

AYURVEDIC PROPERTIES OF SOME HERBS USED IN RASAYAN SHASHTRA

S. K. KHODRE*¹, P. ACHARYA¹, S. N. TIWARI¹, P. K. MEHAR¹, A. VIDYARTHI²

¹Govt. Ayurvedic College, Rewa, M.P., India.

²Govt. Ayurvedic College, Jabalpur, M.P., India.

Corresponding author's Email: surajkhodre.2011@gmail.com

ABSTRACT

The Rasayan shashtra of ayurveda used to maintaining strength of organs, enhanced intelligence, aphrodisiac prowess, improved strength and vitality of cell. Presently considerable research is being carried out on various Rasayan Products and the herbs to screen them for various therapeutic benefits. Many herbs are typically used in rasayan having their own therapeutics importance. Many products are available in this regards and still lot of study need to be carried out on this subject to explore individuality of each and every herbs used in rasayan; considering this fact here we are describing the ayurvedic properties of some herbs used in rasayan shashtra.

Keywords: Rasayan, therapeutic benefits, ayurvedic properties.

INTRODUCTION

Rasayana is one of the eight clinical specialities of classical Ayurveda. It appears to have been practiced in ancient times as an important speciality aiming at rejuvenation and geriatric care. Rasayana (Rasa + Ayana) refers to nutrition and its transportation in body. Such a state of improved nutrition is claimed to lead to a series of secondary attributes like prevention of ageing, provide immunity against diseases, mental competence, increased vitality and luster of the body.

There are many Ayurvedic classical rasayan formulations having good potency to provide immunity and strength may contains herbs like Guduchi (*Tinospora cordifolia* Willd.) Gokshur (*Tribulus terrestris* Linn.) and Amalaki (*Emblica officinalis* Gaertn.), etc. Rasayan formulation may be prepared as per the general method describe in Ayurvedic Formulary of India. Each an individual ingredients of rasayan may have their own activities. Rasayan herbs use for the treatment of autoimmune disorder, for enhancing memory and as a rejuvenator, etc. this article describes some useful informations regarding the herbs used in traditional ayurvedic rasayan. [1-3]

GUDUCHI OR GILOYA

It is considered one of the best *Rasayana* and is unusual in its potent versatility. Recently lot of works have been carried out on this herbs [4]

Guduchi, as it is most commonly called, has been described as “one which protects the body”. The Sanskrit and Hindi name *Amrita* is derived from ancient Hindu scriptures where *Amrita* was used to bring the dead back to life and keep gods from growing ill and old.

Common names:

Marathi : *Gulvel*

Hindi : *Giloe, Gurcha*

Assamese : *Siddhilata, Amaralata*

Bengali : *Gulantha*

Gujarati : *Galac, Garo*

Kannada : *Amrutaballi*

Kashmiri : *Amrita, Gilo*

Malayalam : *Chittamrutu*

Oriya : *Guluchi*

Punjabi : *Gilo*

Tamil : *Seendal, Seendilkodi*

Telugu : *Thippateega*

Urdu : *Gil*

Ayurvedic Properties:

Rasa : Tikta, Katu

Guna : Laghu, Snigdha

Veerya : Ushna

Vipaka : Madhura

Prabhava : Tridosahara



Figure 1. *Tinospora Cordifolia*

GENERAL PHARMACOLOGICAL ACTIVITIES

Anthelmethic (In intestinal parasites): *Guduchi* has anthelmethic properties. Investigations have reported that regular use of *Guduchi* provides relief from intestinal problems.

Anti inflammatory: *Tinos-pora cordifolia* is very helpful in conditions like arthritis, gout, osteoarthritis etc where joint pain is a common symptom. It helps to reduce pain and swelling of joints. *Giloy* also helps to rejuvenate joints and increases their mobility.

Anti pyretic: *Guduchi* also control fever. Amciently it's being served as a antipyretic herbs. This herb helps to bring down the body temperature when used along with other antipyretics.

Chronic cough: *Giloy* helps to reduce chronic cough. It provides expectorant effect. It enhances lungs capacity and and improve nasal congestion.

Aphrodisiac: *Guduchi* is a very good *Ra-sayana* (adaptogen) and *Vajikara* (aphrodisiac) herb. Its regular use helps to detoxify male reproductive system and rejuvenate it. Due to its adaptogenic and aphrodisiac properties *Giloy* helps to increase sperm count, sperm motility and erection time.

Brain Tonic: *Guduchi* also act as an brain tonic by increasing mind powers and memory.

Immunity booster: *Guduchi* is a known immunity booster. It expels toxins from body and rejuvenates it at tissue level by boosting their immunity to diseases. *Guduchi* helps to increase number of white blood cells. Regular use of *Giloy* helps to resist diseases like common cold, cough, fever, leprosy, jaundice, arthritis, etc. [5-6]

CHITRAK (*Plumbago zeylinica*)

Chitrak consists of dried mature root of *Plumbago zeylanica* Linn. (Fam. *Plumbaginaceae*), a large perennial subscandent shrub, found throughout India in wild state and occasionally cultivated in gardens.

Name:

English : Lead war

Sanskrit : Agni, Vahni, Krishanu, Huashaa, Dahana, Hutabhuk

Bengali : Chita

Gujrati : Chitrakmula

Hindi : Chira, Chitra, Chitrak

Kannada : Chitramula, Vahni

Scientific classification:

Kingdom : Plantae

Division : Magnoliophyta

Class : Magnoliopsida

Order : Ranunculales

Family : Plumbaginaceae

Genus : Plumbago



Figure 2. *Plumbago zeylanica*

GENERAL PHARMACOLOGICAL ACTIVITIES

Anti oxidant activity

Plumbago zeylanica having useful antioxidant effects. Plants were found to be effective against the many antioxidant models. Plants extracts also significantly inhibited lipid peroxidation induced by cumene hydroperoxide, ascorbate-Fe (2⁺) and peroxy-nitrite and contained high amounts of polyphenols and flavonoids. New flavonoid 2-(2, 4-Dihydroxy-phenyl)-3, 6, 8- trihydroxy-chromen-4-one were also isolated from the roots of *Plumbago zeylanica* which might be responsible for antioxidant activity the plant roots extract revealed significant antioxidant activity as compared to standard flavonoid (quercetin).

Anti Cancer

Plant significantly suppressed growth of tumor cell lines. Plumbagin also suppressed the constitutive NF-kappaB activation in certain tumor cells. The suppression of NF-kappaB activation correlated with sequential inhibition of the tumornecrosis factor (TNF)-induced activation of IkappaBalpha kinase. Plumbagin also suppressed the direct binding of nuclear p65 and recombinant p65 to the DNA, and this binding was reversed by dithiothreitol both *in vitro* and *in vivo*. The bioassay-guided fractionation of the dichloromethane extract of aerial parts of *Plumbago zeylanica* led to the isolation of compound showed cytotoxic activity against MCF7 and Bowes cancer cell lines.

Anti Allergy

The antiallergic properties of the ethanol extract from *Plumbago zeylanica* stems (EPZ) were also investigated. The extract inhibited systemic anaphylactic and it also reduced histamine release and markedly increased intracellular cAMP contents; which overall provide relief from allergy.

Anti-Cholesterol

Plumbago zeylanica reduced serum cholesterol level. It lowered cholesterol/phospholipid ratio and elevates the decreased HDL-Chol significantly. Plumbagin treatment prevented the accumulation of cholesterol and triglycerides in liver and aorta and regressed atheromatous plaques of thoracic and abdominal aorta.

Anti-Inflammatoty Activity

The plant significantly reduced inflammation plant significantly suppressed inflammatory mediators, including histamine, serotonin, bradykinin, and prostaglandin. It also inhibited the expression of the nitric-oxide synthase and cyclooxygenase II.

Memory

Plumbago zeylanica improve learning and memory. The plant shows promising memory enhancing effect. Furthermore, it also significantly reversed the amnesia induced by scopolamine. The reversal of scopolamineinduced amnesia may be due to facilitation of cholinergic transmission in mice brain. Antioxidant, hypolipidaemic and antiatherosclerotic properties of *P. zeylanica* may be contributing favourably to memory enhancing effect [7].

SHILAJIT

A number of old ayurvedic texts have mentioned tremendous and a variety of uses of shilajit rasayana as a potential rejuvenator and immunomodulator. Shilajit is a Rasayana of traditional origin, which is a blackish-brown exudation of variable consistency exuding from layers of rocks in many mountain ranges. Shilajit has been used as a folk medicine for general physical strengthening, anti-aging, blood sugar stabilization, urinary tract rejuvenation, enhanced brain functioning potency, kidney rejuvenation, immune system strengthening, arthritis, hypertension etc. There are four different varieties of shilajit namely savrana, rajat, tamra and lauha shilajit. Shilajit contains two classes of organic compounds, namely: Humic substances, Non-humic organic metabolites. Humic substances are the major organic constituents of Shilajit present in an amount of about 80-85%. The humic substances can be further divided into three fractions; Fulvic acids, Humic acids and Humins.



Figure 3. Shilajeet

GENERAL PHARMACOLOGICAL ACTIVITIES

Anti-inflammatory and Analgesic activity

Orally administered Shilajit induced significant anti-inflammatory activity against carrageenan induced pedal oedema. Shilajit was also found to have analgesic activity; the effect was significant hence traditionally used to cure fever.

Immunomodulatory

Shilajit and its corresponding combined fractions, acted essentially as cell growth factors in both normal and tumour cells by maintaining membrane integrity. Thus, Ayurveda rasayan, Shilajit would be validated as currently available efficacious immunomodulator. It was found that the white blood cell activity was increased by shilajit extract. The observed activity increased as the dose of shilajit extract and time of exposure was increased.

Anti-ulcer

Shilajit pretreatment orally reduced ulcer index in immobilization and aspirin induced gastric ulcers. In duodenal ulcers also, Shilajit pretreatment significantly reduced the incidence of ulcers induced by cysteamine & histamine.

Spermatogenic and ovogenic effects

The administration of Shilajit remarkable increase in the number of sperm of the epididymus and in the number of ovulation.

Antifungal activity

Methanolic extract of Shilajit having excellent inhibitory activity against *Alternaria cajani*.

Protection of mast cells from degranulation

Shilajit and different combination of its constituents provided statistically significant protection to antigen-induced degranulation of sensitized mast cells and prevent mast cell disruption.

Free radical scavenging and antioxidant effect

Shilajit shown free radical scavenging & antioxidant effect. The antioxidant effects were concentration dependent. Higher concentrations of processed shilajit provided greater free radical protection.

Anti-lipid-peroxidative Activity

It inhibited lipid peroxidation induced by cumene hydroperoxide in a dose dependent reduced glutathione content and inhibited ongoing lipid peroxidation significantly [8].

REFERENCES:

1. Charak Samhita, Chaukhambha Orientalia Varanasi, Section 6 Chikitsasthanam, 1998: Shloka 7-8.
2. Charak Samhita, Chaukhambha Orientalia Varanasi, Section 6 Chikitsasthanam, 1998: Shloka 16-24.
3. Ramnath V, Rekha P. S. Indian J Pharmacol 2009; 41(3): 115-119.
4. Sharma P. V., Dravyaguna V., Chaukhambha Bharati Academy, Varanasi, 2011; 2: 761-63.
5. Krishnachandra C., Bhavapra-Kasha N., Chaukhambha Bharati Academy, Varanasi, 2006; 269-71.
6. Indradev T., Rajanighantu of Pandit Narahari, Chaukhambha Krishna-Das Academy, Varanasi, 29-31.
7. Sanjana D. and Mishra R. N., *Plumbago zeylinica* Linn. (Chitrak) - Review as Rasayan (Rejuvenator / Antiaging), International Journal of Research in Pharmaceutical and Biomedical Sciences, 2012; 3 (1): 250-267.
8. Mittal P., Kaushik D., Gupta V., Bansal P., Khokra S, Therapeutic Potentials of “*Shilajit Rasayana*”-A Review, International Journal of Pharmaceutical and Clinical Research 2009; 1(2): 47-49.