

BHASMA

Definition

Bhasma is that which is burnt to powder. This name is generally applied to all, that are subjected to the process of burning and reduction to ash. In this section, it is applied to the metals, minerals and animal products which are, by special processes, calcinated in closed crucibles in pits with cow dung cakes (putam). Bhasmas are generally, white pale or red in color. The color of preparations mostly depends on the parent material.

Method of preparation

First stage: Sodhana

- Bhasmas are prepared from purified minerals, metals, marine and animal products.
- In Ayurveda, the purification is called Sodhana.
- Chemical purification is helpful for the elimination of foreign matters.
- Medicinal purification is useful for:
 - Elimination of harmful matter from the drug,
 - Modification of undersirable physical properties of the drug,
 - Conversion of some of the characteristic of the drugs to different stages, and
 - The enhancement of the therapeutic action.
- This Sodhana is of two kinds:

Samanya Sodhana which is applicable to large number of metals or minerals as heating the thin sheets of the metals and immersing them in Taila (oil), Takra (extract), Gomutra (cow urine) etc. and

Vishesha Sadhana is that which is applicable only to certain drugs and in certain preparations. Vishesha sodhana includes (1) Bhasama (2) Syedana (3) Nirvapana (4) Mardana etc.

Second State: Marana

- The purified drug is put into a khalva (stone mortar), and ground with juice of specified plants or Kasayas of drugs mentioned for a specified period of time.
- Then small cakes are made (chakrikas) and dried under the sun.
- The size and thickness of the cakes depend on the heaviness of the drug and size.

- The heavier the drug, thinner are the cakes.
- These cakes are dried well and placed in one single layer in a mud tray (sharava) and closed with another such tray and the clay-smeared cloth keeps both the lid and the container in opposition.
- This is applied seven times and dried.
- A Pit is dug in open space with the diameter and the depth depending upon the metal or mineral that is to be calcinated.
- The half of the pit is filled with dried cow dung Cakes.
- The clay tray processed as above is placed in it and the pit is covered with cow dung Cake.
- The fire is put in on all four sides and in the middle of the pit.
- The pit should not be in a place where there are sever gases of wind.
- When the burning is over, it is allowed to cool completely of its own accord.
- A variety of putas are described under different names to indicate the size of the pit and the number of cow dung for a Puram (Mahaputa, Gajaputa, Varahaputa, Kukkutaputa, and Kapotaputa etc.
- They indicate the amount of heat, required and the period of burning.

Characteristics and preservation

- There should no Candrika or metallic lustre (Niscandrika)
- When taken between the index finger and thumb and spread, it should be so fine as get easily into the lines of crevices of fingers (Rekhapurita)
- When small quantity is spread on cold and still water, it should float on the surface (Varitara) and
- The Bhasma should not revert to the original state (Aurnabhava).
- Bhasmas are preserved in air tight glass or earthen containers. The potency of the preparation is maintained indefinitely.

Evaluation of Bhasmas

The following parameters should be determined by following the procedures stated under the standardization of Curnas,

- Description (Color, odor etc.)
- Particle size (mesh size - 200 to 300 mesh)

- Loss on drying at 105 ° C
- Total ash
- Acid - insoluble ash
- Water soluble ash

Assay of element (s) / heavy metals