

## The Rasayana Effect of Contents of Vasant Malati Rasa Along With Modern Attributes

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### ABSTRACT

Rasayana is one of the eight clinical specialties of Ayurveda. There is more than one type of Rasayana in the texts. Rasayana is not just a drug therapy but is a special procedure practiced in the form of rejuvenating recipes, dietary regimen and health promoting conduct and behavior i.e., Achara-Rasayana. This Review Article researches the classical Ayurvedic Texts about the polyherbal and polymineral Kalpa, Vasant Malati Rasa about its Rasayana benefits. Then this review article reviews the modern research on Rasayana and its parallel attributes to assess and validate the claims of Ayurvedic kalpa about its Rasayana benefits.

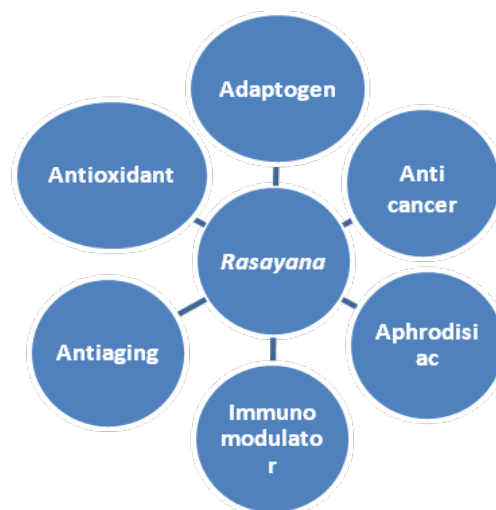
**Keywords:** Antioxidants, Adaptogen, Antiaging, Vasant kalpa.

### INTRODUCTION

Rasayana means the way for attaining excellent Rasa. From the Rasayana treatment, one attains longevity, memory, intelligence, freedom from disorders, youthful age, excellence of lustre, complexion and voice, oratory, optimum strength of physique and sense organs, respectability and brilliance as written in Charak Samhita. These Rasayana attributes will also incorporate being Adaptogen, Antioxidant, Anti cancer, Antiaging, Aphrodisiac and Immunomodulator. Rasayana dravya, are proclaimed to induce qualitative improvements at cellular levels eventually leading to a delay in aging process.

Immunomodulators are biological or synthetic substances that can stimulate, suppress or modulate any aspect of the immune system including both adaptive and innate arms of the immune system. The oxidative stress that results from an imbalance between formation and neutralization of free radicals, in such

conditions Antioxidative property is of use [1]. The Rasayana effect said in the ancient texts could be correlated with:



Vasanta Kalpas has been quoted by most seers and are well acclaimed for their rejuvenation effect. Vasant Malati Rasa [1], which is stated in the Bhaishajya Ratnawali, can also be assessed for its Rasayana Karma. The contents of the kalpa are as follows:

Sr.no	Ingredients	Scientific name	Proportion
1.	Swarna Bhasma	Aurum	1 part
2.	Moutika bhasma	Pearl	2 part
3.	Hingul	Mercury(II) sulfide	3 part
4.	Maricha	<i>Piper nigrum</i>	4 part
5.	Kharpar	Zinc carbonate	8 part
6.	Navneet	Butter	Q.S
7.	Limbu Swarasa	<i>Citrus limon</i>	Q.S

## METHODOLOGY

For the present review, a literature search was conducted (up to October 2021), using Elsevier-Science direct, Pubmed and Google Scholar. The search included the following keywords: “medicinal plants”, “minerals”, and “active constituents” cross-referenced with the keywords: “Antioxidant”, “Adaptogen”, “Antiaging” and “Immunomodulator”.

## PHARMACODYNAMICS

### 1. Swarna Bhasma

- **Immunomodulator Property**

A study of traditional gold preparations when administered in animal model showed better growth rate versus control group, thus indicating no gross or subtle toxic effects and showing adaptogenic, and immunostimulant actions [1].

- **Antioxidant and Adaptogenic Property**

Study was carried out to test antioxidant glycogen sparing and adaptogenic properties of gold preparation used in Indian system of medicine.

In this study test drug *Swarna bhasma* was administered for 10 days and oxidation stress parameter in liver and brain were assessed. It is proved that gold preparation revealed encouraging antioxidant, glycogen sparing and adaptogenic activity with wide margin of safety [4].

### 2. Moutika bhasma

- **Antioxidant and adaptogenic property**

The study proved the effect of *Moutika bhasma* as antioxidant and as immunomodulator. This is an effective and useful property when considering Rasayana karma [5].

### 3. Hingul/ Parad

*Parad* in its purest is considered to be extracted from *Hingul* (ore of Mercury sulphide). It is said that pure mercury can be extracted from *Hingul* (ore of HgS) does not require further purification [6].

- **Antioxidant Property**

A study suggested Anoxia leads the cells to the state of oxidative stress. Administration of exogenous 5-HT reduced this effect. Several research articles reported that Cinnabar (consists of more than 96% mercury sulfide, HgS), has been involved in the regulation of 5-HT. HgS has antioxidant property and can relieve the shifting of antioxidant enzyme and reactive oxygen species overproduction under anoxic condition and prevent oxidative stress induced by hypoxia [7].

### 4. Maricha

- **Antioxidant Properties**

Water and ethanol crude extracts from black pepper were investigated for their antioxidant and radical scavenging activities by using different

assay. Both water extract and ethanol extract of black pepper exhibited strong total antioxidant activity [8].

- **Immunomodulatory Property**  
Study was performed to find immunomodulatory and anti-cancer activity of black pepper in vitro. In this study splenocyte were cultured in medium supplemental with vehicals T-lymphocyte mitogen, B-lymphocyte mitogen, and aqueous extract of black pepper at 4 doses (1, 10, and 50,100) for 48-72 hrs. Proliferation of splenocyte was enhanced in all doses of black pepper aqueous extract led to significant enhancement [9].

## 5. Kharpar

- **Immunomodulatory Property**  
This trace element has a broad impact on key immunity mediators, such as enzymes, thymic peptides and cytokines, explaining the paramount importance of zinc's status on the regulation of lymphoid cell activation, proliferation and apoptosis [10].

- **Antioxidant Property**  
*Yashad bhasma* is unique preparation of zinc. A study of free radicals scavenging activity of *Yashad bhasma* and different zinc containing compound such as ZnO, Zn, and zinc acetate were done and biological activity of *Yashad bhasma* was tested on yeast. Study shows that scavenging activity or antioxidant activity of *Yashad bhasma* in yeast cell is better as compared to other zinc compound [11].

## 6. Bhavana Dravya

- **Nimbu Swarasa**  
Antioxidant activity of lemon juice is studied with experiment Green tea with lemon juice and without lemon juice is studied for its antioxidant properties. From study it was tested that green tea

with lemon juice has more antioxidant properties [12].

## DISCUSSION

It is evident from the review of the research that some aspects of *Rasayana* therapeutic benefits have been studied yet other aspects are yet to be researched. *Vasant Malati Rasa* is a polyherbal polymineral formulation whose probable effect on the *Rasayana* activity is discussed in current research paper with the study of different texts, articles, and research studies. From this study it can concluded that the individual contents have antioxidant, adaptogenic and immunomodulatory property. This comprehensive pharmacological screening will be very useful in future product development also, particularly for the life style diseases and disorders.

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