

Cultivation of Foxtail Millet in India

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INTRODUCTION

We all know that millets are also called nutria cereal. They are filled with a lot of nutritional aspects. According to my article I have explain about a best package and practice of foxtail cultivation i.e the package & practice which help the farmer to earn a good income and also I have explain about the nutritional value if the millet i.e how millet is helpful in our day to day health.

About foxtail millet:-

Scientific name : *Setaria italica* L.

Family : Gramineae

Geneus : Setaria

Spp. : Italica

Origin : China

Common Name : Kakun

Vernacular Name:

Foxtail millet – English

Kangni - Hindi

Navane - Kannada

Thinai - Tamil

Kang - Gujarati

❖ Foxtail is also known as Italian millet and German Millet.

Biology:-

Foxtail millet is a monocot and annual grass with slim, vertical, leafy stems which can reach a height of 120-200cm (4-7feet). The seed head is a dense, hairy panicle and 5-30cm long. Foxtail millet is largely self pollinated with cross pollination averaging about 4 %. The infloresence is a spike with short side branches bearing spikelet and bristles. Anthesis in foxtail millet generally takes place near midnight and in the morning, but varies significantly with the environment.

Nutrition and benefits:-

S.N	Nutrition	Contant
1	Protein	12.3g
2	carbohydrate	60.9g
3	Fat	4.3g
4	Crude Fiber	8.0g
5	Minerals	3.3g
6	Ca	31mg
7	Phosphorus	290mg

Source:-National institute of Nutrition (NIN) Hyderabad

Benefits:-

- ◆ Foxtail millet are rich in calories that provide energy and strength to the body to perform activates.
- ◆ Foxtail millet is rich in vitamin B₁₂ which is essential for maintaining a healthy heart, smooth functioning of the nervous system.
- ◆ Foxtail millet may improve glycemic control and reduce insulin, cholesterol and fasting glucose in Types-2 diabetes patients.

Package and Practices:-
❖ Climate:
❖ Varieties:

S.N	STATE	Varieties
1	Rajasthan	Pratap Kangni-1(SR-51), Meera(SR16), Gavari(SR11), SiA-3085
2	AP	SiA-3088, SiA-3156, SiA-3085
3	Tamil nadu	TNAU-196, TANU-43, K ₂ , K ₃ , CO ₁ , CO ₂ , CO ₄ ,
4	UP	Nischal, PRK 1,
5	All States	Suryanandi (SiA 3088), PS 4

❖ Sowing Time:

Kharif – June to July

Rabi – September to October

❖ Seed Rate:

Line Sowing - 8-10kg/ha

Broad Casting – 15 kg/ha

❖ Spacing

RxR – 25-30cm

PxP - 8-10cm

❖ Manures and fertilizers:

FYM – 5-10t/ha

N - 40kg/ha

Foxtail millet is warm season crop and grow in arid and semi-arid region of the country. The crop can be grown even at an altitude of 2000m and 50-70cm annual rainfall.

❖ Soil:

Foxtail millet grows well-drained loamy soils. They will not tolerate water-logged soil or extreme drought.

❖ Land Preparation

Foxtail millet needs moderately for good yield. Kakun does not require much field preparation. One set of monsoon the field should be harrowed or plough in northern India or with blade harrows in south India.

P₂O₅ - 20kg/ha

K₂O - 20kg/ha

All the fertilizers should be applied as a basal dose at a time of sowing.

❖ Irrigation:

Kharif season crop does not required any irrigation.

First Irrigation – 25-30DAS

Second Irrigation – 40-45DAS

❖ Impotent weed:

Echinochloa colonum

Echinochloa Crusgulli (Sawan)

Elusine indica (Kodo)

Cynodon dactylon (Doob)

Cyperus rotundus (Motha)

Solanum nigrum (Mokoi)

Amaranthus viridis (Chaulai) } Broad-leaf weed

Phyllanthus niruri (Hulhul) }

❖ **Weed Control:**

Two to three weeding with hand hoe are sufficient to keep the weed in control.

Pre-emergence – Isoproturon@1.0kg a.i/ha

Post-emergence – 2, 4 –D sodium salt@ 1.0kg a.i/ha 20-25DAS.

❖ **Crop diseases and pest management:**

Blast, brown spot and Rust:

Appear at the time of early stage of the crop

Spray – Mancozeb (0.2%)

Early sowing in July.

Grain Smut:

Seed treatment with Carbendazim@ 2g/kg seed.

Downy mildew:

Seed treatment with Ridomil MZ@ 2g/lit.

Rouging out and destroying the affected plants.

Army worms, Cut worms and leaf scraping beetles:

Dust application of Malathion 5% @ 3.2-4.0kg/ha.

❖ **Harvesting:**

The crop matures in 80-100 days. The crop is usually harvested during Kharif season from September to October and Rabi season from January to February.

❖ **Yield:**

Grain – 15-18qtl/ha

Straw - 20- 40qtl/ha

CONCLUSION

Now a days foxtail millet has a huge demand in market. As it required less input expenditure, less water and more nutritional value which helps in improving human health has made the crop more feasible for cultivation.

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