



Ijapc 2018

Volume 8 Issue 2

www.ijapc.com

10/3/2018

Greentree Group



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 *doshasin* equilibrium, cleans the channels as well as nourishes all the *dhatu*s (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



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Received 19/01/18 Accepted 08/02/18 Published 10/03/18



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* balanced¹. It is an important *Rasayan* (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, upto about 1500 m elevation, throughout India, flowers appear from April to August and fruits ripen from October- January². It is a part of important formulations like *Triphala*, *Abhyarhista* 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 NAMES³

Sanskrit: Abhaya, Pathya, Kaystha, 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, Karakya

Urdu: Halela

CLASSIFICATION IN BRIHATTRAYI

The classification of *Haritaki* in *Brihatrayi* is given in table 1.

SYNONYMS⁴

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

TYPES⁵

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 *Brihatrayi*

SAMHITAS	VARG/ GANA
<i>Charak Samhita</i>	<i>Virechanopaga Mahakashaya, Jwarhara Mahakashaya, Kasa Mahakashaya, Kustha Mahakashaya, Arsoghana Mahakashaya, Prajasthapana Mahakashaya,</i>
<i>Shusruta Samhita</i>	<i>Triphala, Amlakyadi, Parushakadi, Mustadi</i>
<i>Ashtang Hridaya</i>	<i>Triphala, Vachadi, Mustadi</i>

Table 2 Types of *Terminalia chebula* and their characters

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

IDENTIFICATION OF BEST HARITAKI FRUIT⁶

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 HARITAKI⁷

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

RITU HARITAKI⁸

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*

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

CONTRAINDICATIONS⁹-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).

PHARMACODYNAMICS¹⁰

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 TRIDOSHAS¹¹

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 *Tridoshar* but predominantly *Vatashamak* (subsides aggravated *Vata*).

THERAPEUTIC USES¹²

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.

FORMULATIONS¹³

<i>Abhayamodaka,</i>	<i>Abhyarisht,</i>
<i>Pathyadichurna,</i>	<i>Pathyadivati,</i>
<i>Pathyadikwatha,</i>	<i>VyaghriHaritaki,</i>
<i>AgastyaHaritaki,</i>	<i>ChitrakHaritaki,</i>
<i>DantiHaritaki,</i>	<i>DshmulaHaritaki,</i>
<i>Triphlanchurna,</i>	<i>Phaltrikadikwatha,</i>
<i>Bramharasayna, Haritakikhanda.</i>	

DOSE¹⁴

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%)¹⁵. Apart from tannins it also contains phenolic compounds and flavanoids¹⁶.

PHARMACOLOGICAL

ACTIVITY

Antidiabetic activity

Ethanollic extracts of *Terminalia chebula* fruits exhibited Antidiabetic activity in Alloxan induced diabetic rats (Kannan *et al.* 2012)¹⁷.

Antiplasmodial

Antiplasmodial activity of extract of *Terminalia chebula* against Plasmodium falciparum was studied by Bhagvan *et al* (2011)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 controls¹⁹.

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 extract²⁰.

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 pH²¹.

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 acid²².



The acetone extract of *Terminalia chebula* has stronger antioxidant activity against alpha²³.

DISCUSSION

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 *dhatu*s (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)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.



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