest.

**Urinary system-** It is useful in urinary disorders due to its *tikta guna*.

**Reproductive system-** Being pungent, *pichchila* and *snigdha*, it stimulates the production of semen. Thus it is of much use in paucity (weakness) of semen. Being a regulator of menstrual function it is used in dysmenorrhea.

**Satmeekaran**– Stimulant on all parts of the body. It alleviates psychological and mental troubles and is good *rasayana* (due to *pichchila*). In fractures of the bone, milk boiled with garlic is helpful.

**Skin**—As it contains organic sulphur, it is very effective in skin diseases, pruritus and eczema etc.

**Temperature-**It is useful in fevers. In fever with rigors, garlic oil should be used for massage before the fever rises. It is used as a preventive medicine in enteric fever, diphtheria etc.

Parts used- Bulb, Oil.

**Garlic bud paste** -1 to 6 gms. **Oil** -1to 2 drops

**Formulations** – Rasonvati, Rasonpinda, Rasonashtak, Lasunadi ghrita, Rasona siddha tail.

Excretion – Garlic is excreted from skin, lung and kidneys. In the process it enhances the action of all three organs. It is useful in hypertension. **Contraindication**<sup>2</sup> –Being *tikshna* and *ushna*, it is contraindicated in pregnancy and those with *pitta prakruti* because it aggravates *pitta*.

**Side effects**<sup>3</sup>- Anorexia, asthama, bleeding after surgery, blood pressure reduction, body odour, botulism (paralyzing illness) burns to the skin,

**Antidote<sup>2</sup>-** Cold infusion of coriander seeds should be given repeatedly.

Alcoholic beverages, animal flesh and sour foods good for those who consume *lashuna*.

At that time, they should avoid exercises, exposure, to sunlight, anger, drinking too much water. Milk and jaggery. Rasona is tissue vitalizer, aphrodisiac, promotes oily secretions, heat generating, digestive and laxative. It is associated with pungent and sweet taste and is pungent in post digestic effect. It heals fractures, good for voice heavy to digest, enhances pitta and blood. It is a tonic promotes complexion, act as brain tonic, good for eyes and tissue vitalizer. It cures heart problems, chronic fevers, abdominal pains, constipation, intestinal growth, loss of taste, cough, edema, haemorrhoids, skin diseases, indigestion or lack of digestive capacity, worms, vata diseases, dyspnoea and kapha diseases.

## Scientific view -

- 1)Epidermiological studies indicate that components of garlic have anti-proliferative effects against various types of cancer<sup>4</sup>.
- 2) A.G.E. (Aged black garlic) A.G.E. is a more premising nutraceuticals or medicinal agent to prevent or cure inflammation related diseases for safely aspect compared with R.G.E.(Raw garlic extract)<sup>5</sup>
- 3) Extracts from garlic sprouted for 5 days had the highest antioxidant activity, whereas extract from raw garlic had relatively low antioxidant activity furthermore, sprouting changed the metabolite profile of garlic ,the metabolite profile of garlic sprouted for 5-6 days was distinct from the metabolite profile of garlic sprouted for 0-4 days. Which is consistent with the finding that garlic sprouted for 5 days had the highest antioxidant activity .Therefore sprouting may be a useful way to improve the antioxidant potential of garlic<sup>6</sup>.

- 4) Black garlic is a processed garlic product prepared by heat treatment of whole garlic bulbs at high temperature under high humidity for several days, resulting in black cloves with a sweet taste. Black garlic has recently been introduced to the Korean market as a product beneficial to health. Black garlic can be considered to not only possess antioxidant properties during the aging period, but also reach its optimal antioxidant properties at the 21st day of aging. (Molecules-2014 oct 20:19 (10): 16811-23<sup>7</sup>
- 5) Garlic flower extract is a potent protoscolicid and might be used in hydatid cyst treatment and pre surgery to prevent secondary cyst reoccurrence<sup>8</sup>.
- 6) Researchers have showed that there are 50 chemicals present in garlic and some of them can activate enzymes in the liver that destroy Alfa toxin. A potent carcinogen (a cancer causing agent) that can grow on groundnut and grains, Alfa toxins are a leading cause of liver cancer in the world. Garlic stimulates the bowel to throw off waste materials. (The medicinal use of garlic (*Allium sativum*)<sup>9</sup>.
- 7) People in areas of risk of arsenic contamination in the water supply should eat one to three cloves of garlic per day as a preventative<sup>10</sup>.
- 8) The odor of garlic and "Skunk stink" are also caused by sulfur containing organic compounds/Chemical constituents Allin, Carbohydrates, arabinose, galactose etc<sup>11</sup>.

Vitamins – Folic acid, riboflavin, thiamine, vit.C

Amino acids – arginine, asparagic acid, methionine etc. Enzymes- allinase

Volatile compounds- allyl alcohol, allylthiol, allylpropyl, disulphide etc.

Thioglycosides- scordine, scordinine, A1, A2 and B etc.

Prostaglandins - A2, D2, E2&F2.

### **DISCUSSION**

Rasona is used in regular diet. But if it is not used properly it can be harmful. It is ushna (hot) in nature, so in pitta prakriti patient and ushna kala it can be used carefully. Use of processed garlic should be preferred over raw garlic in practical application.

Rasona is beneficial from small child to aged people. Black garlic is more useful than raw garlic <sup>12</sup> Various sulphur containing compounds occur in garlic. One such compound is called allin. Crushing or chopping garlic may also promote enzyme reaction and allow other compounds to form. Studies show that these compounds may be effective in many ways including pain relief, anti-worm, anti-bacterial, antifungal, anti-viral, anti-oxidant, and anticancer properties, Lowering of blood glucose& blood pressure& liver protection. Other research shows that garlic may help blood clots, spasm, act as an expectorant &alleviate swellings, sores and acne. Many researches showed that it is anti-cancerous, anti-inflammatory<sup>13</sup>, antioxidant, antihypertensive<sup>14</sup>, anti-diabetic<sup>15</sup> etc. properties. Rasona has many applications in Ayurveda from use in various medicines to processing of *Parada* (Mercury).

### **CONCLUSION**

Rasona is used in daily preparation at home in processed form. Due to its *katu*, *ushna*, *deepana*, *rochana* properties it is useful in *kapha* vikara like *kasa*, *shwasa* etc. And because of *snigdha*, *guru vrushya guna* it is

used in *vata vikara*. But due to its *ushna*, *rakkta pitta pradushana guna*, it is *pitta vardhaka* so in *ushna kala* and *pitta prakruti* care can be taken. Eating raw garlic it kills the enzyme essential for production to allicin in the stomach hence processed garlic should be eaten. Hence it is recommended to eat pickled, cooked, powdered garlic while using rason<sup>14</sup>.

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