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## A review on Yakuti: A unique formulation

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### Abstract

Rasashastra and Bhaishajya Kalpana is the branch in ayurveda that deals with Ayurveda pharmaceuticals. Formulations are prepared with drugs that are metals, minerals, gemstones, etc. in combination with other herbs or otherwise. These drugs are subjected to different processes like shodhana (purification), marana (incineration), etc. before using it for internal administration. Many formulations are mentioned in various texts of rasashastra where a combination of these bhasma, are mixed with other herbs and made into different dosage forms like pills, etc. Yakuti comes under the category of preparations termed as khalviya yoga that is indicated in ailments of the heart, fever, nerve weakness, etc. It is a formulation that has a combination of a sindura kalpa- makaradhwaja, pishti of ratnas, a few herbal drugs and bhavana is given with gulab arka.

**Keywords:** Rasashastra, Yakuti, pishti, heart disease

### Introduction

The formulations in rasashastra are divided into four major classes namely; khalviya yogas, parpati yoga, kupipakwa yogas and pottali kalpanas. Khalviya yogas are those preparations where the ingredients mentioned are taken in bhasma form (calcified ash) in case of metal or mineral drugs and in case of herbal drugs, the fine powders are taken and mixed well in a khalwa yantra (mortar and pestle) and triturated with the specified liquid media till the test of perfectness of the formulation is attained. Then it is rolled into pills of desired size.

**Materials & Method:** A literary search was conducted from available literature of Ayurveda texts books pertaining to rasashastra and bhaishajya kalpana (Ayurveda pharmaceuticals). Information was also collected from electronic media from open accessed journals. Yakuti is a formulation that is herbo- mineral in nature. The special feature of Yakuti is the ingredients that are a combination of pishti (gemstones triturated with liquids to make into fine powder form) namely manikya, tarkshya, mukta, pravala, trunakantamani pishti, bhasmas- swarna bhama, rasasindura- a kupipakwa yoga, animal origin drugs namely abaresham and kasturi and few herbal drugs. All the drugs are triturated with gulab arka (distillate of Rose) and preserved until further use <sup>[1]</sup>.

### Method of preparation

First Chandrodaya is powdered well in a mortar and pestle; all the other ingredients with the varkh (thin foils) of swarna except kasturi and ambar are added and mixed well. To this Gulab Arka is added and trituration is done for 21 days. Kasturi and ambar should be added on the last of bhavana and triturated. Pills of 1 ratti size (125mg) are made, dried in shade and stored in air tight container.

The dose mentioned is 125mg with Pudina swarasa (juice of mint leaves) as anupana (adjuvant). It is indicated in Hrut dourbalya (weakness of the heart), sannipata jwara (fever), nadi ksheenata (nerve weakness), swedadikhya (excessive perspiration), hrud spandana (weakness of the heart)

It is also helpful in conditions of manasika nirbalata (weakness of mind), shukra kshaya with milk as adjuvant <sup>[18]</sup>.

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**Table 1:** Ingredients in the formulation

| Sl. No. | Name of the drug   | Proportion                         | Indications  |
|---------|--|------------------------------------|--|
| 1       | Manikya pishti (Ruby) <sup>[2]</sup>                               | 24g                                | Ojo kshaya (reduction of essence), Hrud roga (heart diseases), kshaya (deficiencies), shukra kshaya (decrease in semen), agnimandya (loss of appetite), dourbalya (weakness), buddhimandya (impairment of memory)  |
| 2       | Panna pishti (Emerald) <sup>[3]</sup>                              | 24g                                | Sannipata jwara (fever), visha vikara (disorders because of poison), vamana (emesis), amlapitta (gastritis), pandu (anaemia), malavarodha, arsha (haemorrhoids), shotha (oedema)   |
| 3       | Mukta pishti (Pearl) <sup>[4]</sup>                                | 24g                                | Raktatisara, raktapitta (bleeding disorder), manodosha, unmada (insanity), Hrud roga (heart diseases)  |
| 4       | Pravala pishti (Coral) <sup>[5]</sup>                              | 24g                                | Ojo kshaya, Hrut dourbalya (weakness of heart), kasa (cough), pittaja roga (diseases of pitta vitiation), mano dourbalya (weakness of mind)  |
| 5       | Kahruva pishti <sup>[6]</sup><br>(Trunakantamani pishti)           | 24g                                | Raktatisara, rakta pravahika, raktapitta (bleeding disorder), pitta vikara (diseases of pitta vitiation), rakta pradara (menorrhagia)  |
| 6       | Chandrodaya <sup>[7]</sup>   | 24g                                | Jara- mrutyu-vali-palita nashaka (avoids death, greying of hair, wrinkles), vayahsthamba (maintains youthfulness), vrushya (aphrodisiac), anti-poisonous, useful in all diseases   |
| 7       | Swarna bhasma (calcified gold ash) <sup>[8]</sup>                  | 24g                                | Hrudya (heart tonic), netrya (beneficial to eyes), medhya (improves intellect), rasayana (rejuvenative), vishapaha (anti-poisonous), kanti vardhaka (increases complexion)   |
| 8       | Ambara (Agnijara) <sup>[9]</sup>                                   | 24g                                | Vatakapha nashaka (alleviates the vata and kapha dosha), rakta roga (diseases of the blood), sannipata, shula (pain), vataroga (diseases of vata), dhanushtankara roga nashaka, veerya vardhaka (increases vigor), medorogahara (reduces obesity)  |
| 9       | Kasturi (Indian Musk) <sup>[10]</sup>                              | 24g                                | Veeryajanaka (increases vigor), kaphavata (alleviates kapha and vata dosha), vishahara (anti-poisonous), chardihara (anti-emetic), sheeta (cold), durgandhahara (reduces bad odour) and shoshahara. It acts as stimulant, anodyne, antispasmodic and aphrodisiac. It improves the circulation and raises arterial tension. It is stimulant of urino genital organ. Stimulant for respiratory center Appetizer, mood elevator, tonic for vital organs & sexual functions. Acts as carminative, anti-diarrhoeal, antiemetic, anti-inflammatory, expectorant drug       |
| 10      | Abaresham ( <i>Bombyx mori cocoons</i> ) <sup>[11]</sup>           | 24g                                | Potent cardio- protective effect, is possibly due to its high protein content and very small quantities of non-sericin components of silk cocoons, especially the flavonoids, which have potential free radical scavenging and antioxidant activities  |
| 11      | Kesara ( <i>Mesua ferrea</i> ) <sup>[12]</sup>                     | 24g                                | Tikta (bitter), kashaya (astringent), amapachaka, kinchit ushna laghu (hot and light), ruksha (dry), kaphapaha (alleviates kapha). It is useful in reducing sweda durgandha (bad odour of body), visha (poisonous conditions), kushta (skin diseases), visarpa (erysipelas). Useful in vata (disorders of vata), kandu (itching), hrud vyatha (heart diseases), etc.   |
| 12      | Behamana saphed ( <i>Centaurea behen</i> root) <sup>[13]</sup>     | 12g                                | <i>C. behen</i> has been used to treat weakness of brain, heart and liver, palpitation, hepatitis, melancholia, sexual debility, neurasthenia, spermatorrhoea, fatigue and for diseases of the stomach and intestines. Roots act as nervine and anabolic tonic, strengthen central nervous system and used in affections of kidney. Roots of <i>C. behen</i> constitute the drug Safed behman or Bhamana-i-sufeed. These are credited with fattening and aphrodisiacal properties  |
| 13      | Behamana laal ( <i>Salvia haematodes</i> root) <sup>[14]</sup>     | 12g                                | <i>S. haematodes</i> Wall. is mentioned to possess significant CNS depressant (anticonvulsant) properties. Pharmacological screening revealed a broad variety of pharmacological effects. The ethanolic extract of red sage showed anti-inflammatory and analgesic effects, hypothermic response in non-pyretic rats and enhancement of the wound healing process. The ethanolic extract of <i>S. haematodes</i> had significant inotropic and chronotropic effects on isolated rabbit hearts. It also had a parasympathomimetic effect on isolated rabbit duodenum. |
| 14      | Jatiphala ( <i>Myristica fragrans</i> ) <sup>[15]</sup>            | 12g                                | Biter, astringent, useful in vitiated conditions of kapha and vata; inflammations, ulcer, impotency, skin diseases, cardiac disorders, fever and general debility  |
| 15      | Shweta maricha (Piper nigrum) <sup>[16]</sup>                      | 12g                                | Fruits are said to be acrid, bitter, anthelmintic, carminative, aphrodisiac, alexeteric and useful in kasa (cough), shwasa (dyspnoea), hrudroga (heart ailment), shula (pain), prameha (diabetes), etc.  |
| 16      | Gulab Arka (distillate of <i>Rosa centifolia</i> ) <sup>[17]</sup> | Quantity sufficient for levigation | The flowers are bitter, astringent, aromatic, aphrodisiac, intellect promoting, cardiogenic  |

## Discussion

Tarkshya, Pravala pishti, Mukta pishti, Swarna bhasma, Abaresham, Gulab Arka are indicated in Ojo kshaya, Hrud roga, shukra kshaya. Researches carried out on these also throw light on the usefulness of these in cardiac diseases.

The hydro-alcoholic extract of *Salvia haematodes* has proved to have protective effect on cognitive function against scopolamine-induced memory impairments by elevating acetylcholine level in the brain. Protective effect of hydro-alcoholic extract of *Salvia haematodes* Wall root on cognitive functions in scopolamine-induced amnesia in rats has been studied. <sup>[19]</sup> The aqueous extract of the root of *Salvia haematodes* has been investigated for its pharmacological actions on the cardiovascular and central nervous system. It was found to possess significant cardiogenic and

anticonvulsant activities. It was not found toxic up to the dose of 5 g/kg given orally in order to evaluate its acute toxicity. <sup>[20]</sup>

A study puts light on the use of *Centaurea behen* in anxiety. The petroleum ether, chloroform, ethanol and water extractives prepared of *Centaurea behen* and evaluated for antianxiety activity in mice using elevated plus maize model. The results were compared with standard drug, diazepam. The results indicated that the plant could be considered as a potential candidate for bioactivity guided isolation of natural antianxiety agents <sup>[21]</sup>.

A study has indicated that the prior administration of Jatiphala Churna (*Myristica fragrans* Houtt.) attenuates Isoproterenol induced MI (myocardial infarction). Pre-treated group with Jatiphala churna showed significant effect in case of Serum

glutamic oxaloacetic transaminase (SGOT), creatine kinase-muscle/brain (CPK-MB), cholesterol and Heart & Body weight ratio, when compared with the ISO treated group. Non-significant effect was observed in case of low-density lipoproteins (LDL), high-density lipoproteins (HDL), Triglycerides and serum glutamic-pyruvic transaminase (SGPT). The cardio-protective activity of *Myristica fragrans* is said to be probably related to its anti-inflammatory, antioxidant, anti-hyperlipidemic activity, Hepatoprotective activity and also its ability to strengthen the myocardial membrane by its membrane stabilizing action [22].

The adjuvant Pudina (*Mentha arvensis*) is also antiseptic, carminative, cardiogenic, diuretic, etc. and useful in vitiated conditions of vata dosha, halitosis, cardiac debility, fever, general weakness, etc.

### Conclusion

Yakuti is a formulation that is a combination of calcified ash, pishti of gems, animal products namely kasturi and abaresham, etc. A review of the ingredients has put light that manikya pishti (ruby), pravala pishti (coral), mukta pishti (pearl), swarna bhasma (gold), abaresham (*Bombyx mori cocoons*), kesara (*Mesua ferrea*), behaman saphed (*Centaurea behen* root), jatiphala (*Myristica fragrans*), shweta maricha (*Piper nigrum*) and gulab arka (*Rosa centifolia*) are useful in cardiac ailment. Mukta (pearl) and pravala (coral) are useful in maodaourbalya (weakness of mind). The attributes of the drug aid in giving the desired results in disorders like weakness of the heart, fever, nerve weakness, excessive perspiration, etc.

Research works carried out on this formulation may give more understanding and add knowledge for evidence based practice.

### References

1. Yadavji Trikamji Acharya, Siddha Yoga Sangraha, 11<sup>th</sup> Edition, Nagpur: Sri Baidyanath Bhavan, 2000, 93.
2. Joshi Ramdayal, Ayurveda Sara Sangraha. Baidyanath Ayurveda Bhavan Ltd, 2000, 174.
3. Yadavji Trikamji Acharya, Siddha Yoga Sangraha, 11<sup>th</sup> Edition, Nagpur: Sri Baidyanath Bhavan, 2000, 166.
4. Yadavji Trikamji Acharya, Siddha Yoga Sangraha, 11<sup>th</sup> Edition, Nagpur: Sri Baidyanath Bhavan, 2000, 167.
5. Yadavji Trikamji Acharya, Siddha Yoga Sangraha, 11<sup>th</sup> Edition, Nagpur: Sri Baidyanath Bhavan, 2000, 167.
6. Krishnananda Maharaj, Rasatantrasara, Siddha Prayoga Sangraha. 19<sup>th</sup> Edition, Rajasthan: Krishnagopal Ayurveda Bhavan ltd, 2010, 441.
7. Tripathi Indradeva, Rasendra Sara Sangraha. 2<sup>nd</sup> Edition reprint, Varanasi: Chaukhambha Orientalia, 1998, 508.
8. Kulkarni DA, Rasa Ratna Samuchchaya. Reprint edition, New Delhi: Meharchand Lachhmandas Publications, 1998, 95.
9. Kulkarni DA, Rasa Ratna Samuchchaya. Reprint edition, New Delhi: Meharchand Lachhmandas Publications, 1998, 67.
10. Vidyavati Hiremath, *et al.* Literary review of Kasturi (Indian musk) with special reference to Ayurvedic and modern literatures, Int. Journal of Ayurvedic research. 2017; 1(4).
11. Tarique Mahmood *et al.* Protective Effect of Bombyx mori L Cocoon (Abresham) and its Formulations against Isoproterenol-Induced Cardiac Damage, Tropical Journal of Pharmaceutical Research. 2015; 14(1):63-72.

12. Arya Vaidya Sala, Indian Medicinal Plants, Reprint, Chennai: Orient Longman Pvt. Ltd. 2006; 4:30.
13. <http://shodhganga.inflibnet.ac.in>
14. <https://khs.itvhe.ac.ir>
15. Arya Vaidya Sala, Indian Medicinal Plants, Reprint, Chennai: Orient Longman Pvt. Ltd. 2006; 4:90.
16. Arya Vaidya Sala, Indian Medicinal Plants, Reprint, Chennai: Orient Longman Pvt. Ltd. 2006; 4:297.
17. Arya Vaidya Sala, Indian Medicinal Plants, Reprint, Chennai: Orient Longman Pvt. Ltd. 2006; 5:30.
18. Anonymous, RasatantraSara and Siddhaprayoga Sangraha. Krishnadas Academy, I: 386.
19. Mohammad Shawwal, Badruddeen *et al.* J Tradit Complement Med. 2017; 7(4):471-475.
20. Akbar A *et al.* Pharmacological studies on Salvia haematodes Wall. Acta Tropica. 1985; 42(4):371-374.
21. Balbir Singh *et al.* Antianxiety Investigations of *Centaurea behen* Linn. and *Elaeocarpus ganitrus* Roxb Journal of Pharmacy Research. 2012; 5(3):1483-1486.
22. Dr. Manjunath H, Dundi *et al.* Evaluation of cardio-protective activity of jatiphala (*Myristica fragrans* houtt.) in wistar rats WJPR, 2017, 6(13).