

## BRACHIARIA BRIZANTHA

### The Perfect Pasture\*

#### PASTURE IS THE CHEAPEST OF CATTLE FEEDS

*Brachiaria brizantha* (Signal grass) introduced from East Africa is a vigorous, loosely-tufted, perennial grass with erect, semi-erect or prostrate stems. Under local conditions the prostrate types have given best yields. In Ceylon, *Brachiaria* has been grown successfully in the dry zone, in coconut land in the wet zone and up to 4,000 feet elevation.

#### HOW TO ESTABLISH A PASTURE

##### 1. Select your land

All land that is well drained is suited to *Brachiaria brizantha*. Folds and valley bottoms, if ill drained, can be planted with *Brachiaria mutica*, Para Grass or Water Grass. In relation to systems of land use in the dry zone the un-irrigable lower slopes of a catchment basin can be brought under *Brachiaria brizantha* with advantage.

##### 2. Prepare the land

Clear all shrubs and leave a maximum of 5 trees per acre for shade for grazing animals. Heavy shade in the dry zone is detrimental as *Brachiaria* under heavy shade does not spread and cover the soil but stands thin and erect thus permitting weed growth. *Brachiaria* tolerates more shade in the wet zone. Satin, margosa, teak, palu and mango are suitable for shade.

##### 3. Planting Material

Propagation from seed is not practicable as *Brachiaria* seed loses viability soon. *Brachiaria* is easily propagated from cuttings; rooted cuttings ensure better establishment. Cuttings should be at least 18" long, fully mature and freshly cut, not being more than two days old at the most. If a large area is to be planted first establish a nursery. One acre of well managed nursery will provide cuttings for 15-20 acres of pasture.

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##### 4. Plant in Furrows

The quickest and most economical way to plant is to bury cuttings in furrows made by a mould board plough. Where a bullock-drawn plough is used two people can follow the plough and throw in the cuttings. A tractor-drawn plough will need 4-6 men.

The cuttings are covered by the next furrow slice inverted by the plough, leaving their tips exposed. When the number of cuttings is small, planting may be done by mamoty.

Planting distances are 3' x 3' for planting in furrows and 2' x 2' or 2' x 1½' for planting in holes prepared by mamoty.

Plant during the rainy season and avoid water-logged areas.

##### 5. Use a Legume in the Pasture

Legumes mixed in the pasture provide variety and high calcium and protein content in the feed. Tropical Kudzu—(*Pueraria phaseoloides*) holds promise of competing satisfactorily with the vigorous growth of *Brachiaria* in the dry zone.

#### HOW TO MANAGE A PASTURE

##### 1. Disc and Roll the New Crop

In 3-4 months after establishment in the wet zone and 4-6 months in the dry zone disc harrow the grass to encourage spreading. This operation should be done with the rains. Discing followed by rolling helps to make the land more level for mowing if a mechanical mower is to be used.

##### 2. Adopt Rotational Grazing

Allow grazing only when the pasture is well established in a good sward. Graze rotationally for maximum utilization of the pasture. Allow 10 acres per unit of 50 cows and attendant calves, etc.

In the dry zone after 1 week's grazing rest each paddock for 3 weeks in rainy weather, for 4 weeks in light rainy weather, for 5 in light showery weather and for 8 weeks in dry weather.

In the wet zone 1 week's grazing followed by 4 weeks' resting of paddocks can be followed throughout the year. Where pasture areas are limited tether in rotational strips.

In dry weather restrict grazing to leave at least a 9" height of herbage. In wet weather harder grazing to a 3"-4" height is not detrimental.

### 3. Mow and Disc the Pasture

Grazing should be followed by mowing. If rainy weather prevails disc after mowing. Discing spreads the urine and dung thus giving an even pasture. Mowing cuts down weeds and prevents their seeding. Use mowings for making hay and silage.

### 4. Manure the Pasture

Minimum requirements for average productivity of the pasture are—

Superphosphate — 1 cwt. per acre per year in a single application.

Sulphate of Ammonia — 1 cwt. per acre per year in two equal doses in Maha and Yala.

Much higher yields have been obtained at the Dry Zone Research Institute, Maha Illuppallama with 2 cwt. of Sulphate of Ammonia per acre per year.

#### Ten Reasons

#### WHY BRACHIARIA BRIZANTHA

#### Is Outstanding

- It is easily established by cuttings.
- It competes well with weeds and need not be intercultivated or weeded frequently.
- It resists drought and can also be grazed lightly during dry seasons.
- It thrives under shade and is therefore suitable for pasture in coconut land.
- It grows successfully from sea level to 4,000 ft.
- It protects the soil owing to its close mat-forming growth habit.
- Its yield of dry matter and protein is high.
- It is relished by cattle as pasture and fodder.
- It withstands severe grazing and cutting.
- It is excellent for hay and silage.

Cuttings are available in large quantities in the following live-stock farms:—

Polonnaruwa, Ridiyagama, Karagoda-Uyangoda, Undugoda, Welisara, Nikaweratiya and the Dry Zone Research Institute, Maha-Illuppallama.

Rates: First 1,000 cuttings free.

Further supplies at Re. 1.50 per 1,000.

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Obtain your requirements through the nearest Agricultural Extension Officer.