



A REVIEW ARTICLE ON ASPARAGUS RACEMOSUS (SHATAVARI)

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ABSTRACT

Asparagus Racemosus (Shatavari) is a useful traditional medicinal plant, found to be grown throughout the tropical and subtropical parts of India. Today it is a widespread belief on the percentage of the general public that natural substances are inherently superior to manmade substances and have run a mainstream role in the wellness maintenance system for the prevention of diseases. The major bioactive constituents which impart the medicinal value of the herb are a group of steroidal saponins, sarsasapogenins, flavonoids, kaempferol, quercetin, rutin and polyphenols. The tuberous roots of this herbaceous plant are widely applied in the pharmaceutical as well as on biotechnological scale, in preparation of various herbal preparations because it possesses outstanding potential, and defence system. It is used in almost 67 Ayurvedic preparations and commonly referred as 'Rasayana' in Ayurveda due to its medicinal uses. This review deals with the A. racemosus, and its bioactive constituents that impart medicinal value to the herb.

KEYWORDS: Asparagus Racemosus (Shatavari), sarsasapogenins, flavonoids, kaempferol.

INTRODUCTION

Asparagus racemosus is an important medicinal plant of tropical and subtropical India. Its medicinal use has been accounted in the Indian and British Pharmacopoeias and in indigenous systems of medicine. The genus Asparagus racemosus included about 300 species around the globe. The genus is thought to be medically important because of the presence of steroid saponins and sapogenins in various parts of the plant. Out of the 22 species of Asparagus recorded in India: Asparagus racemosus is the single most commonly used in traditional medicine. Use of Asparagus racemosus was mentioned in the ancient literature of Ayurveda. It is used to rectify the gynecological problems like irregularities in menstrual cycle and sexual dysfunction. Even till today the containing Asparagus racemosus are used to adjust the menstrual irregularities by Ayurvedic practitioner many formulations containing Asparagus racemosus are presently available in the market place for work. Therapeutic usage of the Asparagus is due to the phytoestrogenic components present in it.

Vernacular Names

English – Wild Asparagus

Hindi – Shatavari

Bengal – Shatamuli

Tamil – Shatavali

Telugu – Satavari, Collagad

Synonyms

Shatvedi, Sahseravedi.

Scientific Classification

Kingdom – Plantae

Division – Angiosperms

Class – Monocots

Order – Asparagales

Family – Asparagaceae

Genus – Asparagus

Species – Asparagus Racemosus

Chemical Composition

Quercetin, Kaempferol, Rutin, Polyphenols, Steroids, Saponins, Phytoestrogen, flavanoids, Sarsasapogenin, Glycosides, Spirostanolic and firostanolic saponins and sapogenin.

Pharmacological Activities

- Anticancer Activity
- Antidysentric Activity
- Anti bacterial Activity
- Anti-ulcer Activity
- Anti-oxidant Activity
- Anti-abortifacient Activity
- Anti-coagulant Activity
- Anti-Oxytoxic Spasmodic Activity
- Hypo Glycomic

- Anti-fungal activity

Reported Phytoconstituents

Recently the racemosides the saponin content of *Asparagus Racemosus* roots revised the structures of two major saponins of this plant.

A limited number of steroidal saponins have been reported previously from the roots of this plant Glycorides of quercitin, Rutin, hyperoside and diosgenin, sitosterol and two spirostanolic and furostanolic saponins, asparagmine A and disaccharide in roots are reported.

Propagation & Cultivation: The plants can be successfully grown in variety of soil, but it prefers sandy well drained soil. They can be propagated by seeds & divisions of Rhizomes seedlings should be planted preferably on ridges, 60 in to 60cm a part. Application of 12 tons per hectare increases the yield of Roots considerably: Shatavari can also be propagated by rhoot tip culture on MS medium supplemented with NAA (1.0mg/l) + km/0.5mg/l).

Medicinal Uses

- Diuretic
- Anti Spasmodic
- Demulcent
- Galactagogue
- Infertility
- Dysmentrhoea
- Dyspepsia
- Diabetes
- Rejuvenator

Formulations

- Shatavari Kalpa
- Eranda Paka
- Puga Khanda
- Bhrihat Chagaldya ghrita
- Vishnu Taila
- Shatavari Panaka
- Narayan Taila
- Shatavari Modaka
- Shavaryadi Ghrta
- Brihat Ashwagandha Ghrita

REFERENCES

1. Kirtikar, Basu. Indian medicinal plants. Dehradun, India: Bishen Singh Mahendra Pal Singh, 1985.
2. Bopana N and Saxena S: *Asparagus racemosus*-Ethnopharmacological evaluation and conservation needs. J Ethnopharmacol, 2007; 110: 1-15.
3. Goyal R, Singh Jand Lal H: *Asparagus racemosus*--an update. Indian J Med Sci., 2003; 57: 408-414.
4. Chawla A, Chawla P and Mangalesh R.: *Asparagus racemosus* (Wild): Biological Activities & its Active

- Principles. Indo-Global J Pharm Sci., 2011; 2: 113-120.
5. Gomase V and Sherkhane A: Isolation, structure elucidation and biotransformation studies on secondary metabolites from *Asparagus racemosus*. Int J Microbiol Res., 2010; 2: 07-09.
6. Venkataramaiah H: Double-blind comparative clinical trial of Abana and Simvastatin in Hyperlipidaemia. Insertion in Stroke Feb-Mar, 2002.
7. Sahu M, Gupta S and Srivastava P: Effect of Renalka syrup in Urinary Tract Infection. Indian Pract, 2002; 55: 101-106.
8. Dartsch PC: The Potential of Asparagus-P® to Inactivate Reactive Oxygen Radicals. Phytother Res., 2008; 22: 217-222.
9. Sharma M, Sharma A and Kumar A: Vital medicine *Asparagus racemosus* wild. Curr Trends Biotechnol Pharm, 2012; 6: 210-221.
10. Hussain A, Ahmad MP, Wahab S, Sarfaraj Hussain M and Ali M: A Review on Pharmacological and Phytochemical Profile of *Asparagus racemosus* Wild. Pharmacologyonline, 2011; 3: 1353-1364.