

## ENGLISH TRANSLATION

### Chapter : 10

#### 10.1-8. Yantras (Apparatuses)

Now *yantras* (apparatuses) would be described which restrain/control mercury from being escaped. Hence their form or appearance is being described as per texts.

It is important to mention here that in this text we find only the names of the following *yantras* and their detailed description is not found mentioned in this text.

#### The names of *Yantras*

1. *Dolā yantra*
2. *Palabhalī yantra*
3. *Ūrdhwapātana yantra*
4. *Adhaḥpātana yantra*
5. *Tiryakapātana yantra*
6. *Ghaṭī yantra (Apyāyan yantra)*
7. *Garbha yantra*
8. *Iṣṭikā yantra*  
(*Gandhaka jārana yantra*)
9. *Jala yantra (Kacchapa yantra)*
10. *Khalva yantra*
11. *Damarū yantra*
12. *Cipiṭākhya yantra*
13. *Tulā yantra*
14. *Lavaṇa yantra*
15. *Koṣṭhikā yantra*
16. *Antarālik yantra*
17. *Dhūpa yantra*
18. *Nābhi yantra*
19. *Grasta yantra*
20. *Vidyādhara yantra*
21. *Kuṇḍaka yantra (Svedana-yantra)*
22. *Dheki yantra*
23. *Somānala yantra*
24. *Nigada yantra*

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| 25. <i>Kinnara yantra</i>  | 26. <i>Bhairava yantra</i>      |
| 27. <i>Bālukā yantra</i>   | 28. <i>Pātāla yantra</i>        |
| 29. <i>Bhūdhara yantra</i> | 30. <i>Sāraṇa yantra</i>        |
| 31. <i>Guhya yantra</i>    | 32. <i>Gandhapiṣṭaka yantra</i> |
| 33. <i>Kūpī yantra</i>     | 34. <i>Pālikā yantra</i>        |
| 35. <i>Dīpikā yantra</i>   | 36. <i>Sthāli yantra</i>        |
| 37. <i>Bhasma yantra</i>   | 38. <i>Dega yantra</i>          |
| 39. <i>Ghāṇikā yantra</i>  | 40. <i>Haṃsapāka yantra</i>     |

As per the mention of original text thirty nine *yantras* are mentioned here by names. However according to our counting their number comes to forty. (1-8)

**Note:** In Gujrati Commentary the Commentator Pt. Shri Jivarama Kalidasa Sastri has given details of these *yantras* on the basis of the descriptions found in other texts. But in this commentary also the description of only 32 *yantras* is found mentioned. Probably the description regarding other (remaining) *yantras* may not be found by him. The names of these *yantras* are *Bhairava*, *Guhya*, *Gandha Piṣṭka*, *Kūpī*, *Pālikā*, *Dega* and *Ghāṇikā*, these have however been mentioned in the original text.

#### 10.9-10. Description of *Mūṣās*

Now different type of *mūṣās* are being mentioned here on the basis of different types of soils.

#### Synonyms of *Mūṣās*

The synonyms of *mūṣās* are *Mūṣā*, *Kumudikā*, *Krauncika*, *Karahāṭikā*, *Pātinī* and *Bahnimitrā*. These are a few synonyms found mentioned for *mūṣās* at various places.

### 10.11-28. Types of *Mūṣās* and their Description

#### *Yogamūṣā*

It is made of *Balmikī* soil which is associated with *tuṣa* (husk), *bhasma* (ash) and *viḍa* (a kind of salt). The *mūṣā* which is fabricated with the above mentioned soil mixture is called as *Yogamūṣā*. (11)

#### *Gāramūṣā*

It is made with *gāra* type of soil which is associated with *bhūnāga* (earth worm) *satva*, *śaṇa* (jute), *dagdha tuṣa* (burnt husk) and triturated with *mahiṣi kṣīra* (buffalo milk) for a fortnight (15 days). The *mūṣā* fabricated with the above mentioned soil mixture is called as *Gāramūṣā*.

#### *Varamūṣā*

It is made with ordinary *mūṣā* soil, which is associated with *vastra* (cloth piece), *aṅgāra* (burning charcoal), *tuṣa* (husk) taken in equal parts and mixed with four times soil and also equal part of *bhūnāga mṛttikā* with it and ground well to make a smooth mixture. The *mūṣā* fabricated with this soil mixture is called as *Varamūṣā*. It can tolerate fire heating for one *yama* (3 hours).

#### *Varṇamūṣā*

It is made with the *mṛttikā* (soil mixture) mentioned above and also mixed with the drugs of *raktavarga* (group of red colour) and triturated with the liquid/decoction of *raktavarga* drugs. The *mūṣā* fabricated with the above mentioned mixture and pasted inside with the paste made of *turī* and *puṣpa kasisa* (Alum and Ferrous sulphate) is known as *Varṇamūṣā*. As it is used to improve the colours (*varṇotakarṣa*) hence called *Varṇamūṣā*. (14-15)

#### *Rūpyamūṣā*

If the above *mūṣā* is pasted from inside with the paste of *śveta varga* drugs (white colour group of drugs) then it is called as *Śvetamūṣā/Rūpyamūṣā*. (16)

***Viḍamūṣā***

The *mūṣā* which is made by using *viḍa* (salt soil) and which is also pasted with the *viḍa* paste is known as *Viḍamūṣā*. It is used for *deha siddhi* and *loha siddhi* both. (17)

***Vajramūṣā***

It is made with the mixture made of *gāra*, *bhūnāga satva*, *tuṣa* (husk), *śaṇa* (jute) taken in equal parts and *mṛt* (soil) of equal amount. Then these should be ground with *mahiṣī kṣīra* (buffalo milk) for three days continuously to make it a very smooth and homogenous mixture. It should then be kept for 15 days and then the *mūṣā* may be fabricated with the above mixture. Now paste this *mūṣā* with *matkuṇa śoṇita* and *balā rasa*. It is known as *Vajramūṣā*. It can stand to four *yāmas* heating, i.e. it does not melt even if it is subjected to four *yāmas* heating. It may be used for the melting of *vajra* (diamonds). (18-20)

***Vṛntākāmūṣā***

This *mūṣā* is similar to *vṛntāka* (brinjal) in shape and form, for this prepare a ten *aṅgula* long tube similar to *dhattūra puṣpa* (flower of *dhatura*) of metal means broad at the base and narrow at the upper end having a *chidra* (hole) in it. Its length may be eight *aṅgulas*. This type of tube should be attached on the mouth of the *mūṣā* to make the *mūṣā* similar to brinjal in shape and form. It may be used to extract the *satva* (metal content) from *kharpara* (zinc ore) etc. *mṛdu* (low melting point) drugs/minerals. (21-22)

***Gostanī mūṣā***

The *mūṣā* which is made similar to the shape of *gostana* (udder of cows) and which is closed on its mouth is known as *Gostanī mūṣā*. It may be used for the *drāvaṇa* (melting) and *śodhana* (purification) of *satvas* (extracted metal contents of minerals). (23)

***Mallamūṣā***

The *mūṣā* which is made by joining two *mallas* (lower-half of the pots) i.e. (*malla dvitaya saṃpuṭa*). It may be used to apply *svedana* (heat) to the *rasaparpatī* compounds etc. (24A)

***Pakkamūṣā***

The *mūṣā* which is made similar to *kulāla bhāṇḍa* (pot maker's pot) in shape and form and which is heated strongly to make it very strong is known as *pakkamūṣā*. It may be used for the quick purification of the drugs i.e. (*satvara dravya śodhinī*). (24B)

***Mahāmūṣā***

The *mūṣā* which is made very broad and very long in shape and which is slightly wide at its mouth is called as *Mahāmūṣā*. It may also be used for the quick purification of the drugs (i.e. *satvaradravya śodhinī*). (25)

***Manjūṣamūṣā***

The *mūṣā* which has (6) six *aṅgula*'s height, six *aṅgulas* length and depth and which is square in shape and looks similar to a box is called as *Manjūṣamūṣā*. It is used for the *marāṇa* of *rasa* (mercury). (26)

***Garbhamūṣā***

Make a pit on the earth, put *mūṣā* in it and cover it with sand (*bālukā*). It is known as *Garbhamūṣā*. It is used for the *bandhana* (fixation/ solidification) of *pārada* and for applying heat for this purpose. (27)

***Mūsalamūṣā***

The *mūṣā* which is made flat at the base, cylindrical in shape at the middle and upper end and having eight *aṅgula*'s height is known as *Mūsalamūṣā*. As its shape is similar to a *mūsala* (club) hence called *Mūsalamūṣā*. It is used to prepare *Cakrībaddha rasa*. (28)

**10.29-39. Description of *Koṣṭhis* (Furnances)**

The *koṣṭhis* are used by knowledgeable alchemists to apply different graded heat for the *satvapāt-na* (extraction of metallic content from the minerals) purposes. Their various forms are described as follows. (29)

***Aṅgārakoṣṭhī***

*Aṅgārakoṣṭhī* has a height of one *rājahasta*, and having a square shape of side 12 *aṅgulas*. It is in the soil in all sides. There should be a one *vitasti* hole in its one wall. In its lower part a door (one and half *vitasti* size) should be made for blowing air. On its upper part a *prādeśa* size wall should be made and in this wall a *prādeśa* size door should be made. This door should be closed with a brick and sealed properly. Fill the charcoals or the hard coals in this *koṣṭhī* and attach a blower (*bhastrikā*) to it for blowing air. When needed put charcoals and the material to be heated through the upper door. It is known as ‘*Aṅgārakoṣṭhī*’ and may be used for the *satvapātana* (extraction of metallic content) of the *khara* (hard/having high melting point) *dravyas* (drugs/minerals). (30-34)

***Pātālokoṣṭhī***

Dig a twelve *aṅgula* size square pit on the earth make another four *aṅgula* size circular pit in its middle. Place a strong *kharpāra* (half clay pot) over the mid (inside) pit. Then the outer bigger pit is filled with the charcoals and should be blown with one blower. It is known as *pātālokoṣṭhī*. It is useful for the *satvapātana* from the *mṛdu dravyas* (soft/having low-melting point). (35-36)

***Gārakoṣṭhī***

Prepare a square pit having one *vitasti* depth and *prādeśa* size breadth, close it with a plate (cover) containing number of holes. Fill the pit with burning charcoals and blow the air with a *vaṅk-anāla* (bent pipe) to keep the charcoals burning. It is known as *Gārakoṣṭhī*. It is also useful for *satvapātana* purpose. (37-38)

***Tiryak-Pradhamanakoṣṭhī***

Prepare a square pit having the height of one *vitasti*. Make a four *aṅgula* size another pit in its base so that air could be blown in it through a bent pipe. It is known as ‘*Tiryak-pradhamana koṣṭhī*’. As the air blown in this *koṣṭhī* is in transverse direction hence it is called as *Tiryak-pradhamana koṣṭhī*. It is also used for doing the *satvapātana* from *mṛdu dravyas* (low melting point). (39)

**10.40-52. Description of *Puṭas* (Heating Devices)**

**Definition:** That which indicates the quantum of heat required by the *Rasa* (mercury/metal/minerals) for their proper *pāka* (incineration) is known as *Puṭa*.

**Type of *Puṭas******Mahāpuṭa***

Dig a square pit having the two *hasta* width and depth on the earth. Fill one thousand dung cakes in it. Then keep the drugs to be subjected to *puṭa-pāka* in its middle. It is now covered with another half thousand dung cakes from upside. Then ignite fire for applying heat to the drugs to be subjected to *puṭa-pāka*. It is called as *Mahāpuṭa* as per the texts. (40-41)

***Gajapuṭa***

Dig a square pit of one *rājahasta* (30 *aṅgula*, 22.50") size. This pit should be filled in with one thousand dung cakes. Fill the *mūṣā* or *sampuṭa* with the drugs and seal it properly. Now keep it in the middle of the pit in between dung cakes and fill remaining portion of the pit with remaining dung cakes. Ignite fire from down to apply heat to the drugs for its *pāka*. It is known as *Gajapuṭa*. (42-43)

***Vārāhapuṭa***

When the heat is applied in a square pit having the size of one *aratni* (24 *aṅgula*, 18") then that *puṭa* (heating device) is known as *Vārāhapuṭa*. (44)

***Kukkuṭapuṭa***

In the original texts its size is mentioned as ‘*Vitastidvaya mānena*’ meaning one *vitasti*. Accordingly the size of its pit should be one *vitasti* only in its height, depth and width. The *puṭa* having the one *vitasti* size (height) is known as *Kukkuṭapuṭa*. It is used to apply heat to *mṛdu dravyas* (low melting point). (45)

***Kapotapuṭa***

When the heat is applied with eight dung cakes on the earth then that *puṭa* is known as ‘*Kapotapuṭa*’. [Though, the text has not mentioned about the application of heat with eight dung cakes over the earth here, but it is written on the basis of the descriptions of other texts. This texts has also not mentioned about preparing of any pit here which implies that it should be given over the earth instead of in the pit. Pit is generally prepared or used to avoid heat loss, but in this case very much less heat is required to be applied]. (46)

***Gorvarapuṭa***

The *puṭa* in which husk or dung powder in sixteen *pala* quantity (two *māṇikās*) is used for applying heat is known as *Gorvarapuṭa*. (It is used for preparing *Rasa bhasma*). (47)

***Mṛd-Bhāṇḍapuṭa***

When a *bhāṇḍa* full of soil and containing the drugs in its middle is applied heat from down is known as *Mṛd bhāṇḍa puṭa*. (As per ‘*Rasa Ratna Samuccaya*’ the *bhāṇḍa* (pot) in this *puṭa* should be filled with *tusa* (husk) instead of *mṛt* (soil) to apply slow heat for longer duration) (48).

***Bālukāpuṭa***

Fill a pit or pot with *bālukā* (sand) and put the drugs inside the sand and apply heat from up and down carefully. As here the heat is given through the sand hence it is known as ‘*Bālukāpuṭa*’ by the experts in the *śāstras* (49).

***Bhūdharapuṭa***

In this *puṭa* *mūṣikā* filled with the drugs is kept two *aṅgula*’s under the earth and the heat through dung cakes is given from upside by *puṭa* system. This *puṭa* is known as ‘*Bhūdharapuṭa*’ (50).



***Lāvaka puṭa***

In this *puṭa* the heat is given either through *govara* (dung powder) or *tuṣa* (husk) taken in one *karṣa* quantity. It is known as ‘*Lāvaka puṭa*’. For smaller *Gorvarapuṭa*, the same fuel is used however in less quantity and as a result its rise of temp. and its maintenance time is very less. [It is used for the preparation of *bhasma* from very soft *dravyas* (low-melting point or very less heat resistant drugs). In ‘*Rasa Ratna Samuccaya*’ the quantity of *tuṣa* (husk) prescribed is one *śoḍaśikā* (one *pala*)] (51).

**Synonyms of *Chagaṇas* (Dung cakes)**

*Utpala*, *piṣṭaka*, *chāṇa*, *upala*, *gariṇḍa*, *chagaṇa*, *upalasārī* (*ṭhī*) and *navāri* are the synonyms of *chagaṇas* (dung cakes) (52).