



## A Review on *Asparagus Racemosus* (Shatavari)

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### ABSTRACT:

*Asparagus racemosus* (Shatavari), an important medicinal plant with a rich history in traditional healing systems, has gained increasing attention in modern pharmacology and phytochemistry research. Phytochemical investigations have revealed the presence of various bioactive compounds, including steroidal saponins, alkaloids, flavonoids, and essential oils. Numerous pharmacological effects, such as antimicrobial, anti-inflammatory, diuretic, skin related problems, antitussive, fertility and insecticidal qualities, are exhibited by its extracts. In Ayurveda, the root has traditionally been used as a tonic to increase fertility and minimize menopausal symptoms. Because steroidal saponins and saponins are found in different areas of the plant, the *Asparagus* genus is thought to be important for medicine. There are around 300 species of asparagus known to exist worldwide, spanning both hemispheres, temperate regions, and tropical countries. *A. officinalis*, *A. sprengeri*, and *A. acutifolius* are a few species that are native to Europe. It is said that *A. officinalis* is a widely consumed vegetable around the world.

**KEYWORDS:** Alkaloids, anti-inflammatory actions, antimicrobial, antioxidant, fertility, flavonoids, saponins, skin related problems.

### INTRODUCTION:



*Asparagus racemosus*, colloquially known as Shatavari. It is a much-branched, spinous under shrub found growing wild in tropical and sub-tropical parts of India. Shatavari is a woody climber growing to 1-2 m length. The leaves are like pine-needles, small and uniform. The inflorescence has tiny white flowers, in small spikes and the roots are finger-like and clustered<sup>[1]</sup>.

It was considered "A FEMALE TONIC" due to this ability in a number of research studies Shatavari is translated as "who possesses a hundred husbands or acceptable to many" or "100 spouses" alluding to its traditional use in promoting female reproductive health, fertility, and vitality. However, the therapeutic spectrum of Shatavari extends far beyond its reproductive health benefits<sup>[2]</sup>.

This review embarks on a journey to unravel the intricate story of *Asparagus racemosus*, delving into its phytochemistry and pharmacology. Within its roots and aerial parts, a symphony of bioactive compounds is concealed, each contributing to the plant's remarkable pharmacological profile<sup>[3]</sup>. Among the notable constituents are saponins, alkaloids, flavonoids, steroidal glycosides, and other secondary metabolites. The intriguing interplay between these compounds gives rise to a range of medicinal properties that have earned Shatavari its reputation as an adaptogen, an immunomodulator, an anti-inflammatory agent, an antioxidant, and a stress-alleviating tonic<sup>[4]</sup>.

It has been revered for its role in supporting female reproductive health, including menstruation, fertility, and menopause. Beyond this, it has found application in the management of skin related problems, gastrointestinal disorders, stress-related conditions, and even as a general health tonic. Shatavari is used in Ayurvedic formulations for digestive discomfort, indigestion, amoebiasis and piles. In females it is indicated in habitual abortions, weakness of uterus, excessive bleeding during menstruation<sup>[4-5]</sup>.

In Ayurvedic system of medicine Shatavari is indicated as brain tonic, epilepsy and for Vata disorders. It helps to regulate cardiac disorders and hypertension. It is extensively used in disorders of male genital dysfunctions, oligospermia spermatogenic irregularities and other male disorders such as painful micturition<sup>[6]</sup>.

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### PLANT DESCRIPTION:

*A. racemosus* is readily available throughout India specially Himalaya region and Sri Lanka. The plant grows high up to 3 to 4 meters tall. The leaves are like pine needles, small and uniform and flowers are white and have small spikes. The plant belongs to genus *Asparagus*<sup>[7]</sup>.

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### ROOTS OF SHATAVARI:



#### Scientific classification<sup>[7]</sup>:

Kingdom: Plantae

Division: Angiosperms

Class: Monocots

Order: Asparagales

Family: Asparagaceae

Genus: *Asparagus*

Species: *Asparagus racemosus*

#### SYNONYMS<sup>[7]</sup>:

Hindi : Shatavari, Satawar or Satmuli

Sanskrit : Shatavari

Bengali : Shatamuli

Marathi : Shatavari, Shatmuli

Gujarati : Satawari

Telegu : Toala-gaddalu, Pilli-gaddalu

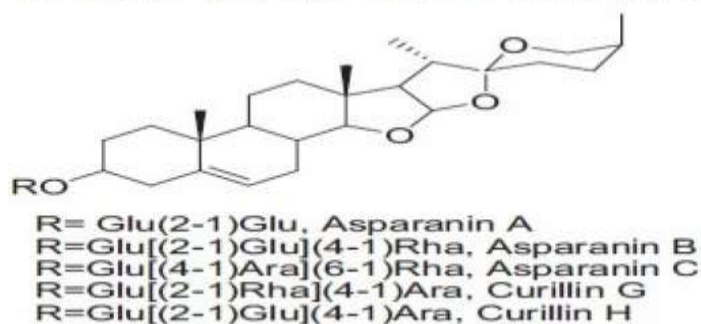
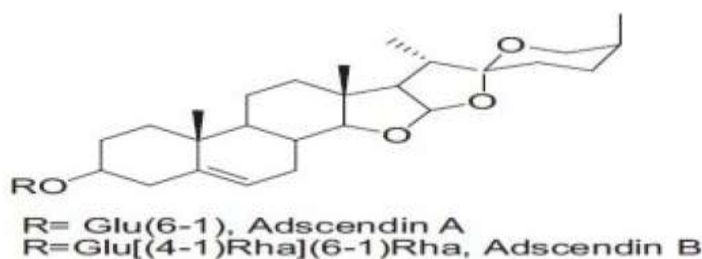
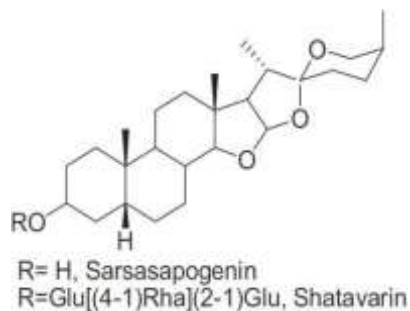
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### CHEMICAL CONSTITUENTS:

Among asparagus's main bioactive components are steroidal saponins. Vitamins A, B1, B2, C, E, Mg, P, Ca, Fe, and folic acid are also present in this plant. Essential oils, asparagine, arginine, tyrosine, flavonoids (kaempferol, quercetin, and rutin), resin, and tannin are some of the other main chemical components of asparagus<sup>[8]</sup>.

With two *Asparagus* rhamnose and one glucose molecule, shatavarin IV is a glycoside of sarsasapogenin<sup>[9]</sup>. The following figure displays the main bioactives (chemical ingredients) of the asparagus species. *Asparagus* species include shasapogenin and shatavarin I–IV in their roots, leaves, and fruits. *A. racemosus* was also reported to have produced a novel isoflavone, 8-methoxy-5,6,4'-trihydroxyisoflavone-7-O- $\beta$ -D-glucopyranoside, earlier<sup>[9-10]</sup>.



## LITERATURE REVIEW

REVIEW OF ARTICLE	ABSTRACT
1. Kirubananandan Shanmugam, Veeramani Subha, Eswari Thulasimuthu. 2023. Environmental Aspects of Copper Nanoparticles Against Green Algae Water and Bactericidal Action From Ethanolic Root Extract of <i>Asparagus Racemosus</i> .	The key objective of the experiment was to show the environmental based of copper nanoparticles which counters the growth of bacterial pathogens such as <i>Pseudomonas aeruginosa</i> , and <i>Staphylococcus aureus</i> . To begin with the experiments, root extract of <i>Asparagus racemosus</i> was used to synthesise Copper nanoparticles. The outcome displayed a satisfactory antibacterial activity against the bacterial pathogens by the biosynthesized copper nanoparticles..
2. REETA TRIPATHI, SHAIL BALA SINGH BAGHEL , SHWETA HINGWASIYA AND REENA UPADHYAY.2021-2022. Evaluation of antioxidant and antimicrobial activities of methanolic extract of <i>Asparagus racemosus</i> Willd. roots and <i>Clitoria ternatea</i> Linn flowers. <i>Journal Of Mycopathological Research</i> .	The present study evaluated in vitro antioxidant and antimicrobial activities of the methanolic extract of the roots and flowers parts of <i>Asparagus racemosus</i> (A. racemosus) and <i>Clitoria ternatea</i> (C. ternatea), respectively. The antioxidant activity of the methanolic extracts of A. racemosus and C. ternatea was remarkable and dose-dependent. Methanolic extracts of A. racemosus and C. ternatea were tested by agar well diffusion method against four selected strains to determine antimicrobial activity.
3. Monika Rani, Sandeep Jaglan, Vikas Beniwal, Vinod Chokkar.2022. Bioactive saponin profiling of endophytic fungi from <i>Asparagus racemosus</i> . <i>Natural Research Products</i> .	The purpose of this was to identify the phytochemicals and to assess the antioxidant potential in aqueous extracts prepared at different pH levels of Satawar tubers. The maximum amount of phenolics and flavonoids content was present at pH 9 i.e. 18.88mg GAE/g and 2.83mg CE/g. According to the study, this plant is a very good source of phytochemicals and acts as a powerful antioxidant.

<p>4. Parvesh Devi<sup>1</sup>, Sushila Singh, Seema Sangwan, Sheetal Sihag and Monika Moond. 2021. Effect of pH on Phytochemical and Antioxidant Potential of Satawar Tubers (<i>Asparagus Racemosus</i> Willd.). Journal of Antioxidant Activity.</p>	<p>Thirty-five distinct endophytic fungi were isolated from the roots of <i>Asparagus racemosus</i>. Five out of 35 isolates were found to be efficient saponins producers and they were identified as <i>Aspergillus terreus</i> (E.F-1), <i>Aspergillus flavus</i> (E.F-7), <i>Penicillium</i> sp. (E.F-12), <i>Talaromyces pinophilus</i>(S-26), and <i>Aspergillus terreus</i> (Y-2) based on 18 sr RNA sequencing. Eight types of saponins recognised by mass spectrometry were Cyclamine saponin, Aspoligonin A, Sarsapogenin, Asparacosin A, Schidigera saponinD5, Aspargoside A, Dioscin, and Protodioscin. Endophytic fungi extracts also exhibited antimicrobial activity and antioxidant activity.</p>
<p>5. Muhammad Amjad, Shabbir Hussain Kashif Javaid , Ahmad Khan, Basharat Ali, Mafia Noreen , Abdul Rehman Khan , Gulzar Hussain, Habib Ullah.2020. Plant Representation, Phytochemistry and Medicinal Assets of <i>Asparagus Racemosus</i>. The Pharmaceutical and Chemical Journal.</p>	<p><i>Asparagus racemose</i> has specific steroids, flavonoids, phenolic compounds, and glycosides. <i>Asparagus racemose</i> has immunomodulatory, antidiabetic, antioxidant, anticancer, hepatic, and neuroprotective effect, antimicrobial, antiurolithiatic, aphrodisiac, memory enhancing the property, antitussive effect, etc. This review elaborated on all of its pharmacological effect, active constituents that are more responsible for multi-facet actions of <i>Asparagus racemosus</i>.</p>
<p>6. Musarat Amina , Nawal M. Al Musayeib , Nawal A. Alarfaj , Maha F. El-Tohamy and Gadah A. Al-Hamoud .2020. Antibacterial and Immunomodulatory Potentials of Biosynthesized Ag, Au, Ag-Au Bimetallic Alloy Nanoparticles Using the <i>Asparagus racemosus</i> Root Extract.MDPI.</p>	<p>The nanostructures of the synthesized nanoparticles were confirmed by various spectroscopic and microscopic techniques. Two noble metals, such as silver and gold alloy nanoparticles, were successfully synthesized by the microwave assisted method in the presence of the <i>Asparagus racemosus</i> root extract and were used as an antibacterial and immunomodulatory agent. These review showed that the root extract of <i>A. racemosus</i>, AgNPs, and AuNPs can reduce the pro-inflammatory cytokine levels in the macrophages cells, while Ag-Au alloy NPs can reduce cytokine responses in NK92 cells.</p>
<p>7. P.L. Saran , S. Singh , V.H. Solanki , G. Devi , R.V. Kansara , P. Manivel. 2020. Identification of potential accessions of <i>Asparagus racemosus</i> for root yield and shatavarin IV content. Heliyon.</p>	<p>The evaluated accessions varied in morphology, herbage, root yield and shatavarin IV content. The accession DAR-7 was showing maximum herbage yield (1860 and 1850 g plant<sup>-1</sup> ), fresh root weight (36.33 and 37.33 g plant<sup>-1</sup> ), root girth (18.25 and 18.45 cm) and root yield (14.26 and 12.79 kg plant<sup>-1</sup> ) in both the harvesting years. Shatavarin IV content in roots was maximum in DAR-14 (152.06 and 151.72 µg g<sup>-1</sup> ), followed by DAR-28 (81.16 and 83.16 µg g<sup>-1</sup> ). For economic yield accessions DAR-7, DAR-19, DAR-14, DAR-28 were found superior therefore, they may be further used in crop improvement program as valuable selection.</p>
<p>8. Panduranga Naga Vijay Kumar Pallela · Shameem Umme Lakshmi Kalyani Rudderaju · Pratap Kollu<sup>4</sup> · Sharmila Khan · S. V. N. Pammi. 2019. Antibacterial activity assessment and characterization of green synthesized CuO nano rods using <i>Asparagus racemosus</i> roots extract. A Springer Nature Journal.</p>	<p>present investigation aims to synthesize copper oxide nano rods using <i>Asparagus racemosus</i> roots extract (Ar-CuO) in an ecofriendly process. The synthesized CuO nano rods are characterized by XRD, SEM, TEM, FT-IR, Raman and UV-visible spectroscopy. X-ray diffraction pattern showed typical monoclinic structure. SEM and TEM analysis revealed the formation of self-assembled CuO nano rods with diameter and length 50–100 nm and 400–500nm respectively. The antimicrobial activity of green synthesized copper oxide nanorods was tested against various bacterial pathogens i.e., <i>E. coli</i>, <i>B. subtilis</i>, <i>K. pneumonia</i>, <i>A. hydrophila</i>, <i>P. fluorescens</i>, <i>Y. ruckeri</i>, <i>F. branchiophilum</i> and <i>E. tarda</i> with fascinating action towards harmful bacteria.</p>
<p>9. Dayanand M Jadhav. 2018. Phytochemical investigation and antimicrobial activity of <i>Asparagus racemosus</i> Willd root against some pyogenic bacteria. The Pharma Innovation Journal.</p>	<p>In the present investigation attempts were made for study of phytochemical and antibacterial activity of ethanolic extract of root. The study showed presence of primary phytochemicals like steroids, alkaloids, saponins, carbohydrates, flavonoids, amino acids except tannins. The antimicrobial study of extract showed significant growth inhibition against <i>Escherichia coli</i>, <i>Staphylococcus aureus</i>,</p>

	Staphylococcus epidermidis Streptococcus pyogenes, Streptococcus pneumoniae and Pseudomonas aeruginosa. The mixture of polyvalent compounds present in the extracts might be responsible for the antibacterial activity against the pyogenic bacteria.
10. Ajai K Pandey , Anumegha Gupta , Meenakshi Tiwari , Shilpa Prasad , Ashutosh N. Pandey , Pramod K. Yadav , Alka Sharma , Kankshi Sahu, Syed Asrafuzzaman , Doyil T. Vengayil , Tulsidas G. Shrivastav , Shail K Chaube. 2018. Impact of stress on female reproductive health disorders: Possible beneficial effects of shatavari (Asparagus racemosus). Biomedicine & Pharmacotherapy.	Asparagus racemose increased oxidative stress may affect physiology of ovary, oocyte quality and cause female reproductive health disorders. To overcome stress mediated reproductive health disorders in women, shatavari is frequently recommended in Ayurvedic system of medicine. Although shatavari is one of the major health tonics and most popular rasayana drugs to treat reproductive ailments of women Based on the existing studies, we propose that shatavari may improve female reproductive health complications.
11. Kalyani Khanra , Sudipta Panja , Indranil Choudhuri , Anindita Chakraborty, Nandan Bhattacharyya. 2015-2016. Bactericidal and Cytotoxic Properties of Silver Nanoparticle Synthesized from Root Extract of Asparagus Racemosus. Nano Biomed Eng.	Bactericidal and cytotoxic properties of silver nanoparticle synthesized from root extract of asparagus racehorses. Nano biomed Eng. To evaluate the bactericidal, and cytotoxicity properties of silver nanoparticles synthesized from root extract of asparagus racehorses. The biochemical properties were assayed by antibacterial study, cytotoxicity assay using cancer cell line. Silver particles are spherical in shape.
12. NATHSIREE PLANGSOMBAT, KANIN RUNGSARDTHONG, LALANA KONGKANERAMIT, NETI WARANUCH and NARONG SARISUTA. 2015-2016. Anti-inflammatory activity of liposomes of Asparagus racemosus root extracts prepared by various methods. EXPERIMENTAL AND THERAPEUTIC MEDICINE.	Anti-inflammatory activity of liposomes of asparagus racemosus root extracts prepared by various methods. Experimental and therapeutic medicine. The aim of the present study was to develop liposomes of AR and to assess their physicochemical characteristics and anti-inflammatory activity in the monocytic leukemia cell line THP-1. The results showed that AR liposomes prepared by TF had a multilamellar structure and a large size, whereas those prepared by REV and PD were oligolamellar in structure, and of a smaller size.
13. Ram Singh and Geetanjali. 2015. Asparagus racemosus: a review on its phytochemical and therapeutic potential. Natural Product Research	Asparagus racemosus a review on its phytochemical and therapeutic potential. Natural product research. The therapeutic applications of this plant have been reported in indian and british pharmacopoeias and in traditional system of medicine, such as ayurveda, unani and siddha. This review aims to give a comprehensive overview of traditional applications, current knowledge on the phytochemistry, pharmacology.
14. Ramit Singla and Vikas Jaitak. 2013-2014. SHATAVARI (ASPARAGUS RACEMOSUS WILD): A REVIEW ON ITS CULTIVATION, MORPHOLOGY, PHYTOCHEMISTRY AND PHARMACOLOGICAL IMPORTANCE. International journal of pharmaceutical science and research.	Shatavari a review on its cultivation, morphology, phytochemistry and pharmacological importance. This plant possesses a wide range of secondary metabolites inclusive of steroids, alkaloids, dihydrophenanthrene derivatives, flavonoids, furan derivatives and essential oils. The review summarizes the information concerning the cultivation, morphology, phytochemistry, biological activities, safety profile, marketing status and conservation techniques of A. Racemosus.
15. Deepika Choudhary , Dimple Sharma. 2014. A Phytopharmacological Review on Asparagus racemosus. International Journal of Science and Research (IJSR).	A phytopharmacological review on asparagus racemosus. International journal of science and research (IJSR). A study of ancient ayurvedic literature has claimed that asparagus racemosus have numerous medicinal and therapeutic properties like phytoestrogenic, antidepressant, antidiarrhoeal, anticancer etc. It is used in almost 67 ayurvedic preparations and commonly mentioned as 'rasayana' in ayurveda due to its medicinal uses.

16. Muhammad Abdullah Shah, syed Muhammad Abdullah, Muhammad Azim Khan, Gulfam Nasar, Irum Saba.2013-2014. Antibacterial activity of chemical constituents isolated from <i>Asparagus racemosus</i> . A Journal of the Bangladesh Pharmacological Society (BDPS).	This study give information about active constituent responsible for antiseptic flok and identify chemical constituents responsible for antimicrobial activity. All compounds showed antibacterial activities against <i>E. coli</i> , <i>s.auerus</i> and no significant effect was observed against <i>s.typhi</i>
17. Arti Sharma , Vandana Sharma.2013. A Brief review of medicinal properties of <i>Asparagus racemosus</i> (Shatavari). International Journal of Pure & Applied Bioscience.	shatavari is recommended in ayurvedic for treatment of gastric ulcer, dyspepsia and galactagogue, nervous disorder, inflammation and liver disease
18. N. Veena & Sumit Arora & R. R. B. Singh & Antariksh Katara & Subha Rastogi & A. K. S. Rawat.2013. Effect of <i>Asparagus racemosus</i> (shatavari) extract on physicochemical and functional properties of milk and its interaction with milk proteins. J Food Sci Technol.	This abstract show effect of interaction of <i>asparagus racemosus</i> with milk constituent and physicochemical and functional characteristics of milk. Addition of freeze dried aqueous shatavari extract at milked showed decrease in pH, increase in acidity, viscosity and heat stability at maximum.
19. Anupam K Sachan , Doli R Das , Senah L Dohare and Mohd. Shuaib.2012. <i>Asparagus racemosus</i> (Shatavari): An Overview. INTERNATIONAL JOURNAL OF PHARMACEUTICAL AND CHEMICAL SCIENCES.	<i>Asparagus racemosus</i> is important for its sapogenins content the precursor of many pharmacological active steroids. It has antioxidant activity ( shatavarin I ) , antioxytoxic ( shatavarin IV ) , hypoglycemic, hypertensive activities, anticoagulant activity, antiviral activity, anticancer activity.
20. Amit Chawla, Payal Chawla, Mangalesh, R C Roy. 2011. <i>Asparagus racemosus</i> (Willd): Biological Activities & its Active Principles. Indo-Global Journal of Pharmaceutical Sciences.	This study give information about active constituent of shatavari are steroidal saponins (I, IV), isoflavone, asparagamine, racemosol, vitamin A, B1, B2, C, E, Mg, P, Ca, Fe and folic acid present in roots. It also show biological activities like anti - aging, impart immunity, improve mental function.
21. Arshad Hussain, Md. Parwez Ahmad , Shadma Wahab, 2011. A Review on Pharmacological and Phytochemical Profile of <i>Asparagus racemosus</i> Willd. Pharmacologyonline.	In this abstract ethnobotany, pharmacology, phytochemistry and biological activities of <i>asparagus racemosus</i> wild was studied.

**AIM:** A REVIEW ON ASPARAGUS RACEMOSUS ( SHATAVARI).

## OBJECTIVES:

The World Health Organization has established that about 80% of the population is unable to afford pharmaceutical drugs and relies on conventional medicine, mainly herbal medicine. Around 1250 plants are used in ayurvedic formulations. *Asparagus racemosus* is one such important medicinal plant. Because the genus *A. racemosus* contains 300 species around the world, The genus is considered important for medicinal use due to the presence of sapogenins and steroidal saponins in various parts of the plant.

### The Main Objectives Are As Follows:

1. The main purpose of review is to give an overview of traditional application and knowledge on pharmacology and phytochemistry of *asparagus racemosus*.
2. To evaluate the presence of various active compounds including steroidal saponins, alkaloids, flavonoids and essential oils
- 3 To study about biological activities of *asparagus racemosus* like antioxidants, anti inflammatory, immunomodulatory, anti bacterial antifungal, anti cancer, anti depressant activity.
4. To identify the health benefits.
5. To ensure safety profile of *asparagus racemosus* and note down its adverse effects.

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## NEED OF WORK:

1. Infection induced by harmful microorganisms are becoming a important source of mortality and morbidity in immunocompromised people in developed countries. We identified the antimicrobial, antibacterial activities of asparagus racemosus.
  2. Explore the plant to discover previously unidentified chemical compounds that may have medicinal properties.
  3. Improved formulation that increases bioavailability.
  4. To study toxicology of plant to identify an potential adverse effect and safety profile.
  5. To make formulation easily available and affordable.
  6. Evaluate female health related problems such as reproductive system, menorrhagia, inflammatory conditions of sexual organs by using asparagus racemosus.
  7. To identify consistent concentration of active compounds in plants which have medicinal values.
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## WORK PLAN SCHEDULE:

### Selection Of Topic

(Due to its therapeutic qualities, growing methods, ecological influence, or even commercial uses, it can be a fascinating choice for a project topic. An interesting and educational work may be to investigate its use in Ayurveda, its phytochemical makeup, its growing methods, or its health effects.)



### Collecting The Review Articles From Internet Source

(A thorough understanding of the subject can be obtained by gathering data from several reliable online sources, such as PubMed, Google Scholar, and other websites.)



### Collecting The Information

(Review papers are in-depth analyses of previous studies on a certain subject. They compile data from numerous primary research publications in order to offer a synopsis, evaluate, and synthesis of the majority of recent knowledge.)



### Sorting Data Regarding The Project

(Sorting the data related to the project can be done by topic/ category, by publication date, by author etc)

Asparagus racemosus, also known as Shatavari, has been used in traditional medicine to treat a variety of conditions:

- Female health: PMS, amenorrhea, dysmenorrhea, menopause, and pelvic inflammatory disease
- Other conditions that Asparagus racemosus may help with include: Menopausal symptoms, Dyspepsia, Diarrhoea.
- Some pharmacological activities of Asparagus racemosus root extract include: Antiulcer, Antioxidant, Antidiarrhoeal, Antidiabetic, Immunomodulatory.
- Asparagus racemosus may also have antibacterial effects and stimulate the immune system.

**1. skincare benefits:** The benefits of shatavari (Asparagus racemosus) for skin include moisturization, hydration, anti-aging, acne management, skin whitening, and calming irritation.

**2. Women's Reproductive Health:** Shatavari has been traditionally used to support women's reproductive health. Some studies suggest that it may help regulate the menstrual cycle and have a tonic effect on the female reproductive system.

**3. Lactation Support:** There is some evidence to support the traditional use of Shatavari for enhancing breast milk production in lactating mothers. However, more research is needed to establish its efficacy and optimal dosage.

**4. Anti-inflammatory and Antioxidant Properties:** Preliminary studies indicate that Shatavari may possess anti-inflammatory and antioxidant properties. These properties could contribute to its potential health benefits, but further research is necessary to confirm and understand the mechanisms.

**5. Antibacterial activity :** Antibacterial activity is the efficacy of the plant extract to inhibit the growth of bacterial pathogens. Plant extract with antibacterial property depends on its phytochemical constituents. Plant extracts with antibacterial property can be used as a medicinal plant and replace synthetic antibiotics. Methanolic and ethanolic root extract shows antibacterial activity against *Escherichia coli*, *Shigella dysenteriae*, *Vibrio cholerae*, *Bacillus subtilis*, *Staphylococcus aureus*, *Shigella sonnei*, *Shigella flexneri*. Owing to its antibacterial property Shatavari can be utilized in place of synthetic antibacterial drugs.

**6. Antimicrobial activity:** The primary cause of serious infections in humans is bacterial organisms, both Gram positive and Gram negative, such as various types of *Bacillus*, *Staphylococcus*, *Salmonella*, and *Pseudomonas*. In the worldwide as well as in the developing countries, the most human died due to infectious bacterial diseases (Nathan, 2004). *A. Racemosus* has antibacterial and antifungal properties in its several inorganic and organic solvent extracts (Patel & Patel, 2013). The antibacterial properties of *A. racemosus* root extracts have been studied using the conventional cylinder method.

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## Conclusion:

*Asparagus racemosus*, particularly in the form of Shatavari, shows promise in traditional medicine and early scientific studies. However, further research is essential to better understand its mechanisms of action, establish optimal dosage, and confirm its efficacy for various health conditions. Always consult with healthcare professionals before incorporating herbal supplements into your routine, especially if you have existing health concerns or are taking medications.

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