



Herbal Garden (Muligai Vanam)

Panivaragu



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Botanical Name	:	<i>Panicum miliaceum</i> (Linn.)
Tamil Name	:	Panivaragu
Sanskrit Name	:	Cheenaka
English Name	:	Proso millet

Distribution and Habitat

Panicum miliaceum (Proso millet) which belongs to the family *Poaceae*, is an erect herbaceous plant. It has been cultivated in eastern and central Asia for more than 5000 years later spread into Europe. It is widely cultivated as a cereal across India, Nepal, Western Burma, Sri Lanka, Pakistan and South East Asian countries.



It grows up to a height of 45-100 cms. Stem is slender with distinctly swollen nodes. The roots are fibrous and shallow. The leaves are linear, slender and the leaf sheath encloses the entire internode. The inflorescence is a much branched panicle without bristles having spikelets at the tips of the branches. The fruit is a small caryopsis (grain), broadly ovoid, up to 3 mm x 2 mm, smooth, and shedding easily. Usually the last or the fourth glume encloses a perfect flower which sets grain. The glume and palea (the upper bract of the floret of a grass) are firmly attached to the grain. The seeds may be creamy white, yellow, red or black. It is a short season crop with low water requirement and highly tolerant to heat and drought. It is preferred for extreme soil and climatic conditions as it yields reasonable harvest even in degraded soils under unfavourable weather conditions.

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

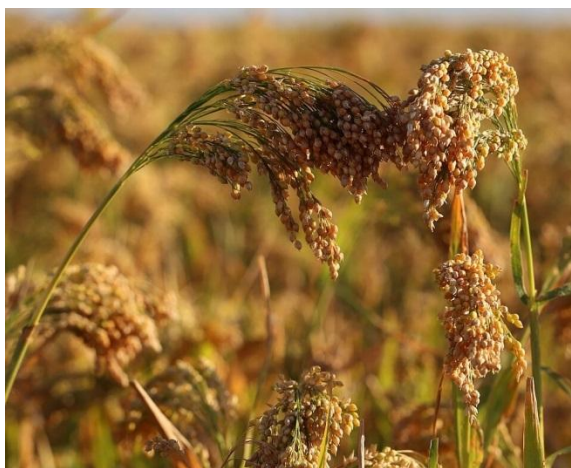
Phyto-chemical constituents

Dietary fibre, bioactive peptides, proteins, minerals, amino acids, poly phenolic compounds, flavonoids, triter-penoids, sterols, steroidal saponins tocols, phytic acids, carotenoids, glucosylceramide, and unsaturated fatty acids.

Uses

Proso millet is suitable for developing ready to cook mixes, snack mixes, snack foods and many products like dosa, idli, laddoo, doughnut, puffed grains and chakli etc.

Medicinal uses



Proso millet is a nutrient-dense, gluten-free grain rich in protein, fibre, B-vitamins, and essential minerals like magnesium, manganese, and iron. With a low glycemic index and high-quality amino acids like leucine and methionine, it supports metabolic health, energy, and digestion. Proso millet holds both nutritional and medicinal value in indigenous systems. Ayurveda describes it as laghu – light

to digest – and sheetal – cooling in potency, traditionally used to pacify *Pitta* dosha, support digestion, and as a bladder tonic when mixed with ghee. Modern studies validate its pharmacological potential: the triterpenoid miliacin shows anti-inflammatory, wound-healing, and hair-growth activity, while its phenolic acids, especially protocatechuic acid, confer strong antioxidant effects. Steroidal saponins and lignans in the grains exhibit anticancer and cardio-protective properties. Proso millet is rich in magnesium which helps to lower the blood pressure and also decreases the chances of strokes, heart attacks and atherosclerosis. It is a good source of potassium which helps to maintain low blood pressure as it acts as a vasodilator. Consuming this millet is linked to a lower risk of type 2 diabetes mellitus because whole grains are a rich source of magnesium. The dietary protein of proso millet plays an important role in cholesterol metabolism because the protein increases high-density lipoprotein (HDL) cholesterol levels, especially the HDL2 sub-fraction without an increase in low density lipoprotein cholesterol level (Mathangi et al.2013; Shimanuki et al. 2006).

Photo link: https://en.wikipedia.org/wiki/Proso_millet

