

Asparagus racemosus Willd.

English name: Indian Asparagus

Sanskrit name: Shatavari

Malayalam names: Chathavalli, Sathavali, Sathavari, Thalicheria

Tamil names: Ammaikodi, Kadumulla, Kadamoolam, Kilavari, Nilichedi, Shimai shadavari, Satavali, Thanneervittam



Description: Woody perennial climbers; stem often spinescent, terete, green; rootstock with fascicled elongated tuberous roots. Cladodes from the axils of scale leaves in clusters of 2-6, 0.8-1.5 x 0.1-0.3 cm, linear-falcate, slightly triquetrous, base narrow, apex acute. Racemes 2.5-5 cm long, slender, axillary, solitary or clustered. Flowers bisexual, 5-6 mm across; pedicel c. 1 mm long. Perianth-lobes 6, white, c. 3 x 0.5 mm, oblong, acute. Stamens 6, adnate to the perianth lobes; filaments subulate. Ovary 2-3 mm long, globose to slightly 3-gonous, 3-celled; ovules 2 per cell; stigma 3, recurved. Berry 4-6 mm diam., globose, purple on ripening; seeds 2-5, c. 2 mm across, globose.

Distribution: Old world tropics; **Habitat:** All forest types, also in the plains, up to 1000 m altitude

Therapeutic uses

The plant, Asparagus, is reputed to be a tonic and a geriatric. The tubers are anti-diarrhoeic, diuretic, nutritive, tonic, aphrodisiac, appetizer, and alternative. They are also reported to increase lactation. In addition, the plant is considered slightly sweet, and is useful in the diseases of blood, kidney, liver, scalding urine, rheumatism, gleet, and gonorrhoea.

AGRO-ECOLOGICAL REQUIREMENTS

- prefers moist, humid and arid conditions.
- Black, well drained and fertile soil.

- Temperature of 20-30 °C is ideal for growth.



CULTIVATION

FIELD PLANTING

- Propagation is either by seeds or vegetative by root suckers.
- Land is thoroughly ploughed and farmyard manure is mixed with soil as a basal dose.
- Beds of 1-2 m width, 60-90 cm height are formed.
- 3-4 month old seedlings are planted in the field.

WEEDING:

- Two weeding's are carried out during the rainy months.

MANURE AND FERTILIZER

- Farmyard manure.

IRRIGATION

- Irrigation is given after the rainy season.

DISEASES/PESTS

Diseases/Pests	Controlling measures
Attack of caterpillars and grass hoppers.	It can be controlled by hand picking, applying crushed neem seed on beds or by spraying <i>Beauveria</i>
Rust is caused by <i>Puccinia asparagi</i> . It causes brown spots on the leaves and results in drying of leaves	Controlled by the application of Bordeaux mixture @ 1%.

Harvesting and Post-Harvest Processing

- The crop can be harvested 18-24 months after planting.
- The plants start flowering and sets fruit in 12-14 month
- The roots are dugout and cleared, then the roots are peeled off with the help of sharp knife immediately after harvesting.

- After removing the skin, it is cut transversely into small pieces and dried in shade.



YIELD

- An average 25 tonnes of fresh tubers can be harvested from one hectare.

ECONOMICS OF CULTIVATION

- Market Price: *Tubers- Yellow Shatavari-* ₹ 300-350/ kg,
- *White Shatavari-* ₹160-190/kg (as on October 2019)