



Barnyard millet (*Echinochloa frumentacea L.*)

1.Improved varieties: The list of latest and popular varieties is given below

S. No.	State	Varieties
1.	Uttarakhand	VL 172, VL 207, PRJ 1, VL 29, PRS 1, DHBM93-3
2.	Uttar Pradesh	VL 172, VL 207, Anurag, VL 29, DHBM 93-3, Kanchan
3.	Tamilnadu	MDU-1, DHBM93-3 , DHBM23-3 , CO 1, CO 2, VL 181, VL 29
4.	Karnataka	VL 172, RAU 11, VL 181, DHBM 93-3, DHB 93-2, DHBM23-3
5.	Gujarat	Gujarat Banti1, DHBM93-3, VL172
6.	Bihar	VL Madira 181, DHBM93-3
7.	Andhra Pradesh& Telangana	DHBM93-3, DHBM23-3
8.	Madhya Pradesh	DHBM93-3, DHBM23-3



These values are approximate and can vary based on specific varieties, growing conditions, and agricultural practices. For precise recommendations and information, it's best to consult with local agricultural experts or extension services.

2.Maturity Period: Barnyard millet (*Echinochloa esculenta*) typically takes around 60-90 days to mature from the time of sowing, depending on factors like climate, soil conditions, and cultivation practices.

3.Number of Tillers: Barnyard millet plants can have multiple tillers per plant, with the exact number depending on the variety and growing conditions.

4. Seed Rate per Hectare: The recommended seed rate for barnyard millet cultivation is approximately 4-6 kg per hectare. However, this can vary based on factors like soil fertility, planting method, and local agricultural practices.

5. Yield per Hectare: The yield of barnyard millet can vary widely depending on factors like soil quality, climate, and cultivation practices. On average, under good growing conditions, it can yield around 800-1000 kg per hectare.

6. Size and Colour of Grains: Barnyard millet grains are small and round, similar in size to mustard seeds. They are usually white, although some varieties may have brownish or blackish hues.

7. Length of Plant: Barnyard millet plants typically range in height from 60 to 130 cm (24 to 51 inches), although it can vary depending on the specific variety and growing conditions.

8. Nutritional Value: Barnyard millet is a nutritious cereal grain. It is a good source of essential nutrients like carbohydrates, dietary fiber, protein, and various vitamins and minerals. It is gluten-free and rich in antioxidants.

9. Germination Percentage: The germination percentage of barnyard millet seeds can vary based on factors like seed quality, storage conditions, and age of the seeds. Under optimal conditions, the germination rate can be quite high, often above 80%.

10. Insect-pests and their management:

Shoot fly

Shoot fly is the most serious pest causing significant yield losses. Early sowing with the onset of monsoon is an effective and cheapest method of control.

Stem borer

Apply Carbofuran 3G @20 kg/ha in the soil at the time of field preparation.

Termites

Soil should be mixed with Chlorpyrifos 5D@35 kg/ha at the time of sowing. When the incidence of pest is noticed in standing crop dilute Chlorpyrifos 20EC in 5 lit of water and mix it with 50 kg of soil and broadcast evenly in one ha followed by light irrigation. Use Methyl parathion (2%) dust @ 20-25 kg/ ha before sowing.

Diseases and their management

Smut

The crop although affected by three different smuts, the grain smut is important.

Management

Seed treated with thiram @ 2.5 g/kg of seed and soaking seeds in hot water at 55 o C for 7-12 minutes is done.