



Herbal Garden (Muligai Vanam)

Foxtail Millet



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Botanical Name	:	<i>Setaria italica</i> (L.) P. Beauv.
Tamil Name	:	Thinai
Sanskrit Name	:	Kangu
English Name	:	Foxtail millet

Distribution and Habitat

Setaria italica (Foxtail millet) which belongs to the family *Poaceae*, with slim, vertical, leafy stems which can reach a height of 1.2-2 m. This plant originated from China, where its cultivation dates back to 5000 BC. It probably spread from the highlands of Central China towards India and Europe. In India, foxtail millet is still an important crop in arid and semi-arid regions.



Leaf blades are linear-lance shaped, 15-45 x 0.6-2 cm. Flower panicles dense, lobed, 6-40 x 0.5-5 cm, very variable, erect or pendent when mature; seed-head dense, hairy panicle, 5-30 cm long, 2 mm in diameter, convex oval or elliptical and light yellow to brown, rusty or black. This crop can be harvested for green fodder or hay after 70 – 75 days of sowing depending on the variety. It has strong adaptability to a-biotic stresses, especially drought, and poor soil. In South India, it has been a staple diet among people for a long time from the Sangam period. It is referred to often in old Tamil texts and is commonly associated with Lord Muruga and his consort Valli.

Parts used: Seed (as grain) and leaf (as fodder)

Phyto-chemical constituents

Dietary fibre, bioactive peptides, proteins, minerals, amino acids, phenolic compounds, sterols, tocopherols, phytic acids, carotenoids, and unsaturated fatty acids.

Uses

In many Indian households, foxtail millet is used to make traditional dishes like payasam, laddu, porridge, and other breakfast dishes. Its nutty flavor and high nutritional value makes it a popular choice for health-conscious individuals. It is also used in the preparation of vinegar, wine beer and alcohol. Its straw is nutritious and easily digestible which is used as feed for cattle, poultry, and pigs.



Complete Grain of Thinai

Medicinal uses



Thinai Rice

Foxtail millet has been an integral part of traditional Indian cuisine and medicine for centuries. In Ayurveda, it is valued for its cooling properties and is used to treat digestive issues and inflammation. The millet is also used in traditional Indian medicine to treat conditions like poor appetite and indigestion. Traditionally, foxtail millet has been used in medicinal practices as an emollient, astringent and stomachic, providing remedies for dyspepsia and food heaviness. It is rich in anti-oxidants, fibre, and essential minerals like iron and magnesium. Its anti-inflammatory properties may help manage conditions like arthritis and digestive issues. Various bioactive chemicals found in foxtail millet's seed coat functions against life threatening disorders such as cancer, cardiovascular diseases, diabetes, and high blood pressure (Chandrasekara and Shahidi, 2011). Some studies suggest that it is potential in managing blood sugar levels and cholesterol. Insoluble dietary fibres derived from Foxtail millet could delay the diffusion of glucose and promote its absorption in the gastrointestinal tract, could also inhibit α -amylase activity and delay the digestibility of carbohydrates and deter the release of glucose (Bangoura et al. 2012). In pharmaceuticals, extracts from foxtail millet are being explored for their antimicrobial and anti-diabetic properties, making it a valuable crop for nutraceutical research.

