

## OTHER CROPS

### Broom grass (*Thysanolaena maxima*)

**Zones:** All Zones

**Variety:** GBGC-1

**Soil type:**

It is grown on marginal lands and wastelands. It also grows well on a wide range of soils from sandy loam to clay loam and is free from Water logged condition of soil.

**Land Preparation:**

Land should be clean, cross plough the soil and well level the field.

**Time of Planting:**

Mid of March - mid of May is the optimum time of planting.

**Time of harvesting:**

Harvesting starts from Mid February and continues till March end.

**Spacing and Plant Population:**

Row to Row spacing 1.5 m and plant to plant spacing 1.5 m to maintained the tussock or hill population 4, 444 tussock or hill /ha

**Fertilizer and Manure:**

Nutrients	Requirement (kg/ha)	Source	Fertilizer requirement	
			kg/ha	g/pit
N	60	Urea	130	29.25
P <sub>2</sub> O <sub>5</sub>	45	SSP	281	63.23
K <sub>2</sub> O	30	MOP	50	11.25

Planting the broom grass slips/rhizome in fertile soil ensures the best yield. For first year, Farm yard manure 5-10 t/ha or 1-2 kg FYM + 14.62 gm Urea + 63.23 gm SSP + 11.25 gm MOP fertilizer per pit are mixed into the pits before planting, remaining 14.62 gm Urea should be applied before flowering initiation stage in ring method.

From the second year, the whole amount of 29.25 gm Urea + 63.23 gm SSP + 11.25 gm MOP fertilizer should be applied in ring method after harvesting of 1<sup>st</sup> crop and follow the second year doses in the subsequent year.

**Intercultural operation:**

In order to grow broom grass the slips/ Rhizome in the planting site must be clear of

weeds and debris. Intercultural operation in the form of light hoeing is necessary at 30-35 days of planting and also after each cut. Application of weedicide Glycides @ 2.5 ml/lit is recommended to control weeds.

**Gap filling:**

Gap filling should be done 1 month after transplanting to ensure uniformity of plant population.

**Irrigation:**

Generally irrigation is not required during planting time as it is transplanted during monsoon season. If a dry spell prevails irrigation should be applied immediately after planting. Depending upon soil condition during inflorescence initiation stages, single irrigation is required.

**Harvesting method:**

The mature panicles which turn light green or red are harvested in the winter season from Mid of February to end of March. The timing of the harvest is essential as if the plant is harvested prematurely (5–7 days) their production declines, while if it is harvested late it will begin to wilt. The panicles are either harvested by cutting above the soil separating the panicle for stem or pulling the panicles out by hand. It is important to make sure the Harvesting young sprouts are not damaged or the plants uprooted during harvest. The yield will be the lowest in the first and fifth year with the highest in the third. The ratoon of this grass can be taken up to 5<sup>th</sup> or 6<sup>th</sup> year of planting. Generally, the centre of tussock is devoid of new culms during the 4<sup>th</sup> and 5<sup>th</sup> year of planting as they arise from the periphery. To obtain high yield from broom grass, fields are burnt during April after harvesting the crop in 5<sup>th</sup> or 6<sup>th</sup> year. The Rhizome is again planted as per the method described earlier.

**Duration:**

1<sup>st</sup> year takes 11 month duration from planting to harvesting and from 2<sup>nd</sup> year onward it takes 10 months duration.