

HYBRID NAPIER

(*Pennisetum purpureum* X *Pennisetum typhoides*)

This is an inter-specific hybrid between Napier grass (*Pennisetum purpureum*) and Bajra (*Pennisetum typhoides*). It is widely known as Bajra-Napier Hybrid or Elephant grass. Hybrid Napier is a perennial grass which can be retained in the field for 2-3 years. Compared to Napier grass, Hybrid Napier produces larger and softer leaves.

Climate: Grows best in deep, well drained loams with a pH of 4.5-8.2 (mean 6.2). It produces best growth between 25 and 40°C, and little growth below about 15°C. The growth ceases at 10°C. It normally grows in areas with rainfall >1,000 mm. It can tolerate moderate drought as the root system is very deep. It is susceptible to prolonged flooding or water logging.

Land Preparation: The land is thoroughly prepared generally by 2-3 ploughing followed by planking. It is a long duration crop; hence periodical tillage activities like other crops are not possible after the crop occupies the field. Plantings can also be done on flat beds.

Improved varieties:

Area of cultivation	Varieties
Central India, North East Hills and Northern Hills	IGFRI Hybrid Napier - 3
Whole Country	Pusa Giant & NB -21
Tamil nadu, Karnataka, AP and Gujrat	Co-1, Co-2 and Co-3
Hilly, Sub Humid and Sub Temperate India	IGFRI-7
Punjab	PBN-83
Whole Country	IGFR- 10

Sowing time: This crop can be cultivated throughout the year under the Indian condition. Best time of showing is between 15th February to 15th March.

Seed rate: Being a sterile hybrid, the grass is planted by roots and stem cuttings.

Sowing method: Stem or root cuttings are generally used for propagation of this crop with a spacing of 50 x 50 cm. While planting, two nodes are buried inside the soil and one node is exposed to outside.

Manures and fertilizers: 25-40 tonnes/ ha of FYM is to be applied at the time of final land preparation. This crop requires (per ha) about, 53 kg urea, 87 kg DAP and 67kg MOP (NPK:40:40:40). After every cut 40 kg nitrogen is applied as topdressing.

Irrigation: The crop needs liberal irrigation, so it should be planted in well moist soil condition. The crop needs regular irrigation at an interval of 15-18 days in March-May, at 10-12 days interval during summer months.

Harvesting: First cut is taken at 75-80 days after planting and subsequent cuts are obtained at 30-40 days interval. At least 6-8 cuts are possible annually.

Yield: An average green fodder yield of 150 t/ha per year can be taken.

Utility: The excess fodder can be chaffed and converted to silage along with legume fodder in the ratio of 1:2. During summer this can be converted to hay.

