



## ANTI-AGEING EFFECT OF AMALAKI (*EMBLICA OFFICINALIS GAERTN*) IN PREMATURE AGEING.

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### ABSTRACT

A review research work prepared regarding the anti-ageing effect of Amalaki i.e. *Embllica Officinalis Gaertn*, which is mentioned here. The study demonstrates that the Amalaki possesses various pharmacological properties including anti-ageing. According to Ayurveda, it has Vayasthapana, Rasayana, Tridoshghna, Deepana, Shophaghna, Raktpittaghna, Pramehghna, Arshghna, Vrushya, Chakshushya, Hrudy, Jwarghna etc properties; whereas according to modern view it has Anticancer, Anti-inflammatory, Antimicrobial, Immunomodulatory, Antioxidant, Hepatoprotective, Gastroprotective etc. properties. Acharya Charaka has mentioned Amalaki as Vayasthapana Rasayana, so it can be said that it is having an anti-ageing effect and used in premature ageing, which can be correlated with the Ayurvedic term Akalaja Jara.

**KEYWORDS:** Anti-ageing, Amalaki, *Embllica Officinalis Gaertn*, premature ageing.

### INTRODUCTION

Amalaki is a fruit of *Phyllanthus Emblica* tree.<sup>[1]</sup> It is also referred as *Embllica Officinalis*.<sup>[2]</sup> Amalaki is one of the most commonly used herbal drug by Ayurvedic physicians as well as by the people in various conditions from simple problem hyper acidity to life threatening disorders like diabetes, cancer etc. It is used as a single drug or used in the combinations like *Triphala*,<sup>[3]</sup> *Chyavanprasa*<sup>[4]</sup> etc. Amalaki is very important drug for Ayurveda management, for that reason it is referred widely across the Ayurvedic literature.

#### Amalaki<sup>[5]</sup>

Latin Name: *Embllica Officinalis Gaertn*

English: *Embllica Myrobalan*

Sanskrit: Amalaki

Hindi: Amla

Family: Euphorbiaceae

Varga: Haritakyadi<sup>[6]</sup>

Parts used: Fruit (Fala)

Ayurveda Properties:

- Pradhana Rasa: Amla
- Anya Rasa: Madhura, Kashaya, Tikta, Katu
- Guna: Guru, Ruksha, Sheeta
- Virya: Sheeta
- Vipaka: Madhura
- Doshaghna: Tridoshashamaka
- Prabhava: Rasayana<sup>[7]</sup>

**Chemical Composition:** Vitamin-C, Carotene, Nicotinic acid, Mucin, Indoleacetic acid, Alkaloids, Tannin, Polyphenolic compounds, Phyllantidine, Phyllantine, Riboflavin, D-glucose, D-fructose, Myoinositol.<sup>[8]</sup>

**Pharmacological Activities:** Spasmodic, mild CNS depressant, Hypolipidaemic, Anti-atherosclerotic, Anti-mutagenic, Anti-microbial, Anti-oxidant, Immunomodulatory, Anti-fungal, Anti-tumour, Anti-inflammatory, Anti bacterial, Anti-ulcer, Adrenergic Potentiating, HIV-1 reverse transcriptase inhibitor action.<sup>[9]</sup>

#### Properties and Uses of Amalaki in Samhita/ Nighantu

- Charaka Samhita: Raktpittahara,<sup>[10]</sup> Pradarahara,<sup>[11]</sup> Gulmhara, Udarahara, Jwarahara,<sup>[12]</sup> Panduhara, Atisahara, Pramehahara,<sup>[13]</sup> Kamalaraghara, Krimihara, Rasayana,<sup>[14]</sup> Vayasthapana.<sup>[15]</sup>
- Sushruta Samhita: Raktpithara, Chakshushya, Vataraktahara<sup>[16]</sup> Panduhara<sup>[17]</sup> Pramehagna,<sup>[18]</sup> Vrushya.<sup>[19]</sup>
- Bhavprakash Nighantu: Vrushya Raktpitthara, Rasayana, Pramehara.<sup>[20]</sup>
- Dhanvantari Nighantu: Vrushya, Vayasthapana, Tridosahara.<sup>[21]</sup>

#### Premature ageing

The desire of living is one of the basic instinct, which is common across the living organism on this planet.

Among the all living organisms, man is certainly the most advanced one. As it is stepping forward in all the manners and trying to develop new techniques and machines for the betterment and ease of life as far as possible. But the continuous improvement in the life expectancy with technological advancement, rapid urbanization, increasing competition in every field of life etc., has changed our lifestyle, food habits and psychological status significantly, which leads to prematurely aged society. As per the modern criteria, the onset of senile characteristics before the old age, i.e. as early as 40 years age is premature ageing.<sup>[22]</sup>

#### The Ayurvedic concept on premature ageing

In Ayurveda ageing can be termed as *Jara*,<sup>[23]</sup> which is described of two types, one is *Kalaja* and another is *Akalaja*.<sup>[24]</sup> *Kalaja Jara* is a *Swabhavika Vyadhi* or natural phenomenon,<sup>[25]</sup> which stems from inherited potential. *Akalaja Jara* or premature ageing is an appearance of sign and symptoms of *Jara* before its natural time,<sup>[26]</sup> which may be triggered due to physical and mental stress. *Kalaja Jara* is irreversible,<sup>[27]</sup> whereas *Akalaja Jara* is somewhat reversible<sup>[28]</sup> by rejuvenating *Rasayana* therapy.<sup>[29]</sup>

#### Need of Ayurveda

There isn't any remedy of the premature ageing in conventional medical health science, except some vitamin and nutritive food supplement therapies, which are neither promising nor satisfactory. While Ayurveda health science has a specialized branch to manage the age and its related problem that is known as *Rasayana*. This way, Ayurveda can accomplish the need of the management of premature ageing with its rejuvenating therapy.

#### Selection of *Rasayana* for the management of premature ageing

*Rasayana* is one of the important branch of *Astanga Ayurveda*,<sup>[30]</sup> which deals to promote and preserve the health of a healthy person as well as to treat the diseases. So it is the solution of undesired health problems causing shortening of life span. The *Rasayana* drugs are used as a single drug or in the formulation of many drugs, having properties like *Balya*, *Vrishya*, *Medhya*, *Ojovardhaka* and *Vayasthapana* etc.<sup>[31]</sup> along with proven pharmacological efficacy like immuno-modulator, adaptogenic, antioxidant etc.<sup>[32]</sup>

#### AIMS

- To study anti-ageing effect of *Amalaki* (*Emblica Officinalis Gaertn*).

#### OBJECTS

- To understand the premature ageing from Ayurveda as well as modern point of view.
- To understand the pharmacological property of *Amalaki* (*Emblica Officinalis Gaertn*) in the context of premature ageing.

#### CONCEPTUAL MATERIAL

For the literary work, the references are gathered from various sources which include classical as well as contemporary texts, article published in international or national journals, numerous magazines. Some of the data obtained from the internet, also.

#### DISCUSSION

##### Anti-ageing effect of *Rasayana*

*Rasayana* improves the *Dhatus* qualitatively and quantitatively, which is termed as *Dhatu Sarata*<sup>[33]</sup> Thereby it increases *Ojasa*<sup>[34]</sup> and enhances *vyadhikshamatva*,<sup>[35]</sup> leading to reduces wear and tear of the body by ill conditions. *Rasayana* therapy enhances the anabolic activities, while it reduces the catabolic activities. Further *Rasayana* drugs correct the Agni, which is responsible for *Ayu*, *Bala*, *Varna*, *Ojasa*, etc.<sup>[36]</sup> Thus helps to delays the ageing process.

##### *Amalaki* as a *Vayasthapana Rasayana*

*Amalaki* is one of the foremost drug recommended in Ayurvedic classics for the *Rasayana* having above said properties. *Acharya Charaka* has described it as *Vayasthapana Rasayana*,<sup>[37]</sup> which means that *Amalaki* is having that type of property which has efficacy to completely pause or slow the process of ageing at some level. Considering the pharmacological properties, it can be said that *Amalaki* is the potent drug to reverse the pathophysiology and relieve the symptoms of premature ageing.

#### CONCLUSION

On the basis of this review article, a conclusion can be made that *Amalaki* (*Emblica Officinalis Gaertn*) is having anti-ageing effect in premature ageing.

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