

Seteria grass

Common name: Nandi grass

Botanical name: *Seteria sphacelata* stapf.

Seteria is a moderate to tall and bunch type grass. It is comparatively good under cool season growth and some varieties have good frost tolerance. It is a fast growing perennial grass recommended for cool and frost prone sub-tropical grasslands. It provides nutritious and palatable fodder for all the year round. It grows faster and produces more herbage and the stem is thin. Its herbage contains moderate to high levels of oxalate. It can be mitigated if harvested at longer intervals (45-60 days). The grass is ideal for green fodder, silage and hay. It grow well at high temperatures, can withstand to drought conditions for fairly long spell. It is shade tolerant.



Soil and its preparation

It can grow on almost all type and fertility status of soils but being exhaustive species, well drained clay loam soils are preferred. It is a long duration crop; hence periodical tillage activities like other crops are not possible after the crop occupies the field. Generally one ploughing with soil turning plough and 2-3 harrowing followed by planking is required to obtain the fine tilth for planting of rooted slips or seedlings.

Varieties

Varieties	Area of cultivation	Green fodder yield (t/ha)
Nandi	Sub tropical hill zone	50-70
PSS-1	Sub temperate hill zone	40-50
Setaria-92	Himachal Pradesh & Utrakhand	40-55

Sowing/planting time

It should be sown in the mid February -July. Planting of rooted slips or seedlings should be done in the month of February- March or after onset of monsoon in the month of July.

Seeds rate and planting method

It is propagated by seed as well as rooted slips. About 2.0-2.5 kg seed is sufficient for planting of one hectare. About 40000 rooted slips are sufficient for planting of one hectare area. In intercropping system, 20000 rooted slips are required. The seed should be broadcast on the bed and covered with thin layer of fine soil. Care should be taken that the seed does not go deeper than

5 cm. Nursery bed should be irrigated after sowing and continued till the seedlings emerge. Seedling becomes ready for transplanting when they attain height of 15-20 cm. The transplanting is done during February and July. Rooted slips are prepared by uprooting a clump, dividing it into rooted slips with small stem. In fields, the seedlings are to be planted at a spacing of 50 cm x 50 cm. Just after planting, irrigation should be done.

Cropping system

Promising cropping systems are Setaria + (Cowpea- Berseem), setaria + ricebean, setaria on bunds and setaria under orchards and groves.

Nutrient management

It is a heavy feeder crop, therefore, it requires heavy amount of organic and inorganic fertilizers. 10-15 t FYM/ha should be well mixed in soil at the time of land preparation. At the time of sowing a basal dose of 40 kg N, 40 kg P₂O₅ and 40 kg K₂O/ha should be applied in bands prior to planting. Subsequently 20 kg N should be top dressed after each cut.

Water management

The crop should be planted in well moist soil condition. During monsoon seasons, the irrigation is rarely required in event of long monsoon failure. First irrigation should be applied just after planting. Subsequent irrigation will depend upon rainfall. The crop needs regular irrigation at an interval of 15-18 days during March to May and at 10-12 days interval in summer months.

Weed management

Regular hand weeding/hoeing ensures good aeration and crop growth as well as control the weed growth. Light hoeing is necessary at 30-35 days after planting.

Harvesting management

First cut at 60-65 days after planting and subsequent cuts are obtained at 25-30 days interval. At least 6-8 cuts are possible annually. In order to encourage quicker regeneration from the basal buds, stubbles of 10-15 cm are to be left out at harvest.