Haritaki (Terminalia chebula Retz.), A Boon of Nature: A Review

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ABSTRACT
Haritaki (Terminalia chebula Retz.) is a drug of paramount importance in Ayurveda. It keeps all the three doshas in equilibrium, cleans the channels as well as nourishes all the dhatus (tissues) of the body. It is an effective drug in various diseases like Agnimandya (poor digestion), Grahni (Irritable bowel syndrome), Vibandha (Constipation), Vishamjwara (Malaria), Gulma, Kamla (Jaundice), Kasa (Cough), Kustha (Skin disease), Ashmari (stone) etc. It is also Rasayan (Rejuvenating) and Vayasthapka (age delaying). It is rich in various phytochemicals including tannins, phenolic compounds and flavanoids. It exhibits a number of important pharmacological activities like Antidiabetic activity, Antiplasmodial activity, wound healing activity, Antiulcerogenic activity, Antioxidant and free radical scavenging activity. Haritaki is a wonder drug which is not only preventive, promotive (of health) as well as curative in action.

KEYWORDS
Haritaki, Terminalia chebula, Ayurveda, Nature
INTRODUCTION

Haritaki is that drug of Ayurveda which acquires highest position among all the drugs. According to Acharya Charaka ‘HARITAKI PATHYANAM’ i.e., it is wholesome for body in all ways as it cleans all the channels of the body as well keeps all the three doshas balanced. It is an important Rasayana (Rejuvenating) drug. It is a moderate sized or large tree found throughout India, chiefly in deciduous forests and areas of light rainfall, but occasionally also in slightly moist forests, up to about 1500 m elevation, throughout India, flowers appear from April to August and fruits ripen from October- January. It is a part of important formulations like Triphala, Abhyarihsta etc. which are widely used in India. All the classical literature of Ayurveda covers all the aspects of this wonderful drug which need to be brought down before the research community for further exploration of its activities.

MATERIALS & METHODS

It is a conceptual study. For this study various texts of Ayurveda including Samhitas, Nighantus (lexicons) and books on medicinal plants have been consulted. Internet has been explored for recent research activities.

VERNACULAR NAMES

Sanskrit: Abhaya, Pathya, Kaytha, Shiva, Vijaya.
Asamese: Shilikha
Bengali: Haritaki
English: Myrobalan
Gujarati: Hirdo, Himaja, Pulo-harda
Hindi: Harre, Harad, Harar
Kannada: Alalekai
Kashmiri: Halela
Malayalam: Katukka
Marathi: Hirda, Haritaki, Harda, Hireda
Oriya: Harida
Punjabi: Halela, Harar
Tamil: Kdukkai
Telugu: Karaka, Karakkyaa
Urdu: Halela

CLASSIFICATION IN BRIHATTRAYI

The classification of Haritaki in Brihattrayi is given in table 1.

SYNONYMS

Abhaya, Pathya, Kaytha, Putna, Amrita, Hemvati, Avyatha, Chetaki, Shreyasi, Shiva, Vayastha, Vijaya, Jivanti, Rohini.

TYPES

According to Bhavprakash Nighantu, it is of 7 types viz. Vijaya, Rohini, Putna, Amrita, Abhaya, Jivanti and Chetaki. Chetaki is further of 2 types Shukla (of 6 angula) and Krishna (1 angula). The best among the 7 is...
Vijaya. Their habitat, shape and action are described in table 2.

**Table 1** Classification of *Terminalia chebula* in *Brihattrayi*

<table>
<thead>
<tr>
<th>SAMHITAS</th>
<th>VARG/GANA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charak Samhita</td>
<td>Virechanopaga Mahakashaya, Jwarhara Mahakashaya, Kasa Mahakashaya, Kushta Mahakashaya, Arsoghana Mahakashaya, Prajasthapana Mahakashaya,</td>
</tr>
<tr>
<td>Shusruta Samhita</td>
<td>Triphala, Amlakyadi, Parushakadi, Mustadi</td>
</tr>
<tr>
<td>Ashtang Hridaya</td>
<td>Triphala, Vachadi, Mustadi</td>
</tr>
</tbody>
</table>

**Table 2** Types of *Terminalia chebula* and their characters

<table>
<thead>
<tr>
<th>S. NO.</th>
<th>NAME</th>
<th>HABITAT</th>
<th>APPEARANCE</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Vijaya</td>
<td>Vindhaya hills</td>
<td>Alabu (long gourd)</td>
<td>All diseases</td>
</tr>
<tr>
<td>2.</td>
<td>Rohini</td>
<td>Everywhere</td>
<td>Round</td>
<td>Wounds</td>
</tr>
<tr>
<td>3.</td>
<td>Putna</td>
<td>Sindh</td>
<td>Smaller, bony</td>
<td>Prulepa (external application)</td>
</tr>
<tr>
<td>4.</td>
<td>Amrita</td>
<td>Champa</td>
<td>Fleshy</td>
<td>Sodhan (cleansing)</td>
</tr>
<tr>
<td>5.</td>
<td>Abhaya</td>
<td>Champa</td>
<td>5 lines on fruit</td>
<td>Eye disease</td>
</tr>
<tr>
<td>6.</td>
<td>Jivanti</td>
<td>Sorashtra</td>
<td>Gold coloured</td>
<td>All diseases</td>
</tr>
<tr>
<td>7.</td>
<td>Chetaki</td>
<td>Himanchala</td>
<td>3 lines on fruit</td>
<td>Purgation</td>
</tr>
</tbody>
</table>

**IDENTIFICATION OF BEST **HARITAKI** FRUIT**

Only those fruits of Haritaki are considered best to be used in medicines which have following features: new, smooth, bulky, round, heavy, sink in water and weight of 2 karsha (~20gm).

**PROPERTIES OF DIFFERENT PARTS OF **HARITAKI**

The seed kernel of Haritaki is sweet, the ligamentous/fibrous part is sour, pericarp is pungent and the seed is astringent in property.

**RITU HARITAKI**

To get Rasayana (Rejuvenating) effect of Haritaki it is indicated by Bhavmishra to use Haritaki along with a particular dravya (drug) in each particular ritu (season) which is given in table 3.

**Table 3** Ritu Haritaki

<table>
<thead>
<tr>
<th>RITU (SEASON)</th>
<th>DRAVYA TO BE USED WITH HARITAKI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varsha (Rainy)</td>
<td>Saindhavlavana (rock salt)</td>
</tr>
<tr>
<td>Sharadritu (Autumn)</td>
<td>Sharkara (sugar)</td>
</tr>
<tr>
<td>Hemanta (Winter)</td>
<td>Sunthi (Dry ginger)</td>
</tr>
<tr>
<td>Shishir (early spring)</td>
<td>Pipalli (Long pepper)</td>
</tr>
<tr>
<td>Basant (Spring)</td>
<td>Madhu (Honey)</td>
</tr>
<tr>
<td>Grishma (Summer)</td>
<td>Guda (Jaggery)</td>
</tr>
</tbody>
</table>

**CONTRAINDICATIONS**-Haritaki

should not be used in following people:

Tired due to excessive walking, weak, dryness, lean and thin, fasting, pregnant,
Pitta dominant prakrati (body constitution) and who has undergone Raktamokshana (blood letting).

PHARMACODYNAMICS

Rasa (Taste)- Panch rasa (except lavana i.e. salt)
Guna (Property)- Laghu (light), Ruksha (Dry)
Virya (Potency)- Ushna (Hot)
Vipaka (Metabolism)- Madhur (Sweet)

EFFECT ON TRIDOSHAS

Being Madhura (sweet), Tikta (Bitter) and Kashaya (Astringent) in rasa it harmonizes Pitta. By its Katu (Pungent), Tikta (Bitter) and Kashaya (Astringent) rasa it harmonizes Kapha. By its Amla (sour) and Madhura (Sweet) rasa it balances Vata. Thus it is Tridoshhar but predominantly Vatashamak (subsides aggravated Vata).

THERAPEUTIC USES

External use: Gargling by its decoction is useful in oral and throat disorders.

Nervous system: It is a brain tonic. It improves the functioning of sensory organs.

Digestive system: It is chewed in indigestion, powder is given in constipation, in Grahni it is given after being boiled and in tridoshajvikara (disease) it is given after being roasted (Bhavprakashnighantu, Haritakyadivarga).

Circulatory system: It is useful in heart diseases, gout etc.

Respiratory system: Being an expectorant it is useful in cough, Asthma etc. respiratory disorders.

Reproductive system: Haritaki is useful in leucorrhoea, spermaturia, uterine weakness etc.

Urinary system: Being diuretic it is useful in dysuria, urine retention, stone etc.

Skin: It is useful in various skin diseases like Kustha, Visrapa etc.

Temperature: It is useful in malarial and chronic fever.

FORMULATIONS


DOSE

Fruit powder: 3-6gm.

CHEMICAL CONSTITUENTS

Myrobalan fruits are an important source of tannin that varies according to geographical source. Myrobalan fruits of Chennai are very rich in tannin. The approximate value of fruits is as follows: Moisture-10%, Tannin-25-32%, Water insoluble matter- 40-
50%. It also contains glucose and sorbitol (about 3.5%)\textsuperscript{15}. Apart from tannins it also contains phenolic compounds and flavanoids\textsuperscript{16}.

**PHARMACOLOGICAL ACTIVITY**

**Antidiabetic activity**

Ethanolic extracts of *Terminalia chebula* fruits exhibited Antidiabetic activity in Alloxan induced diabetic rats (Kannan et al. 2012)\textsuperscript{17}.

**Antiplasmodial**

Antiplasmodial activity of extract of *Terminalia chebula* against *Plasmodium falciparum* was studied by Bhagvan et al (2011)\textsuperscript{18}.

**Wound healing activity**

The wound healing activity of ethanolic extracts of fruits of *Terminalia chebula* in the form of an ointment with two concentrations (5% and 10% w/w ointment of bark extract in simple ointment base) showed significant response in excision and incision made in albino rats compared to controls\textsuperscript{19}.

Tannins extracted from immature fruits of *Terminalia chebula* inhibited *Staphylococcus aureus* and *Klebsiella pneumonia* in vitro and promotes cutaneous wound healing in rats due to a powerful anti-bacterial and angiogenic activity of the extract\textsuperscript{20}.

**Antiulcerogenic activity**

Hydroalcoholic extract of *Terminalia chebula* showed reduction in lesion index and total area affected in animals pretreated at 200 and 500mg/kg body weight in comparison with control groups in the aspirin, ethanol and cold restraint stress-induced ulcer models. The *Terminalia chebula* extract increased mucus production in aspirin and ethanol- induced ulcer models and showed antisecretory activity in pylorus ligated model leading to a reduction in the gastric juice volume, free acidity and significantly increased gastric pH\textsuperscript{21}.

**Antioxidant and free radical scavenging activity**

Gall of *Terminalia chebula* was tested for antioxidative and tyrosinase inhibition activities as well as for proliferative and MMP-2 inhibition activities on early aging human skin fibroblasts to evaluate *in vitro* anti aging activity. The cold water extract of *Terminalia chebula* gall indicated the highest stimulation index (SI) on normal human fibroblast proliferation. The extract also demonstrated MMP-2 inhibition on fibroblasts 1.37 times more potent than ascorbic acid\textsuperscript{22}.
The acetone extract of *Terminalia chebula* has stronger antioxidant activity against alpha$^{23}$.

**DISCUSSION**

*Haritaki (Terminalia chebula*) is a drug of paramount importance in *Ayurveda*. It keeps all the three *doshas* in equilibrium, cleans the channels as well as nourishes all the *dhatus* (tissues) of the body. It is an effective drug in various diseases like *Agnimandya* (poor digestion), *Grahni* (Irritable bowel syndrome), *Vibandha* (Constipation), *Vishamjwara* (Malaria), *Gulma, Kamla* (Juandice), *Kasa* (Cough), *Kustha* (Skin disease), *Ashmari* (stone) etc. It is also *Rasayan* (Rejuvenating) and *Vayasthapka* (age delaying)$^{24}$. It is rich in various phytochemicals including Tannins, Anthraquinones and polyphenolic compounds. It exhibits a number of important pharmacological activities like Antidiabetic activity, Antiplasmodial, wound healing activity, Antiulcerogenic activity, Antioxidant and free radical scavenging activity.

**CONCLUSION**

*Haritaki* is a wonder drug which is not only preventive, promotive (of health) as well as curative in action. It is the high time to work on such miraculous drug when the whole world is looking at *Ayurveda* primarily because of our knowledge of medicinal plants. *Yuktigata* (judicious) use of *Haritaki* can prove a boon to medical science.
REFERENCES

2. www.ayurveda.hu>api>API-Vol-1
3. www.ayurveda.hu>api>API-Vol-1


