

## A COMPREHENSIVE STUDY ON HARIDRA (CURCUMA LONGA LINN.)

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## ABSTRACT

*Haridra (Curcuma Longa Linn.)* is one of the patent drug of india and the most valuable drug which is used by the Indians in all the ways for the rituals (in marriages & poojas); for preparing food preparation and as usual as home remedy medicine since ancient days. Till today *haridra* is considered to be the most important drug. The aim of this study is to collect and evaluate the information on haridra an important valuable medicinal plant and is mentioned in different ayurvedic treatises like *Brihadtrayee*, *Lagutrayee*, *And Nigantus*. it is a drug which is having high therapeutic value as the root is available both in dried and wet form and this is used in so many preparations and used as *Ekamuliya Prayoga* (single drug therapy) also and is having highly antimicrobial and anti-fungal and anti-bacterial activity .

**KEYWORDS:** *Haridra* , *Brihadtrayee*, *Ekamuliya Prayoga*.

## INTRODUCTION

*Haridra* is considered to be the one of the most important drug which is easily available at home and can be used as a home remedies since ancient days to today when go through the history of *haridra* from vedic period to modern era – In Vedic period; *rigveda*: in the treatment of *harima*, *haridrodana* is mentioned. Later in *Atharva Veda*: In *switra* and *palita* *Haridra* is used with *Indravaruni* and *Nili*. *Haridra* was also used externally for *Udvardana* in *Hridroga* and *Kamala*. *Kousika Sutra* delineated *Haridra* as an antidote of snake venom. *Sayana* claimed *Hridra* as *Medhya* when administered with honey and ghee. In *Brahma Vaivarta Purana* Goddess *Parvati* made a paste of *Turmeric* to cleanse her body, the same paste was used to make an idol of *Ganeseha* and infused life into it, and thus *Ganesha* was born. Later in *samhita* period *charaka samhita*<sup>[1]</sup> In *Sutrasthana* it was mentioned in, *Lekhaniya*, *kustaghna*, *kandughna*, *krimighna* *gana* in *Chikitsasthana* it is used in *prameha* *chikitsa*, *arshas* *chikitsa* etc. In *Shushruta Samhita*<sup>[2]</sup> *Shushruta* mentioned *Haridra* in *Sutrasthana* in *Haridradi* *gana*, *Mustadi* *gana*, *Sleshma* *samshamana* *varga*. Its *prayoga* in different *rogas* have been mentioned in *Chikitsasthana* and *Uttaratantra*. In *Astanga Sangraha*<sup>[3]</sup> – In *Haridraadi* *gana*, *Mustadi* *gana*, *Tiktha skandha*, *Lekhaneeya* *dravya*, *Shirovirechanopaga* *dravya*, *kustaghna* *dravya*. In *Astanga Hridaya*<sup>[4]</sup>– In *Sutrasthana*, *Haridradi*, *Mustadi*, *Tiktha skandha*, *Lekhaneeya* *dravya*, *Shirovirechanopaga*, *Kustaghna* *dravya* and *Chikitsasthana* of *Astanga hridaya*. In *kashyapa samhita*<sup>[5]</sup> – In *kalpasthana* and in *khilasthana*

*Haridra* is mentioned as an ingredient of *dhupa* & also in *chikitsa* of *kasa*, *shwasa*, *chardamala* etc. In *Sangraha Kala* Authors of *Chakradatta*, *Yoga Ratnakara*, *Rasa Ratna Samucchaya*, *Bhaishajya Ratnavali*, *Rasatarangini*<sup>[6]</sup>, etc. have mentioned this drug in their literature. When it comes to *Adhunik Kala*: *Vaidya P.V. Sharma* has explained about *Haridra* in detail. In *Nighantu Adarsha* the drug *Haridra* is mentioned with its properties & *eka moolika prayoga*. Modern botanical books like *Indian Materia Medica* by *Nadkarni* (1908), *Indian Medicinal Plants* by *Kirtikar & Basu* (1918), *The Wealth of India*, *Indigenous Drugs of India* by, *R.N.* have identified this drug as *curcuma longa* In *Dravyaguna Hastamalaka* *Vaidya Banwarilal Mishra* has mentioned *Haridra* under *Ardraka kula*. In *Dravyaguna vignana* by *Acharya Yadavaji Trikamji* has mentioned *Haridra* in *Haridradi* *varga*. In *Ayurvedic Pharmacopoeia of India* and *Ayurvedic Formulary of India* Drug *Haridra* has been mentioned. Thus *haridra* is one of the best herbal drug and important drug from vedic period to till today.

Nirukti of Synonyms<sup>[7,8]</sup>1. WûËUSiÉ : WûËUÇ WûËUíÉÇ uÉhÉrÇ  
WûÉÍqÉMüÉZrÉÇ SiÉÍiÉ AmÉxÉÉUrÉÍiÉÍiÉ |

It is an efficacious drug for Jaundice.

WûËUÇ uÉhÉrÇ SiÉÍiÉ xÉÇZÉÉâkÉrÉÍiÉ

It normalizes the complexion.

2. MüÉlcÉÍiÉ : xuÉhÉíuÉhÉÉí |

Because of its yellowish color/ golden color

3. M×üÍqÉÍiÉÉ : M×üÍqÉÍiÉÉÍiÉÍiÉ |

It is kriminashaka

4.  $\text{ÌÉzÉÉZrÉÉ} : \text{ÌÉzÉÉUeÍÉÍrÉÉÍSIÉÉqÉÍpÉurÉúÉ¾úíÉÉ} |$   
The color is as beautiful as full moon light night.
5.  $\text{ÌmÉhQûWûÉUSìÉ} : \text{ÌmÉhQûÁmÉÉ WûÉUSìÉ} (\text{ÍÉ} \text{iÉÑ SÉÁÁmÉÉ}), \text{MæurÉSâuÉxiÉÍxqÉ³ÉâuÉÉjÉâi}$   
'ÌmÉhQûpÉSìÉ'  
'ÌmÉhQûÉ' CÌiÉ cÉ mÉPùliÉ |  
The part used is rhizome which is in panda form.
6.  $\text{mÉÍiÉÉ} : \text{mçÉÍiÉuÉhÉiMùlSÉç mÉÍiÉmÉÑwmÉÉ cÉ} |$   
The color of the rhizome and the flower are yellow
7.  $\text{qÉ...úsrÉÉ} : \text{qÉ...úÍsÉMüM×üirÉâwÉÑ mÉërÉÉâerÉqÉÉÍÉÉ} |$   
Used in auspicious ceremonies
8.  $\text{rÉÉâÍwÉÍimÉërÉÉ} : \text{mÉÉâÍwÉÍimÉërÉÉ x§ÉÍhÉÉç} \text{ÌmÉërÉÉ},$   
Liked by women
9.  $\text{qÉâWûÍblÉ} : \text{mÉÉqÉâWûUÉâaÉâ} \text{ÌuÉzÉâwÉâhÉ} \text{mÉézÉxiÉÉ} |$   
 $\text{qÉâWûbÉÉliÉÍÍ CÌiÉ} \text{ÌIÉbÉhOÒûzÉâwÉÈ} |$   
Best among drugs used in treatment of prameha
10.  $\text{UleÉÍIÉ} : \text{UleÉrÉliÉ} \text{uÉx§ÉÉÍSIÉÉ},$   
 $\text{uÉx§ÉÉÍSUleÉÍÉâ} \text{mÉërÉÑ£âüirÉjÉrÈ} |$   
This is used as coloring agent / it colors the cloths
11.  $\text{sÉÉâqÉxÉqÉÓÍsÉMüÉ} : \text{sÉÉâqÉzÉç} \text{qÉÓsÉqÉxrÉÉÉ} |$   
The rhizomes having root hairs
12.  $\text{uÉUuÉÍhÉiÍIÉ} : \text{uÉUÈ} \text{Éâ,Éâ} \text{uÉhÉÉâi} \text{AxrÉÉÈ} |$   
Color is good / appreciable.

#### Vernacular names

Arabi Aurukesafur, kurkum, zarsud; Persian Darzardi; Burmese Hasanwen, Sanac, Tanun; Hebrew Ilocano; French Curcuma; Gujarati Haladar; Hindi Bimb, Kanturi, kundaru, kanduri, Tirkol; English Indian saffron, turmeric; Kannada Arisina; Kokani Halad,ollodi; Marathi Haldi; Panjabi Haldar, halija; Sanskrit *Haridra*; Telugu Pasupu; Urdu Haldi; Tamil Manzal; Malayam Mannel, Marinalu; German kurkuma.<sup>[9,10,11]</sup>

#### Taxonomical classification<sup>[12]</sup>

|                 |                        |
|-----------------|------------------------|
| Kingdom         | - Plantae              |
| Division        | - Angiospermae         |
| Order           | - Zingiberales         |
| Class           | - Liliopsida           |
| Family          | - Scitaminae           |
| Subfamily       | - Zingiberoidea        |
| Tribe           | - Zingibereae          |
| Scientific name | - <i>Curcuma longa</i> |
| Genus           | - <i>Curcuma</i>       |
| Species         | - <i>Longa</i>         |

#### Varieties of *Haridra*<sup>[13]</sup>

- *Haridra* - *Curcuma longa* Linn.
- *DaruHaridra* - *Berberis aristata* Dc
- *Amragandhi Haridra* - *Curcuma amada* Roxb
- *Vana Haridra* - *Curcuma aromaticum* Salisb
- *Kali Haridra* - *Curcuma caesia* Roxb.
- *Zedoary* - *Curcuma zedoaria* Rosc.

#### Rasa panchaka<sup>[14]</sup>

- *Rasa* - *Tikta Katu*
- *Guna* - *Ruksha Laghu*
- *Vipaka* - *Katu*
- *Virya* - *Usna*
- *Dosa karma* - *Kapha Pitta Samaka, Pittahara Due To Tikta Rasa And Kapha Nasaka, Varnya, Twacya, Pramehahara, Sothahara, Vranahara, Kandughna, Visaghna, Krimighna, Ruci Kara, Sitapittahara.*

#### Distribution<sup>[15]</sup>

A genus of about 70 species of rhizomatous herbs distributed in India, Siam, Malay Archipelago and N. Australia. About 30 species occur in India of which a few are of economic importance.

A genus of rhizomatous herbs distributed mainly in the Indo Malaysian region. About 18 species occur in India of which a few are important spice plants including the Turmeric and Zedoary.

The plant is a native of Southern Asia (probably India) and is cultivated extensively throughout the warmer parts of the world. It is grown on a large scale in India, China and East Indies. It is cultivated in almost all the States in India, particularly in Madras, Bengal and Bombay. The main regions of cultivation in Madras are Guntur, Cuddapah, Krishna, Kerala. In Maharashtra, the chief area of cultivation being Satara district.

#### Morphology<sup>[16]</sup>

*Curcuma longa* is a perennial herb, with a short stem, tufted leaf and the rhizomes, which are short and thick and from root to.

**Leaf:** leaves about 2 feet long, deeply veined leaves that project upward from stems that grow from the base of the plant. The leaf color is deep green and the surface is glossy and smooths.

**Flowers:** The flowers range from white to light yellow and form a tall spike.

**Rhizome:** The rhizomes, specialized underground stems that are root like in structure have a brown surface and bright orange or yellow interior flesh and after cutting, it is in curved cylindrical or oblong tubers 2 or 3 inches in length, and an inch in diameter, pointed or tapering at one end, yellowish externally, with transverse, parallel rings internally deep orange or reddish brown, marked with shining points, dense, solid, short, granular fracture, forming a lemon yellow powder.

#### CHEMICAL CONSTITUENTS

The active constituents of turmeric are the flavonoid curcumin (diferuloylmethane) and various volatile oils, include ng tumerone, atlantone, and zingiberone. Other constituents include sugars, proteins, and resins. The best-researched active constituent is curcumin, which comprises 0.3–5.4 percent of raw turmeric.

**ADULTERANT AND SUBSTITUTE**

*Curcuma longa* Linn. is rarely adulterated or substituted. However fingerprint profiles using TLC and GLC can distinguish the drug from other species of *Curcuma longa* is a substitute for Daru *Haridra* (*Berberis aristata*).

**EKMULIKA PRAयोग**

- In disorders due to change of place (asatmyajanya or allergic), one should Take *Haridra* pounded with sour gruel. (vai. M 1/ 16)
- In anemia, One should take *Haridra* mixed with triphala, ghee and honey.(Su.U.44/17)
- *Haridra*, gairika and amalaka used as anjana alleviate jaundice.(A H Chi 16/44)
- In thirst caused by kapha, one should take water processed with *Haridra* and mixed with honey and sugar.(A.S.Chi 8/81)
- Prameha - *Haridra* powder mixed with honey should be taken with the juice of Amalaka.(C.Chi6/26, Su.chi 11/8, A.S.Chi 14/5, A H Chi 12/5)
- Decoction of *Haridra* and Daru*Haridra* is specific remedy of Pistameha. One crosses over the sinful disease(Kushta) by taking *Haridra* with the cow's urine for a month.(Bhela samhita.Chi 6/56)
- Sleepada *Haridra* mixed with Jaggaery should be taken with cow urine. It destroys Filaria & also ring worm.(Vru,M42/24, Bha P Chi 45/14)
- Vatarakta - Decoction of *Haridra* & Guduchi mixed with honey should be taken in Vatarakta predominant in kapha.(Bh. P Chi 29/79)
- By taking *Haridra* & Jaggery in equal parts with sour gruels ashmari passes away. (Vangasena Ash.45)
- Cow's urine mixed with paste of *Haridra* should be taken, it destroys Scabies & Eczema (Vru.M 41/41)
- Ghee should be cooked separately with the paste of *Haridra*, Nakuli & Jati. It is efficacious in Poisoning.(A.S.U 40/127)
- Intake of ghee mixed with *Haridra*, Rocksalt & Honey is useful in poisoning by root or arrow. (Vru.M 68/18)
- Prameha- Fresh Rhizome juice with honey should be taken.(priya nighantu)
- In prameha Amalaki Swarasa and madhu mixed with *Haridra* churna should be consumed.(cha chi 6)
- *Haridra* churna and gudayukta kanji is effective in sharkara meha(vangasena) *Haridra* churna with Gomutra (shodala nighantu)
- In Masurika *Haridra* is trichurated with cincha patra and is given with cold water (shodala nighantu)

**CONCLUSION**

*Haridra* is one of the drug which is easily available in market and prepared easily at home for home remedies. This *haridra* is not only important as medicine but also in many rituals like marriages and in pooja *haridra* has its

own importance. *Haridra* has been used in Asia for thousands of years. It was first used as a dye, and then later for its medicinal properties.<sup>[18]</sup>

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