

## BLUE PANICUM



Blue panicum (*Panicum antidotale* Retz.) also known as “blue panic” belongs to the Poaceae family. It is a perennial grass with height ranges from 1.5-3 m. It is deeply rooted and develops from short, thick, and somewhat bulbous rhizomes. Its stems are erect, rigid, almost woody, and swollen at the base. The leaves are smooth and look bluish where the grass

derives its name from. The grass develops a long panicle of between 13cm and 30-cm long. Blue panicum is an important fodder crop and it produces a good amount of grain. Numerous varieties of the crop are commercialized and available in many local markets.

### Crop requirements

#### Climate and soil preparation

Blue panicum is adapted to tropical, subtropical, and arid regions. Blue panic is a summer grass that benefits from seasonal rains. It can survive mild winters and temporary

flooding for short periods. Blue panicum grows well in loamy to clayey soils. It can grow, where even rainfall is less than 130 mm/year. It is a drought- and salt-tolerant crop, (up to 15 dS/m). The crop responds to soil fertility management and hence does well in relatively more fertile soils.



## Crop cultivation and management

### Sowing

Blue panicum is propagated by seed. Sowing is done in rows 50-100 cm apart and 30-45 cm within the row. Seed of up to 2 kg/ha is required for the crop when sowing the crop at a depth of 1 cm. After seed germination, the plant develops slowly during the first 6-8 weeks.

### Irrigation

Blue panicum grows well with about 300 mm of irrigation water. It can grow in arid areas that receive less than 300 mm

of rain. The crop can tolerate water salinity of up to 15 dS/m.

### Fertilization

Blue panicum grows well in soils enriched with composted manure applied at a rate of about 20 t/ha. Application of about 30 kg N + 30 kg P<sub>2</sub>O<sub>5</sub> + 20 kg K<sub>2</sub>O per hectare is recommended for forage yield increase. In sandy soils with significant nutrient losses, adjustments could be about double the recommended fertilizer quantities.

## Harvest, postharvest, and storage

The potential yield of Blue panicum ranges between 10-50 t/ha of fresh biomass under good management. Biomass harvesting is recommended at 20-day intervals. Delaying harvesting leads to lower quality fodder due to increased lignin and cellulose contents in plant stems. Biomass can be

harvested and processed as hay or grazed from the fields. Store harvested forage in cool, dry conditions to prevent mold and spoilage. Clean and dry seeds to a moisture content of around 10% before storing in sealed containers to maintain viability. Palatability has been associated with the plant flowering phase.



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