

STANDARDIZATION OF *VANGABHASMA*  
(PREPARED BY DIFFERENT *SHODHANA* PROCESS)  
WITH REFERENCE TO ANCIENT AND MODERN PARAMETERS

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**ABSTRACT**

**Background:** *Rasashastra* is a specialized branch of Ayurveda which deals with the pharmaceuticals of its unique and potent preparations. *Bhasmas* (calx) are one among such preparations which are prepared after various *Samskaras* (processings) such as *Shodhana* (purification), *Jarana* (roasting), *Marana* (incineration), *Amrutikarana* (nectarization) etc. They are said to be good if properly prepared and pass certain *bhasma* tests enlisted in classical *Rasashastra* texts. But in this era, only ancient *bhasma parikshas* are not enough to satisfy the modern scientific world.

**Objective:** Hence the present study was carried out to evaluate an *Ayurvedicbhasma* with both modern and ancient parameters.

**Materials and methods:** *Vanga bhasma*, a Tin based *Ayurvedic* metallic preparation, was prepared as per *Rasa* text and it was tested with both ancient and modern analytical parameters to know how the basic metal was transformed into bio-absorbable *bhasma* form and also to know its physical nature as to in which form the final product is.

**Results:** The ancient *bhasma parikshas* revealed that the *bhasma* prepared with *Shodhana* process passed all the tests and thus ascertaining it was properly formed and modern analytical techniques like XRD (X Ray Diffraction) identified the final product as Tin oxide (SnO<sub>2</sub>). SEM (Scanning Electron Microscopy) revealed the amorphous nature of the *bhasma* with particle size range 5-20 µm. ICPAES (Inductively Coupled Plasma Atomic Emission Spectroscopy) showed the presence of Tin in major portion and other elements like Pb and As <0.5 ppm in the final product.

**Conclusion:** Hence it can be concluded that ancient tests are handy in the qualitative aspect where as modern tests are useful for quantitative aspect and both of them are practically suited to test the proper formation of *bhasma*.

**KEYWORDS:** *Vanga Bhasma*, X ray diffraction; *Shodhana*; *Jarana*; *Marana*.

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