



Package of Practices of Bajra

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Bajra is an important kharif crop of Mathura which occupies more than 40000 ha area and grown in almost every block of Mathura. Its productivity as reported by department of agriculture is 14.65q per hectare. Its production and productivity can be enhanced by using scientific management practices.

1. Selection of Soil : Sandy loam and light or loam soils with proper drainage are considered as best.

2. Field Preparation : Prepare the field by doing 1st ploughing with mould-bold plough followed by 2-3 ploughing with cultivator to pulverise the soil.

3. Important Varieties : Two types of varieties remain available for sowing of Bajra

commonly referred as Composite and hybrid varieties. The important composite

varieties suitable for the district are : ICMB-155, WCC-75, ICTP-8203, Raj-171, NDFB3, and Dhanshakti etc. Among hybrid Pusa-322, Pusa-23, ICMH-451, Kaveri(KSB), Super

Boss, Boss-65 Fauzi, Pioneer 86M84, Tata-Dhanya, GK-1111, GK-1200 Bullet and MP7888 etc.

4. Seed Rate: 4-5 kg seed per hectare is required.

5. Sowing Time and Method : For grain Bajra should be sown from July to mid August

and for fodder purpose it can be sown from last week of June to first week of July.

Bajra should be sown at the depth of 4 cm in lines with a spacing of 45 cm.

6. Seed treatment : Treat the seed with thiram or cabendazim @ 2-2.5 gm per 1 kg of

seed before sowing to avoid seed borne diseases. To manage Ergot treat the seed in

20% salt solution.

7. Fertilizer Management : Use balance fertilizers as per the soil test basis.

Generally

for hybrid varieties 80-100 kg nitrogen, 40-50 kg phosphorous, and 40 kg potash is

recommended, while composite varieties need 40-50 kg nitrogen, 25 kg

phosphorous, and 25 kg potash per hectare. Use full dose of phosphorous and potash

and half dose of nitrogen as basal dressing and the remaining dose of nitrogen

should be applied after 25-30 days after sowing as top dressing.

8. Thinning and Gap filling : It is an important operation to be done after 10 days of

sowing. Transplant the plant from high density area to poor germination area and fill

the gap to maintain crop geometry and population.

9. Weed Management : Weeding and earthing is done manually with khurpi after 15

and 30-35 days of sowing. It helps in proper aeration and good establishment of crop.

To control weed with chemicals, the following weedicides can be used : Use Atrazine @ 1.25 kg per hectare in light to medium soils within 48 hours of sowing. For

very hardy weeds add Pendamethylene 30EC @ 2.5 litres with atrazine to control

weeds.

10. Irrigation Management : Bajra crop is highly susceptible to moisture specially at the

times of flowering and grain formation, thus, if rain fails two irrigations on these stages must be provided.

11. Plant Protection : (Major Diseases): Ergot : It is a serious disease of Bajra in which

scabers are developed in the ears and black powder is formed in grains with the

eruption of Sclerotia (honey like sticking liquid) from the affected ears. To

manage this

disease treat the seed before sowing with chemicals or 20% salt solution. Use Zeerum 80% WP or Zeneb 75% WP 2kg or Mencozeb 75% WP @ 2kg per hectare.

Bajra Smut : Black powder is formed in grains. To manage this disease treat seed

and use fungicides as recommended for ergot.

Ear Kokkle/green ear disease: In this disease the whole bajra ear converts into green

leave and de-shaped which finally looks like a broom. To control this disease use 2

sprays of carbendazium 50% WP or Thiophinate methyl 70% WP @ 2gm per litre of

water at an interval of 10 days.

Important Insects & Pests : Termites: Use chloropyriphos 20% EC @ 2.5 litre in standing crop with irrigation water.

Nematodes : Use 10kg forate 10G before one week of sowing in soil.

Stem borer : Use Cabofuron 3G or Forate 10G @ 20kg or spray Di methoate 30%EC

1 litre or Quiolphos 25%EC 1.50 litre per hectare.

Shoot borer : Use Cabofuron 3G or Forate 10G @ 20kg or spray Di methoate 30%EC

1 litre or Quiolphos 25%EC 1.50 litre per hectare.

Thrust Points : Select the variety suitable for your condition.

Treat the seed before sowing.

Use fertilizers as per soil test basis.

Irrigate the crop at flowering if rain fails.

Proper management of Insects pests and diseases in time