Research Article

PRELIMINARY STUDIES OF SOME MARKETED AYURVEDIC PREPARATIONS OF ASAVA’S AND ARISHTA’S

Mohini Kuchekar 1*, Mohini Upadhye 2, Ashwini Chakor 2
1Department of Pharmacognosy, P. E. S’s Modern College of Pharmacy, Savitribai Phule Pune University Ganeshkhind, Pune, Maharashtra, India
2Department of Pharmacognosy, P. E. S’s Modern College of Pharmacy (For Ladies), Savitribai Phule Pune University Ganeshkhind, Pune, Maharashtra, India
*Corresponding Author Email: phanse_mohini@yahoo.co.in

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ABSTRACT

Ayurveda is a science of life. Ayurveda is considered as the Upaveda of Aharvaveda which deals with different type of herbs, plants, the anatomy and physiology of different organs of body and the principles of treatment of diseases. Ayurveda is an oldest system of medicine which native to India. Asava and Arishta’s are liquid preparations containing self generated alcohol. Thus contain water soluble as well as alcohol soluble substances of the drugs. Asava and Arishta’s are differing from each other owing to their difference in method of preparation. In the current study, an attempt was made to evaluate some ayurvedic preparations like Asava and arishta available in market. The preparations were evaluated for various parameters like estimation of alcohol content, pH values, total solid content, density, surface tension and viscosity of Asava and Arishta’s. It was observed that an establishing quality and standard parameters like alcohol level, pH, acid values and other components of all these preparations are highly significant.

Key words: Asava, Arishta’s, Marketed Preparations, Evaluation study.

INTRODUCTION

Ayurveda is one of the most ancient systems of medicine known today developed through daily life experiences with the mutual relationship between mankind and nature 1.

The lack of appropriate clinical studies of Ayurvedic treatments is heavily criticized by Western physicians. Western physicians and medical scientists claim that very few clinical studies exist and those that do exist show, at best, questionable results. Their main concern against Ayurveda is that its reliance on pure observation, experimentation, and philosophical emphasis on individualizing treatments (i.e. making different treatments for different people for the same disease) create consistency and unreliable data on the efficacy of the treatments. Although Ayurved as strength comes from the fact that it is highly individualized form of medicine, this is a disadvantage in the context of the western world 2,3,4.

This traditional system comprises of various types of medicines including fermented forms, namely Asavas and Arishtha’s. Fermented dosage forms show high palatability and stability 5.

Asava and arishta have been used as medicines for over 3000years to treat various disorders and are also taken as appetizers and stimulants. Asava and Arishtha’s are liquid preparations containing self generated alcohol. Thus contain water soluble as well as alcohol soluble substances of the drugs. Asava and Arishta’s were differing each other owing to their difference in method of preparation 6.

In the current study, an attempt was made to evaluate some marketed Ayurvedic preparations of Asava and arishta for the estimation of alcohol content, pH values, total solid content, surface tension and viscosity.

MATERIALS AND METHODS

Collection of samples: All the sample preparations of Asavas and arishta were purchased from local market Pune. The details of Ayurvedic preparations were given in Table 1.

Preliminary evaluation

All Preparations of Asava and Arishta’s were evaluated for their preliminary evaluations study 7,8. This study involves identification of odour, taste and colour. The results have been shown in Table 2.

Determination of alcohol content

The deviation in ethanol content in ayurvedic preparations like Asava and Arishta’s were stand a critical difficulty to fix their limits as a quality control parameter. By considering this approach to set up its limit over a period of time, the present study was focused on determination of ethanol content of the preparations 9.

For the estimation of alcohol content, 100 ml of each preparation of Asava and Arishta’s were distilled at temperature 78.5°C until content volume was obtained. The yield was calculated as percentage weight by ml basis. The distillations were repeated another two times for each preparation. Values were represented as means of ± S.D for there trails.
Table 1: Preparations of Asava and Arishtha purchased from the market

<table>
<thead>
<tr>
<th>Sr no</th>
<th>Preparation name and company</th>
<th>Net volume (ml)</th>
<th>Main ingredient</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ushirasar (Sandu brothers Pvt Ltd, Mumbai)</td>
<td>200ml</td>
<td>Ushira, Balaka, Padma, Gambhari, Patha, Priyangu, Dhataki, Nilopala, Padmaka, Shati, etc.</td>
<td>Rakitpitta, anaemia, piles, skin disorder.</td>
</tr>
<tr>
<td>2.</td>
<td>Vasakasava (Sandu brothers Pvt Ltd, Mumbai)</td>
<td>200ml</td>
<td>Vasaka, Guda, Dhataki, Tvak, Ela, Tejapatra, Sunthi, Marich, Pippali, etc.</td>
<td>Kas, kshya, rakitpitta.</td>
</tr>
<tr>
<td>3.</td>
<td>Punarnasava (Sandu pharmaceuticals Ltd, Navi Mumbai)</td>
<td>200ml</td>
<td>Shunshi, Marich, Pippali, Haritaki, Bibhitaki, Darvi, Bhrooti, Kantakari, Vasa, Mula, Eranda Mula, Kataka etc.</td>
<td>Oedema, hyperacidity, udar rog, disorder of yakrit, and spleen.</td>
</tr>
<tr>
<td>5.</td>
<td>Khadirarishta (Shree baodynath Ayurveda bhavan Pvt Ltd)</td>
<td>200ml</td>
<td>--</td>
<td>Indicated in all types of skin, diseases and problem associated with it like inflammation, itching, rashes, minor boils etc.</td>
</tr>
<tr>
<td>6.</td>
<td>Dashmularishta (Sandu brothers Pvt Ltd)</td>
<td>200ml</td>
<td>Bilva, Syonaka, Gambhari, Patala, Agninantha, Salaparana, Prasnparrana, Khadira, Devdaru etc.</td>
<td>Vatvikar, convalecence, general debility, loss of appetite.</td>
</tr>
</tbody>
</table>

Determination of pH

The potential of hydrogen (pH) is a numeric scale normally used to denote the basicity or acidity. The pH values for each preparation were determined by using digital pH meter.10,11

Determinations of total solid content

This method is performed to get information of total solid content present in the preparation. The preparation of Asava and Arishtha’s were taken in pre weighed petri dishes 10ml of each and dried under oven. The total solid content was calculated on percentage weight by ml basis.

\[
\text{Weight of empty Petri dishes} = w1 \\
\text{Weight of Petri dish +sample} = w2 \\
\text{Solid content} = w3 = w2 - w1 \\
\text{Percentage total solid content} = w3/10*100
\]

Determination of density

Density determination by pycnometer is a very precise method. In the present study density of the sample was determined.

Determinations of total solid content, determination of density, determination viscosity and determination surface tension were given in Table 3.

Table 2: Preliminary evaluation study of Ayurvedic preparation

<table>
<thead>
<tr>
<th>Sr.no</th>
<th>Parameters</th>
<th>Asavas</th>
<th>Arishtha’s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Vasakasava</td>
<td>Ushiraasava</td>
</tr>
<tr>
<td>1.</td>
<td>Colour</td>
<td>Brown</td>
<td>Dark brown</td>
</tr>
<tr>
<td>2.</td>
<td>Taste</td>
<td>Sweet and bitter</td>
<td>Bitter</td>
</tr>
<tr>
<td>3.</td>
<td>Odour</td>
<td>Aromatic</td>
<td>Pleasant</td>
</tr>
</tbody>
</table>

Table 3: Evaluation study of Ayurvedic preparation

<table>
<thead>
<tr>
<th>Sr.no.</th>
<th>Parameters</th>
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<th>Arishtha’s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Vasakasava</td>
<td>Ushiraasava</td>
</tr>
<tr>
<td>1.</td>
<td>Total alcohol content(% w/v)</td>
<td>10.2</td>
<td>8.55</td>
</tr>
<tr>
<td>2.</td>
<td>pH determination</td>
<td>4.87</td>
<td>5.02</td>
</tr>
<tr>
<td>3.</td>
<td>Density</td>
<td>1.093</td>
<td>1.053</td>
</tr>
<tr>
<td>4.</td>
<td>Viscosity(Poise)</td>
<td>2.6786</td>
<td>1.8606</td>
</tr>
<tr>
<td>5.</td>
<td>Surface Tension(dynes/cm)</td>
<td>90.0936</td>
<td>92.130</td>
</tr>
<tr>
<td>6.</td>
<td>Determinations of total solid content</td>
<td>26% w/v</td>
<td>8% w/v</td>
</tr>
</tbody>
</table>

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REFERENCES

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