ABSTRACT
The word Rasashastra literally means the “Science of mercury”. It is a specialized branch of Ayurveda dealing mainly with materials which are known as ‘Rasa dravyas’. Hingula(Cinnabar) is a rasa dravya; 7th Sadharana rasavarga in Rasa Rayna Samuccaya. Ashuddha Hingula is one of the toxic material that leads to various diseases like prameha(diabetes mellitus), citta-vibhrama (delirium), andhatwa (darkness before eyes), krama(tiredness), and sariraksinatwa (emaciation). Therefore, hingula(cinnabar) should be properly purified before it’s therapeutic use. Various methods of hingula shodhana is described in various Rasa Shastra texts, this study deals the descriptions from Rasa Tarangini and Rasa Tantra Sauraevum Siddha Prayoga Sangraha, the methods of shodhana, the time difference of shodhankaala and also the medicinal uses of Hingula.

KEYWORDS: Hingula Shodhana, Rasa Tarangini, Rasa Tantra Saara Siddha Prayoga Sangraha.

INTRODUCTION
Description of Hingula (cinnabar) is not available in the Bhurt Trayee of Ayurveda. It is found in texts of Rasa Shastra and in Kootiya’s Arthashastra. Hingula, which is a compound of mercury and sulphur is available naturally and also can be prepared artificially.\(^1\) Hingula is therapeutically effective in Netra roga, kashtha, kamala, prameha, amavata and jwaraafter its purification. In Rasashastra generally the metals, minerals, mercury and sometimes a few other drugs of poisonous nature are indicated in clinical practise. The toxic drugs need to be detoxified before they are added to a therapeutic formulation, hence with a view to remove or minimise the toxicity and to make the drugsto express only desired effects a number of Shodhana procedures and techniques have been prescribed and practised.\(^2\)

Importance of Shodhanam
Shodhanam is a process by which minimization or removal of toxic effect of the drug, conversion of hard material into soft and brittle (bhangeratwa) so as to proceed for further pharmaceutical techniques and impregnation of organic qualities of Bhavana dravya into the formulation is done. The impurities of the substance cause several diseases and shows toxic effect. So, it is advisable to administer the drug in a formulation in pure form. The raw Hingulam contains several impurities that could cause andhyatwa (blindness) klaibya(impotency) kastha (skin diseases) bhrana (giddiness) gaurava (heaviness) and prameha (diabetes). Hence, Shodhana of Hingula is recommended, to get it qualities under control, before using it in any formulation.\(^3\) The Shodhanaof Hingula is done by bhavana, the trituration.

Bhavana
The process of triturating powders of drugs in Khalva Yantra by adding liquid enough only to soak the drug, till the wet powders become dry is called Bhavana.\(^4\) On grinding the Bhavita Dravya should become Chipitibhuya (convert into roll form) and Mardavya (soft) in nature, it is characteristic of Subhavita Dravya (ideal trituration). If the bhavita dravya suddenly turns into powder form and rough to touch, it is characteristic of Durbhavita Dravya (improper trituration).

MATERIALS AND METHODS
1. Grahyalakshanuof Hingula: Acc. to Rasa Tarangini, the best variety of hingula is having red colour as japakusuma(Hibiscus rosa-sinensis), which can be easily triturated, which has shiny appearance and which is heavy; is considered the best variety for therapeutic purpose.\(^5\)

Table 1: Hingula Shodhana, acc. to Rasa Tarangini.

<table>
<thead>
<tr>
<th>Method</th>
<th>Bhavana Dravya</th>
<th>English name</th>
<th>Scientific name</th>
<th>No.of Bhavana</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ArdrikaSwarasra</td>
<td>Ginger juice</td>
<td>Zingiberofficinale</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>LakoochaSwarasra</td>
<td>Monkey Jackfruit juice</td>
<td>Artocarpuslakoocha</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Meshi Ksheera</td>
<td>Sheep milk</td>
<td>Ovisaries</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>NimbaSwarasra</td>
<td>Lemon juice</td>
<td>Citrus medica</td>
<td>7</td>
</tr>
</tbody>
</table>

Shuddha Hingula Guna

Acc. to Rasa Tarangini, Shuddahingula will be used in all types of eye diseases. It mitigates vitiated kaphadooshan cures the symptoms of the pitjaroga. It cures piliharoga (splenic disorders), kustharoga (skin diseases); and cures garavisha and kamala roga (jaundice). It improves the appetite and digests ama-dosa and all types of ‘prameharoga’ (diabetes). Its appropriate use imparts good radiance to the body. It improves good physical strength and intellect and cures amavata (Rheumatoid arthritis) and jwara (fever).[7]

3. Hingula Shodhana: Acc. to Rasa Tantra Saaraevum Siddha Prayoga Sangraha.[8]

Method 1

The ‘ashuhdahingula’ is taken in clean khalva yantra and triturated to obtain fine powder. The powder is subjected to mardana (trituration) with nimbuswarasa (lemon juice) for 12 hours and dry completely. Then mardana with meshi kshir (sheep milk) or maahishakshir (buffalo milk) for 12 hours hingul gets purified.

Method 2

The ‘ashuhdahingula’ is taken in clean khalva yantramardana (trituration) with Go dudh (cow’s milk) for 3 hours. Then mardana (trituration) with nimbuswarasa (lemon juice) 7 bhavana shuddahingulalavisheshlabhdaayak (more beneficial) as per yadayitjikamjiacharaya.

Method 3

The ‘ashuhdahingula’ is taken in clean khalva yantra mardana (trituration) with meshi kshir (sheep milk) or maahishakshir (buffalo milk) for 7 days wash with water and then mardana(trituration) with nimbapatraswarasa (juice of neem leaves, Azadirachtindica) or nimbuswarasa (lemon juice) for 7 days it is similar to dwigunagandhakaarthahingula.

DISCUSSION

In classical text Rasa Tarangini, it is mentioned hingula is given bhavana with nimbuswaras (lemon juice), aadrdakswaras (ginger juice), meshi kshir (sheep milk) and lakoochaphalaswaras (Artocarpuslakoocha).[9] Repeated bhavana will yields more effect and be beneficial. Nimbuswarasa removes paraddosha from hingula and makes ‘pradippta’. By milk it is nourished and mercury gets out from hingula easily.

Urdhwapaatithahingula gets purified in very less time as it isissimilar to Rasa-sindoora. In Olden era, mineral of hingula was being used but now artificial hingula made from ashuddhiparadara and gandhaka (sulphur) is used. In artificial hingula, “Romihingula” is beneficial and the hingula which is made of less mercury and more gandhaka, which is hard and of dull colour it is not used in medicines.[10]

CONCLUSION

Shodhana is a samskara adopted to Rasadraya to reduce the toxicity of the drug and to bring about the therapeutic action. So, it is concluded that according to Rasa Tarangini four methods of hingulshodhan 7 bhavanas (21 hours) is followed. According to Rasa Tantra Saaraevum Siddha Prayoga Sangraha more time of Shodhana is given and also has the same property that is purified by Rasa Tarangini method. In need of addition of hingula to formulation the methods which include more bhavana shall be followed to avoid risks of adverse events; and if the hingulahas to be subjected for Urdhasvapataana for extraction of mercury the methods of less efforts shall be followed.

REFERENCES