

PASTURE & FORAGE

2019 - SPRING

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DOLICHOS

RONGAI

Dolichos Bean

A trailing annual/biennial and is best suited to warm areas with rainfall of over 800mm, but some cultivars will grow with about 650mm rainfall. Dolichos beans can be used for silage, grazing or hay. In terms of establishment it needs to be sowed at 50kg/ha in 1m rows during November to January.

RONGAI

Introduced from Rongai area of Kenya to subtropical and tropical Australia in 1962 as CPI-17883(CPI 16883?). It is a late flowering variety with high dry matter production. RONGAI has white flowers and light brown seeds. In the absence of frosts, it may flower over several months. It is most commonly a forage cultivar. Seed weighs 5,000/kg.

Rongai grown in summer in Australia is a prolific and vigorously twining herbaceous annual or short-lived perennial. Stem robust, 3–6 cm, leaves trifoliolate; leaflets broad ovate-rhomboid, 7.5 to 15 cm long, thin, acute apex, almost smooth above and short-haired underneath. Petioles long and slender. Inflorescence lax, fascicled, of many flowered racemes on elongated peduncles. Flowers white.

Pods 4–5 cm long, broadly scimitar shaped, smooth and beaked by persistent style, contain two to four seeds. Seeds are buff or pale brown-coloured, ovoid, laterally compressed with a linear white conspicuous hilum, 1.0 cm long and 0.7 cm broad.

- Can be used for silage, grazing or hay
- Sow 50kg/ha in 1m rows
- Plant during November to January



Grows upto 1 meter high with longer stems in climbing types (upto 6 meters tall). Leaves are pubescent, trifoliolate, 3–15 cm long and 1.5–14 cm wide. Flowers purple or white, 4–20 cm long and 1.2–1.6 cm in diameter on peduncles that are 2–40 cm long. Pods vary in shape and colour, flat or inflated, 5–20 cm long, 1–5 cm wide.

DOLICHOS

HIGH WORTH

HIGH WORTH

Introduced to Australia in 1973 as CPI 30212 (CPI 20212?) from Southern India. Earlier flowering variety, originally intended for grain production (high seed yield) in areas experiencing early frosts. Also has adequate forage dry matter production. High Worth has purple flowers and black seeds. Seed weighs 4,000/kg. It has high seed yield coupled with adequate foliage DM production. It has purple flowers and black seeds. High Worth

- Can be used for silage, grazing or hay
- Sow 50kg/ha in 1m rows
- Plant during November to January

is widely grown in northern New South Wales for forage and will not normally set seed before frosts which occur in late autumn or early winter.

Other Available Varieties

MIXED

COWPEAS

BROWN MIXED

OVERVIEW

Mixed Cowpea is as the name defines a mix between a determinate and an indeterminate growth habit brown cowpea, very much suited to Southern African conditions. Cowpeas are sensitive to day lengths as well as temperature sensitive, which determines growth pattern.

The following are points to bear in mind:

- Soil to be free of weeds
- Planting rate 50kg / ha
- Flowering will begin at 65 to 70 days

Yields of up to 1 1/2 mt/ha are possible depending on weather. An exceptional drought tolerant and disease resistant cultivar. Very widely adapted to different kinds of soil.

- Mix between determinate and indeterminate growth habit
- 50kg/ha planting rate
- 65-70 days to flower
- Yields of up to 1 1/2 mt/ha





COWPEAS

GLENDA

OVERVIEW

GLENDA is a sub-tropical/ Tropical, Legume. It's production period is annually in Summer. In terms of a morphological description it is stouling to indeterminate with medium to fine stems. Its leaves comprise of three hairless leaflets; triangular to egg-shaped measuring 10cm by 7-8 cm.

It is noted as being drought tolerant and serves well as a rotational crop due to a strong Nitrogen fixation. It is a highly palatable hay crop.

It can be used for grain production as well as hay and as a rotation crop. It is adapted to most soil types but one should avoid wet soils and try stay in a pH range of 5.0-7.0 for best results.

GLENDA should be planted during mid October - January.

- Drought tolerant
- Rotation crop with good Nitrogen fixation
- Highly palatable
- Crude protein 14-21%

SEED/HA	10-15Kg
DAYS TO FLOWERING	50-55
DAYS TO HARVESTING	90-110
SEED COLOUR	Red/ Brown
GROWTH HABIT	Upright

DR SAUNDERS

OVERVIEW

DR SAUNDERS is a sub-tropical/ tropical legume that can be described as stouling to indeterminate with medium to fine stems. Its leaves comprise of three hairless leaflets; triangular to egg-shaped that are approximately 10cm x 7-8 cm. There are approximately 8000-15000 seeds per kg.

DR SAUNDERS tolerates drought and hot conditions as well as being a highly palatable hay crop.

- Tolerates drought and heat
- Highly palatable
- Digestibility 56-65%

SEED/HA	15-20Kg
DAYS TO FLOWERING	55-60
DAYS TO HARVESTING	120
SEED COLOUR	Reddish Brown
GROWTH HABIT	Semi-Upright

COWPEAS

BECHUANA WHITE

OVERVIEW

Bechuana White is a summer growing annual. It has an upright growth habit making the harvesting easier than the runner types. Bechuana White is used for grain/hay and silage. It combines well with maize, sorghum and millet.

The grain colour is white when freshly harvested. Grown in hot conditions, moderate acid soils and low fertility. It will not grow in wet soils as it is cold sensitive and doesn't like high humidity. Plant in Nov/Dec for hay and Dec/Jan for grain.

- Upright growth habit
- Grain, hay and silage
- White grain colour when freshly harvested
- Grown in hot and dry conditions



IT 18

OVERVIEW

The variety IT 18 was selected from IITA material and is widely used in the SADC region. It is a semi-bush type, suited mainly to grain production and for its fodder value.

The grain is a light brown colour and will mature in as soon as 90-100 days and can be planted as late as January.

Row width: 45-75cm
In row Spacing: 10-20cm
Seed rate: 50kg/ha
Planting time: November - December

- Has about 8000 seeds/kg
- Seed rate is 50kg/ha
- Planting time is November to December
- Row width: 45-75cm
- In row spacing: 10-20cm



COWPEAS

RAMROD

OVERVIEW

Ramrod is a bush type with an erect plant habit. Flowering days start on average 30 days after sowing with 1-3 flowerings depending on the soil moisture. 1st crop is the most important with bigger peas, the 2nd crop is smaller with smaller pea size. There are usually an average of 6-8 peas per pod

- Bush type - Plant habit erect
- Flowering: 30 days after sowing
- 1-3 flowerings depending on soil moisture
- 6-8 peas per pod



PEARL MILLET

BABALA (OPV)

OVERVIEW

Babala is a tall erect, annual grass that grows 2 meters to 4 meters in height. The stems are pithy while the leaves are long-pointed. Tillers are formed freely at the base of the plant.

It is important to not that pearl millet is NOT A FORAGE SORGHUM.

Babala has a sowing time between October and January and should be sown only after all danger of frost is past, in warm soils, preferably above 18 degrees Centigrade, for best germination. Babala likes hot conditions to grow in.

Its seeding rate is as follows:

Dryland	10-15kg/ha drilled in rows
	15-25kg/ha depending on rainfall
Irrigated	20-25kg/ha drilled rows 25-30kg/ha broadcast

Sow seed to an average depth of half a centimeter under soil surface, roll well to ensure good germination.

Babala is well adapted to both sandy and clay soils, tolerating acid and wetter soils better than forage sorghum.

- Grows 2-4m tall
- Sowing time between October and January
- Well adapted to both sandy and clay soil conditions
- Pithy stems with long-pointed stems



PEARL MILLET

SPEEDFEED

OVERVIEW

SPEEDFEED should be planted in October, November or December. SPEEDFEED is good herbage for dairy cattle, growing calves and horses. There is no danger of prussic acid poisoning. SPEEDFEED has a very fast germination rate. SPEEDFEED tolerates poor acid soils better than maize.

SPEEDFEED has a higher sugar content and improved Rust tolerance. It also is noted as being very drought tolerant. SPEEDFEED is a warm season annual grass adapted to sandy soils. It is economical at- plant population is 5-8kg/ha. SPEEDFEED can be used for grazing, hay, greenchop and silage.

- Robust plant type
- Duration: 80-85 days
- Days to 50% flowering: 53-55
- Plant height: 200-210cm



SPEEDFEED SUPER (HYBRID)

OVERVIEW

SPEEDFEED SUPER is a Hybrid Millet which means that it will grow taller than SPEEDFEED making it better suited for silage. SPEEDFEED has better regrowth for grazing purposes.

PLANT TYPE	ROBUST
DURATION	80-85 DAYS
PLANT HEIGHT	200-210 cm
No. of TILLERS	3-4
PLANT PIGMINTATION	DARK GREEN
EARHEAD SHAPE	CYLINDRICAL
EARHEAD COMPACTNESS	HIGHLY COMPACT
EARHEAD DIAMETER	3.8 -4.0 cm
EARHEAD LENGTH	28-30 cm
EARHEAD BRISTLES	ABSENT
ANTHER COLOUR	LIGHT YELLOW, TURNS BROWN
GRAIN COLOUR	DARK GREY
GRAIN SIZE	LARGE
DAYS TO 50% FLOWERING	53-55R
REACTION TO DOWNY MILDEW	RESISTANT

JAPANESE MILLET

LOCAL SHIROE

OVERVIEW

Japanese Millet is grown principally as a forage grass. Japanese Millet is noted for having the most rapid growth of all millets. It is grown as a late-season green feed in temperate climates. It produces ripe grain 45 days after seeding. Japanese Millet makes best growth on good soils; it is not subject to major fungal diseases.

It is generally an erect tall plant at 2-5ft tall with a panicle inflorescence made up of 5-15 sessile erect branches. The seeds are slightly longer than wide.

- Principally grown as forage grass
- Most rapid growth of all millets
- Late-season green feed
- Plant height: 2-5ft



HYBRID FORAGE SOGHUM

SWEETFEED SUPER

Sweet Sorghum x Sweet Sorghum

Sweetfeed is a vigorous three way cross hybrid forage sorghum. It is a full season maturity hybrid with will reach 3 meters upon maturity. The high leaf to stem ratio of this hybrid allows for high yields with increased palatability. This hybrid has also proven to have excellent root and stalk strength which gives it tremendous stand-ability even under drought stress.

Sweetfeed is a sorghum cross suitable for silage and grazing in winter.

It also has a high protein and sugar content. Sweetfeed is usually grown in a plant population of 8-15kg/ha and, like all sorghums it likes to be grown in warm soils

-
- Vigorous three way cross hybrid
 - Full season maturity
 - High leaf to stem ratio
 - Plant height: 3m
-



HYBRID FORAGE SORGHUM

MULTICUT

OVERVIEW

Multicut can be used for grazing, hay, silage or green chop and is excellent for dry matter production with a high protein and energy content.

This new hybrid was developed in the U.S.A. and tested in South Africa.

Multicut has been bred to surpass many of the existing hybrids in dry matter production, protein and energy content, disease and drought tolerance. It also has rapid re-growth under heavy grazing and unfavourable growing conditions.

FEATURES

Under optimum conditions Multicut will utilize available nutrients and moisture to maximize dry matter and protein production and good management produces high tonnages with superb feed values.

BENEFITS

Multicut can be grazed, cut for hay, silage or fed as green chop and has a quick initial growth with grazing from 3-6 weeks after planting. The re-growth and tillering is rapid and it can grow 50mm a day to a height of 3m.

Multicut can be looked on as stress insurance, recovering well after dry spells and responding rapidly to any available moisture.

Multicut will ratoon after hail or insect damage. Because of its versatility, it can be used as high energy feed for producing dairy or beef cattle, as well as maintenance rations for breeding stock.

- Grazing within 3-6 weeks of planting
- Disease and drought resistant
- High tonnages with superb feed values
- Uses: grazed, hay, silage or fed as green chop



HYBRID FORAGE SOGHUM

BIG KAHUNA BMR

- First true Photo Period Sensitive Brown
- Midrib forage hybrid
- Multi-purpose forage
- Unprecedented hybrid vigor
- Superior yield
- Outstanding lodging resistance
- Large stems and huge leaves
- Very high palatability
- Superb foliar disease resistance



OVERVIEW

This hybrid is a true "break through". Combining both photo period sensitivity and brown midrib traits into one forage, makes this a near perfect hybrid forage sorghum.

The palatability of BIG KAHUNA is so high that cattle will eat the stems down to the soil if not managed well by cell grazing. It is possible to produce 40 or more leaves in a full season.

BIG KAHUNA

OVERVIEW

Late flowering ensures longer utilization and greater yield. This variety is Photoperiod sensitive (PPS) and needs 12hrs:20mins of day length to remain vegetative. It is a Sorghum x Sudangrass. It has a very high yield of quality dry matter as well as a wide window for harvest. It has large, very long leaves that enhance the quality. It has excellent regrowth and recovery. It has a wide use - direct pasture, cell grazing, green chop or silage-one cut.

- 150-160 days of growth
- Can be harvested 3-4 times a season
- Plant colour is tan
- Grain colour is red
- Aprox. Seeds/KG = 36000





ERAGROSTIS TEFF

SA BROWN

OVERVIEW

A summer annual, maturing quickly in 10 – 12 weeks SA brown grows under a wide range of conditions

It is an annual grass used mainly for hay. It is normally established in the summer months. Being shallow rooted and small seeded, a fine firm seedbed is essential for establishment.

- Seeding Rate; 15kg/ha
- Roll for better germination results

- Quick maturing: 10-12 weeks
- Used mainly for hay
- Established in the summer months
- Requires a fine, firm seedbed
- Seeding rate: 15kg/ha



ERAGROSTIS TEFF

EMERALD

OVERVIEW

A re-look at Teff has been a long time coming. Capstone Seeds is now in the process of releasing a couple of new varieties, one of which is Emerald. Emerald is a multi-purpose, white seeded type suitable for hay, grazing or grain.

This plant is leafier and has softer leaves than the traditional S.A. Brown variety. This means that although it still has an application for hay, it can also add grazing to its repertoire of purposes.

For the farmer, this means that he can use Emerald as a grazing pasture to fill the autumn gap. Should Emerald be needed for grazing, the potential is very good because the plant is bigger with a lot of material. The leaf and stem width are wider than S.A. Brown, and it is a taller growing plant.

The value of teff is well known and documented. It can be cultivated under a wide range of environmental conditions, such as on marginal soils and it can also handle dry conditions. Teff can produce a crop in a relatively short time and will produce both grain for human food and fodder for cattle.

Teff is relatively free of plant diseases when compared to other cereal crops. It is therefore a reliable and low-risk crop. It can be stored easily and for relatively long periods of time.

Emerald has all the advantages of S.A Brown and more because it has been bred for bulk and palatability

- Bred for bulk palatability
- Leafier and softer than S.A. Brown
- Multi-purpose, white seeded type
- Requires a fine, firm seedbed
- Can be used for hay as well as grazing and grain



Teff grows best in a fine, firm seedbed and must be well rolled. The seed must not be planted too deep.

Variety protected by plant breeder's rights



ERAGROSTIS TEFF

IVORY

OVERVIEW

Ivory is also a white-seeded teff with a compact, red-tinged inflorescence. The variety has a broad leaf and stem width and is also medium flowering. It is taller growing than SA Brown. IVORY is also a multi-purpose type, but for hay production, silage and grazing the sowing rate will have to be increased to effect a dense sward resulting in reduced leaf and stem width.

Ivory is noted as being a self-pollinating variety with some out-crossing occurring, depending on conditions. It has an upright growth habit and can grow to a height of 120cm.

Depending on conditions Ivory will reach heading in approximately 70-85 days and maturity in approximately 110-130 days.

Sowing rate: 15kg/ha optimum drilled
20kg/ha broadcast

Fertilization: Raise to minimum of P 15mg/ha and K 100mg/kg. 50kg/ha should suffice if the pasture is planted for seed only, but will depend on the residual N status of the soil.

Teff grows best in a fine, firm seedbed and must be well rolled.

- White seeded teff with a compact, red-tinged inflorescence
- Self-pollinating
- Upright growth habit
- Days to maturity: 110-130
- Days to heading: 70-85



ERAGROSTIS TEFF

NILE

OVERVIEW

NILE TEFF should be sown at 15kg/ha optimum drilled (lower rates may allow higher weed infestation). If broadcast, then 20kg/ha.

Teff grows best in a fine, firm seedbed and must be well rolled. The seed must not be buried too deep.

As a general rule, this grass requires 100kg of nitrogen, 15 – 30 kg of phosphate and 25 – 100 kg potassium per hectare. Heavy fertilization is not recommended when NILE TEFF is being grown as a hay crop as it will result in lodging

- A white-seeded teff with a semi-compact to open, dark green inflorescence
- Generally taller growing than SA Brown
- A multi-purpose type suitable for hay, silage, grain or grazing
- This variety has medium leaf and stem width and is medium flowering (SA Brown is early)





SUDAN GRASS

PIPER

OVERVIEW

NILE TEFF should be sown at 15kg/ha optimum drilled (lower rates may allow higher weed infestation). If broadcast, then 20kg/ha.

Teff grows best in a fine, firm seedbed and must be well rolled. The seed must not be buried too deep.

As a general rule, this grass requires 100kg of nitrogen, 15 – 30 kg of phosphate and 25 – 100 kg potassium per hectare. Heavy fertilization is not recommended when NILE TEFF is being grown as a hay crop as it will result in lodging

- Plant late spring to early summer when the soil is warm (above 16°C)
- Average 93,000 seeds per kg. Plant @ 10-15 kg /ha dryland, @ 20-25 kg / ha irrigated
- Very good forage yielding ability, cut hay at 1 m for best TDN and protein levels.
- Silage harvest – cut at full heading, approx 2 mt, dry overnight, chop and ensile .

- Good disease resistance
- Has the palatability characteristic of sweet Sudan grass
- Very low in hydrocyanic acid (prussic acid) content





BLUE BUFFALO GRASS (CENCHRUS CILLARIS)

GAYANDAH MOLOPO

OVERVIEW

A tufted, perennial summer growing grass. Under favorable conditions the grass has lush foliage with characteristic blue/green colour. It has high leaf production and palatability.

Adapted to hot low rainfall areas of South Africa. Usually used for beef cattle but also suitable for dairy cows, sheep, horses and for making hay.

MOLOPO grows up to 1,6m tall, GAYANDAH grows to a height of 1m (finer texture). Mainly used by beef cattle farmers, dairy cattle and sheep (esp. GAYANDAH).

Grows best in a subtropical climate with a minimum 300mm per annum, and prefers heavier soils, but can grow on most types of soil.

Yearly aeration of the soil to a depth of 15-20cm as well as cutting back of dead material to stimulate new tillers is required. Bloubuffel / Blue Buffalo grass should be grazed during early, succulent stage. There are a number of advantages for using Bloubuffel / Blue Buffalo grass - It's palatable with high leaf production, extremely drought resistant, lifespan of 30+ years, high grazing value, recovers rapidly after defoliation and develops new shoots from rhizomes, has the ability to re-seed, no danger of bloating, outstanding disease tolerance.

Disadvantages include that it will survive water logging for a short period only and has poor frost tolerance.

- Good disease resistance
- Very low in hydrocyanic acid (prussic acid) content
- Has the palatability characteristic of sweet Sudan grass



COUCH GRASS

BERMUDA

(CENCHRUS DACTYLON)

OVERVIEW

Grows in sandy soil amongst cultivated crops into a grass suitable for grazing and fodder production. Bermudagrass has consistently proven to be the best perennial grass for irrigated summer pastures but used mainly for lawns. More recently stockmen have shown considerable interest as a source of green forage and hay. This interest has been sparked by the development of tall-growing varieties and improved growing practices.

WHERE TO USE

Bermudagrass is suited for commercial pasture or hay production in areas where (1) land and water costs are relatively low, (2) total soluble salts in water tend to restrict production of other crops, and (3) bermudagrass is also a practical choice for small pasture plots where a home owner wants to keep one or two horses and/or pasture a few head of cattle.

YEILD

Bermudagrass normally can be pastured or harvested from mid-April until frost time in November. Over this seven-month period, a planting generally can carry one to two horses, two to five head of 400 to 600 pound beef cattle, or 2 to 3 cows and calves per acre. Growing cattle will gain about 1/2 to 1 pound per day, if no additional feed is provided.

Hay yields run from 5 to 10 tons per acre a season, harvested in about 6 cuttings. When properly fertilized, irrigated and harvested, bermudagrass hay has a feeding value about equal to alfalfa hay in terms of total digestible nutrients (TDN), but has less digestible protein.

IRRIGATION

The water requirements of bermudagrass will vary slightly from one year to the next and from one area to another, but a total of 5 to 6 acre-feet of water per acre per year is needed

- Yields from 5 to 10 tons per acre
- Grows in sandy soils
- Suitable for grazing and fodder production



ESTABLISHING A STAND

To establish a stand, broadcast the seed at a rate of 10 to 20 pounds per acre. Or seed can be drilled in 20-inch rows with vegetable planting equipment at the rate of 10 pounds per acre. When drilling, it is best to plant in dry seed bed and irrigate-up, unless the soil is disked first to kill germinated weed seed.

Planting depth is extremely important. For best results seed should be planted as near 1/4 inch deep as possible. Do not plant too deep. It is a good practice to apply a light irrigation (or after planting in a moist seedbed). This keeps the soil from crusting and the seed moist. It will be about 90 days from date of planting until first harvest. Do not mow or graze closer than 1-1/2 inches during the first 2 or 3 harvests.

FERTILIZATION

Bermudagrass is a heavy and efficient user of nitrogen. Up to 300 pounds of actual nitrogen per acre per year can be used. This should be applied 3 to 4 uniform application of 75 to 80 pounds per acre. The first application should be made in early March as the grass begins to turn green, and the last application in late August or early September.

WEEPING LOVE GRASS (ERAGROSTIS CURVULA)

ERMELO

OVERVIEW

One of the most useful pastures, especially in the Highveld because it is easy to establish and invariably grows well even on poor soils. Outstanding acid soil tolerance. A relatively short summer grazing period.

It starts growing early in spring but does not produce much bulk until early summer.

The great ease with which this grass can be established on virtually any soil type, accounts for the tremendous area planted throughout the world. Furthermore it has a long life, is tolerant to grazing mismanagement, provides good spring grazing and is by far the easiest grass of which to make hay.

To obtain a good feed value however, it requires high Nitrogen fertilization, thus making it a rather high cost pasture.

Evaluation Synopsis

Acid soil tolerance	Outstanding
Adaptability	Outstanding
Bloat Danger	None
Disease tolerance	Outstanding
Drought leaf-hold	Excellent
Drought survival	Excellent
Feed value	Fair
Foggage potential	Poor
Frost tolerance	Poor
Grazing flexibility	Poor
Insect tolerance	Excellent
Longevity (years)	± 10 years
Palatability	Fair

Description: A tufted perennial

Adaptation: Particularly well suited to the Highland Sourveld, but will grow wherever the rainfall is more than about 700mm. Prefers light soils.

Uses: Primarily a hay grass (cures easily). Also grazing and silage. Unpalatable if allowed to become too rank and if not well fertilized with nitrogen. Very useful in leys – extensive root system aids build-up of soil structure.

Establishment: Sow 2 – 4 kg / ha

Cultivars: Ermelo is the best available but better grazing types may be selected in time.



WEEPING LOVE GRASS

PUK 436

OVERVIEW

PUK 436 is a sub-tropical grass that is tufted and grows to 1.2 - 1.8m tall. Its leaf blades vary in colour from grey to green. They are flat and 500mm long x 3 -7mm in width. There are typically 1 200 000 - 1 500 000 seeds/kg.

The crop is easy to establish and has excellent early spring and early summer grazing. It has a tolerance to cold and drought.

In terms of dry matter production PUK 436 has been known to produce anywhere from 6-14 t/ha per year and can be used for both grazing and for hay.

- Easy to establish
- Excellent early spring and early summer grazing
- Tolerant to cold as well as being drought hardy

It is best suited for well-drained, acid soils of sandy to loam texture with a pH range of 5.8 - 6.8.

Planting is done during October- November; January- February at a seeding rate of 2-4 kg/ha dryland and 5-8 kg/ha irrigated.

KIKUYU

(PENNISSETUM CLANDESTINUM)

WHITTET

OVERVIEW

A stoloniferous and rhizomatous perennial used for Grazing. Requires a high level of fertility. Adapted to areas with over 900mm rainfall. Does especially well in the mistbelt. Kikuyu has one of the highest yield potential of all grasses.

Whittet Kikuyu is a deep rooted self repairing perennial grass. It forms a dense turf and spreads by stolons, which creep both above and below the soil surface. It is predominately spring summer active with a very small amount of winter growth. It is used either as a stand alone turf option in turf blends with Tall fescue or Ryegrass. It is extremely hardy and can tolerate high levels of traffic.

The best time for sowing is late spring, to late summer, as long as your temperature is within the optimum temperatures of 18-29°C, you can expect germination.

- Drought tolerant warm season grass
- Vigorous grower
- Produces quick cover
- Holds colour well in most situations
- Low Maintenance
- High Wear Tolerance
- Moderate Shade Tolerance
- Grows well where other grasses won't



KIKUYU (PENNISSETUM CLANDESTINUM) ACACIA

OVERVIEW

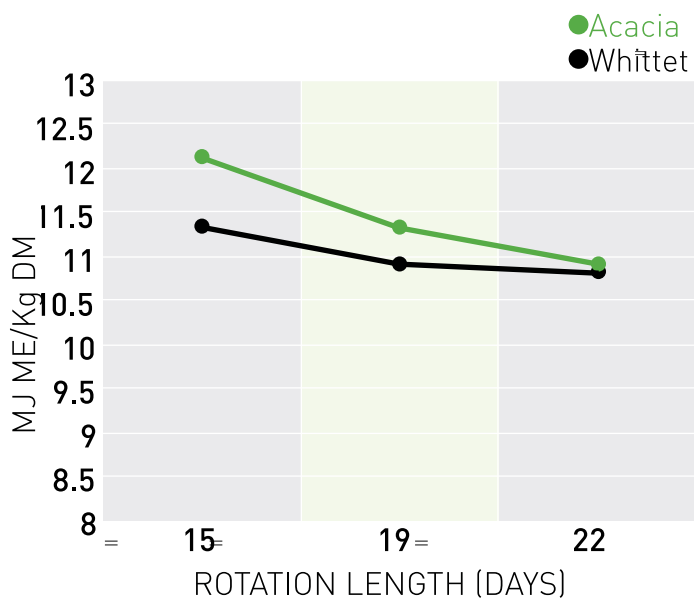
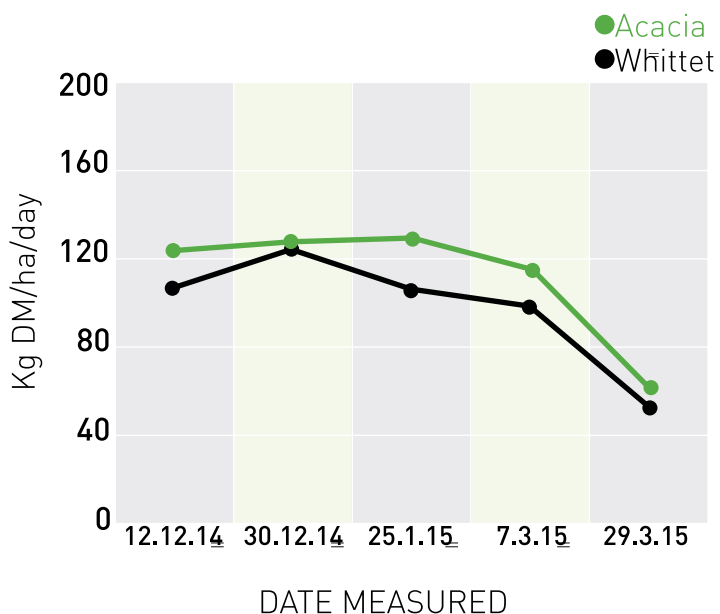
ACACIA is a fast establishing forage Kikuyu with improved cold tolerance and rapid lateral spreading ability.

It was selected from plants at Acacia Plateau at the top of Clarence River catchment close to the NSW/QLD border some 1000m above sea level. This has led to a new variety with an ability to establish and grow under cooler temperatures, yet cover over rapidly.

As an excellent seeder it can produce lower cost seed, enabling growers to sow Kikuyu at more successful, higher sowing rates at a similar cost per ha.

ACACIA is suited to all livestock categories including dairy, beef, sheep, and horses. It is well suited to silage production.

- Rapid lateral spread
- Greater cold tolerance
- Broad seed germination period
- Improved feed quality over Whittet



WHITE BUFFALO GATTON

(PANICUM MAXIMUM)

OVERVIEW

This variety is a leafier grass than Smuts finger grass and has a higher production potential in specific areas. The indications are that it also makes superior foggage. Excellent Palatability and disease tolerance. Longevity (years) is 10+.

Gatton grows in most soil types providing they are well-drained, moist and fertile, although some varieties are tolerant of lower fertility and poorer drainage. Tolerance of low soil pH and high Al+++ saturation is also variable. 'Vencedor' and 'Centenário' were bred for these tolerances; other varieties require liming on acid ultisols and oxisols for best results. The species is generally intolerant of water-logging or salinity.

It is important to keep in mind that this variety requires fertile soils, is intolerant of water-logging, intolerant of heavy grazing and becomes stemmy in not cut out grazed frequently.

- Very leafy
- High quality feed
- High production potential
- Readily eaten by all stock
- Suited to grazing and cutting
- Drought tolerant
- Early season growth in some lines



BAHIA GRASS (PASPALUM NOTATUM)

PENSACOLA

OVERVIEW

A summer growing perennial that develops runners and rhizomes. The runners grow flat against the soil surface and have short internodes. The best time for establishment is February. It is important that the seeded bed be well prepared and weed free.

Used as permanent forage for intensively grazed pastures and as a stable drought-resistant, ground cover/soil binder, particularly in traffic and shaded areas. Suitable for agroforestry. Recommended more for beef than for milk production. If well fertilized and vigorous it can make useful hay. It is used as a ley in four-year rotations to reduce nematode damage to tomatoes (*Lycopersicon esculentum*) and peanuts (*Arachis hypogaea*).

It is important to note that there is a slow rate of establishment and seedlings are susceptible to phenoxy herbicides. It is relatively unpalatable once mature and can become moribund with time. It is not suitable for high pH soils (it can develop iron chlorosis).

- Adapted to a range of soil types
- Tolerates acidic/low fertility soils
- Fair shade tolerance
- Good drought tolerance
- Few pest or disease problems
- Tolerant of close grazing and traffic wear
- Suppresses weeds once established
- Responds well to nitrogen



RHODESGRASS (CHLORIS GAYANA)

KATAMBORA

OVERVIEW

A tufted perennial which spreads vigorously to form a dense mat. Popular due to its versatility, it is often used for erosion control as with tobacco, due to its nematode resistance and can produce 5-7mt of good quality hay.

Used in permanent pasture or as a short- to medium-term pasture ley to restore soil structure, improve organic matter levels, and reduce nematode numbers. Can also be under sown into maize. Makes good hay if cut at or just before very early flowering. Generally not suitable for silage. Provides fair standover roughage when mature, better than *Cenchrus ciliaris* and *Panicum maximum* due to its greater cold resistance and lower loss of dry leaves. Develops good ground cover and effectively controls erosion once established (needs regular defoliation to maintain cover). Also effectively suppresses woody regrowth provided trees and shrubs are not well established prior to planting the grass.

Some limitations that are faced by this variety include the fact that there is a short nutritive peak in many cultivars and it has fluffy seed that is difficult to sow. It is not adapted to acidic and infertile soils as well as requiring high fertility to persist. It also has a low shade tolerance.

- Widely adapted
- Easily established
- Early nutritive value
- High salt tolerance
- Tolerant of heavy grazing
- Few pests or diseases of economic importance
- Some varieties can suppress nematodes
- Good seed production



SMUTSFINGER GRASS (DIGITARIA ERIANTHA)

IRENE

OVERVIEW

Irene is an extremely drought tolerant sweet grass with a wide range of adaptability to climate and soil. Singularly its most valuable attribute is that it can be fogged so successfully with even the frosted material being palatable and nutritious.

All genotypes of *D. eriantha* are tolerant of heavy grazing. Regular grazing is necessary to maintain quality and to minimize disease incidence. Probably best if the grass is maintained between 10-15 and 30-40 cm, although this may not be feasible under sheep grazing. Ideally, it should be grazed every 2-3 weeks.

- Adapted to light-textured soils and red loam soils
- Persistent, productive
- Drought-tolerant
- Tolerant of moderate levels of exchangeable aluminium
- Good cool-season activity in *D. smutsii* types
- Tolerant of fire
- Tolerates short-duration heavy grazing by cattle and sheep
- Contains low levels of soluble oxalate





SILK SORGHUM

SILK

OVERVIEW

Silk Sorghum is late flowering and has good resistance to leaf diseases. Its life expectancy varies from three to six years under normal conditions. It has been lab analyzed for feed value and found to have a protein content of 15% at the soft dough stage.

An erect, robust, tussocky perennial with numerous tillers and thick short rhizomes which curve upwards to produce new shoots near the parental stool. Culms solid and pithy, about 1 cm thick, sometimes reaching a height of 3–3.6 m. Internodes of culm may have a thickened ring. Leaves 2.5–4.0 cm wide, generally glabrous except for hairs near the ligule. Inflorescence is a large pyramidal panicle with secondary and tertiary branches, generally drooping as seed ripens.

USES

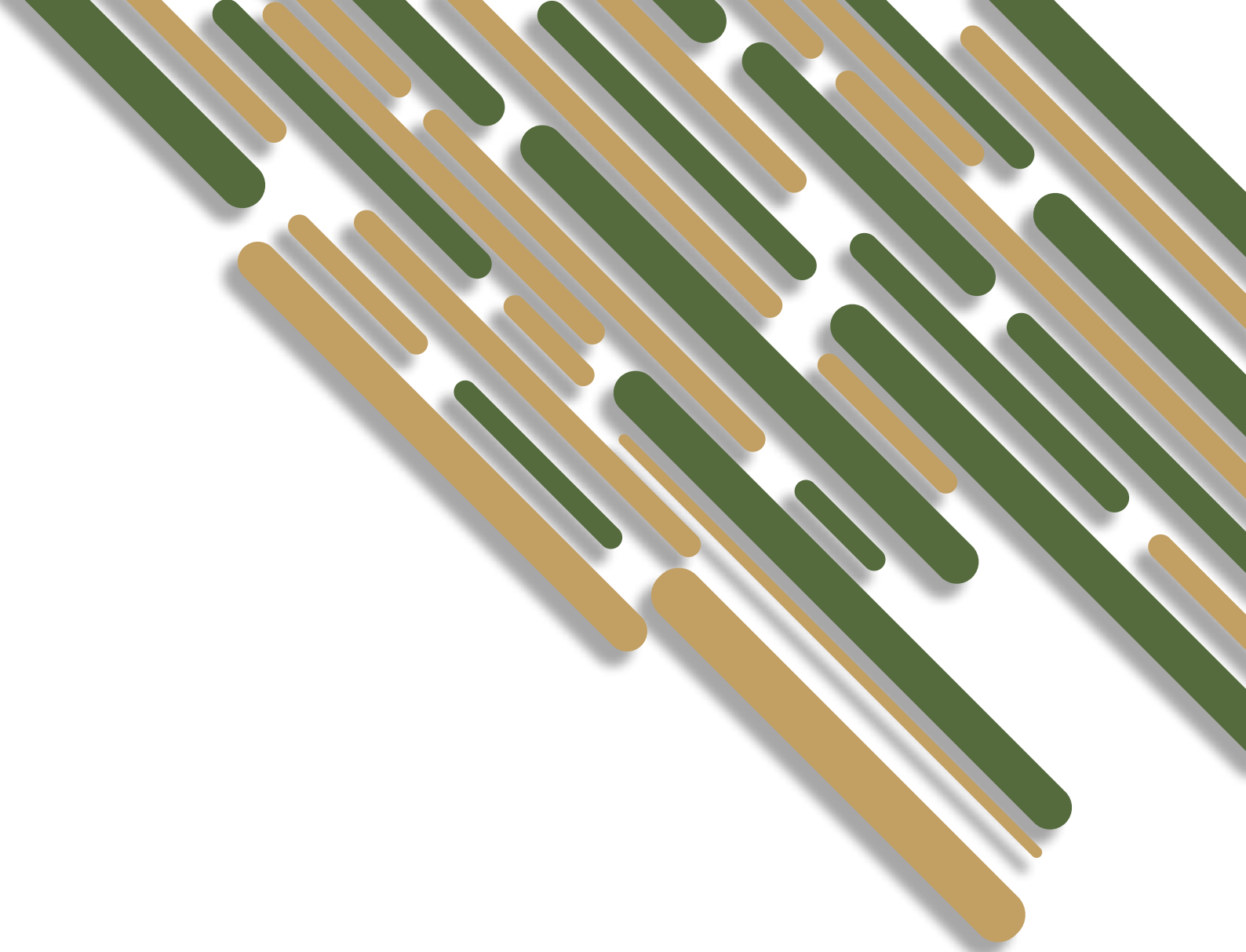
Vigorous medium-term (3–5 years) pasture forages for grazing by cattle, or conservation as hay or silage. Can be used as pioneer species when sown with other more persistent, but slower establishing, perennial grasses for quick cover and feed.

- Easy establishment
- Very productive on fertile soils
- Pioneer species with other perennial grasses or legumes









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