





700mm+ 5.0-8.0 Most Soil Types

\* For international sales.

## **Key Features**

- Suitable for environments generally considered outside the normal adaptation range for many Brachiaria species
- Available for sales outside the Americas
- · Will tolerate acid soils of high aluminum
- Forage yields recorded up to 27mt DM/ha/year & 17% crude protein
- · Very palatable, grazing and drought tolerant
- Recommended for cattle, sheep, goats and some types of surface dwelling fish
- · Suitable for direct grazing, cut-and-carry methods, bailing and ensilage

### **Background**

Mulato II is a three-way hybrid (Brachiaria ruziziensis x B. decumbens x B. brizantha). It is the result of three generations of crosses and screening carried out by CIAT's tropical forages project.

Mulato II was developed at CIAT in Colombia from an original B. ruziziensis x B. decumbens cross. This was followed by two generations of hybridisation by open exposure to B. brizantha pollen in the field then commercially released by Grupo Papalotla in 2004.

Mulato II is the second Brachiaria hybrid developed by CIAT. Being an apomictic hybrid, it is genetically stable and does not segregate or divide from one generation to the next.

## **Planting Rate**

8 - 10kg/ha

# **Establishment**

Broadcast sow at 6-8kg/ha dryland or 8-10 kg/ha irrigated into a freshly prepared seedbed. Sow the seed on to the soil surface, and bury the seed no more than 1-2cm under the soil.

## **Variety Management / Agronomy**

Management systems such as rotational grazing, set stocking or cut-and-carry are all suitable. Most farmers in South East Asia prefer cut-and-carry, whilst farmers in the South Pacific set stock for periods up to three months. For cut-and-carry, cut every 40-45 days in the wet season and 60-70 days in the cool season (depending on moisture and temperature).



#### **Performance**

In Asia on low fertile, acid soils (pH 4.7), results showed Mulato II produced between 14 - 17t/DM/ha/year. Approximately 70% was produced in the six month wet season and 30% in the six month dry season without irrigation. Under better fertility and management, dry matter yields in excess of 27mt have been regularly achieved.

Mulato II produces a very high leaf dry matter percentage. In trials in Thailand with other Brachiarias cultivars, Mulato II produced 71% leaf dry matter in the wet season and 86% leaf dry matter in the dry season, significantly more than Ruzi, Signal, Marandu and Toledo.

In southern China on better soils (pH 6.3), Mulato II planted at the end of April produced 35t/DM/ha in seven months, with 11% crude protein, low fibre and a high leaf ratio (85%).

In trials in central and South America, Mulato II produced more dryseason forage and had better milk production over time than Mulato and other Brachiaria cultivars.

### **Animal Production**

In Florida USA, young animals grazing Mulato II pastures at 4-6 heifers/ha averaged 0.4-0.6 kg, live weight gain per day with no concentrates.

In work carried out by CIAT, milk production of cows grazing different types of Brachiaria cultivars was studied. Milk production from cows grazing Mulato II produced 11% more milk during the dry season and 23% more milk during the wet season compared to production from cows grazing signal grass or Toledo.

In Mexico, dairy cows grazing Mulato II produced 30% more milk than cows grazing signal grass because of better forage quality and persistence, which allowed for higher stocking rates.



# **Drought Tolerance**

Mulato II has an extensive root system which allows it to tolerate drought and enables it to have rapid regrowth at the onset of the wet season. Its pubescent leaves allow it to efficiently use moisture deposited on the leaves by the evening dew until late the next morning.

It is the ability of Mulato II to maintain green leafy dry matter during the dry season (85% leaf ratio) that makes it outstanding dry season forage.

### **Adaption to Acid Soils**

In Thailand, Laos and Vietnam, Mulato II grows well on very acid soils with a pH of 4.5-5.0. However for persistence, phosphate fertiliser must be applied to the Mulato II pastures to avoid aluminium toxicity.

In trials on highly acid soils over three years in Thailand, Mulato II produced significantly more dry matter and leaf dry matter than other Brachiaria cultivars.

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