

Tropical and Sub-Tropical Grasses Guide

Buffel (*Cenchrus ciliaris*)

Buffel Grass is a deep-rooting, summer growing, erect tussocky grass. It is the most important sown species in the 400-800mm rainfall zone of QLD. Buffel persists well because of its excellent drought and grazing tolerance. It responds quickly to rainfall and will grow on a range of soil types. Buffel does not tolerate waterlogging or flooding conditions. It is also high in oxalate.



Biloela

Biloela is a taller, more robust Buffel with a deep root system and greater drought tolerance. It is more suited to heavier soil types, higher rainfall and cattle production.



Gayndah & USA

Gayndah and USA Buffels are finer, medium height varieties that establish readily. They are more suited to lighter soils, lower rainfall and for sheep production. They are however less vigorous than *Biloela*.

Creeping Bluegrass (*Bothriichloa insculpta*)

Creeping Bluegrass is a summer growing tufted perennial with creeping (highly stoloniferous) stems that rapidly cover bare ground. It can be slow to establish but produces leafy, good quality feed in summer and autumn, carrying through into winter until frosted. *Hatch* was the original commercial variety that has bluish green leaves, with purple coloured stems and although the crowns send out long runners, they do not readily take root from the nodes to make new plants. Suited to a wide range of soil types.



Bisset

Bisset is the newer variety that has much finer, greener coloured leaves and stems with reddish colourings, establishes faster, more stoloniferous and flowers two weeks later than *Hatch* (later maturity). It will suit a wide range of soils and tolerate lower fertility, while being more drought tolerant.

Guinea Grass (*Megathyrsus maximus*)

Guinea Grass is a clump-forming perennial which grows best in warm frost free areas receiving more than 900mm rainfall. The deep, dense fibrous root system allows it survive long drought periods, but it performs best on well-drained soils of good fertility in high rainfall regions (tropics). Can tolerate heavy grazing.



Hamil

Hamil is a very tall variety, robust, smoother and grows to 3.0-3.5 metres. The leaves are darker green, stem nodes hairless and will grow on more poorly drained soils and seeds more freely. It is well accepted by cattle and its tall growth makes it attractive in tropical country where most fodder is cut rather than grazed.

Humidicola - Tully Grass (*Urochloa humidicola*)

Humidicola, otherwise known as Tully Grass is a highly stoloniferous perennial grass with the ability to withstand prolonged waterlogging, more so than *Signal Grass*. It will grow as far south as Brisbane; however it is not frost hardy and its cool season growth is lower than that of *Signal Grass*. It will establish in low fertility soils and tolerate very acid soils. Humidicola has a vigorous and dense mat forming growth habit that can withstand heavy grazing with minimum weed invasion, which reduces its compatibility with twining legumes. Requires minimum 1000mm annual rainfall.



Panic Bambatsi (*Panicum coloratum* var. *makarikariense*)

Bambatsi is a perennial summer growing grass that is well adapted to medium to heavy cracking clay soils where the average rainfall is greater than 600mm/year. It is a high yielding, very palatable grass easily distinguished by its bluish leaves with prominent white mid rib. Bambatsi can tolerate waterlogging, drought, frost and saline soils. It performs well on melon hole (gilgai) soils in brigalow lands, but is unsuited to sandy and loamy soils of lower fertility.



Panic Gatton (*Panicum maximum*)

Gatton Panic is more suited to the sub-tropical regions of Australia. It is a tall, tufted, summer growing perennial that is often regarded as being more vigorous, palatable and drought tolerant than *Green Panic*. It prefers fertile, well drained soils and has good shade tolerance. Gatton Panic can be distinguished from *Green Panic* by its longer, broader, hairless, greener leaves. Of the two, Gatton Panic is far superior on low fertility soils and establishes more readily.



Panic Green (*Panicum maximum* var. *trichoglume*)

Green Panic is a tufted summer growing perennial species that persists best on high fertility, friable, softwood scrub loams and light clays, disliking sands, hard setting soils and heavy black clays. It is intolerant of waterlogging, very shade tolerant, more so than *Gatton Panic* and is one of the most palatable tropical species available. It has a moderate drought tolerance and a remarkable ability to yield a 'green pick' if mild weather follows winter rainfall.



G2* Panic

G2* Panic is a totally new panic species. It exhibits an abundance of bulky, lush feed, has a big aggressive crown, excellent cold tolerance at all growth stages, very good 'bounce back' and suited to a variety of soils. This panic variety is flexible enough to be used for either grazing or as opportune hay production.

Paspalum Dilatatum

Paspalum dilatatum is a palatable, tufted perennial grass. It responds well to moisture and fertiliser and has a good tolerance to grazing, with a quick 'bounce back' of new growth following. It can grow in a wide range of soil types, but is best suited to higher fertility soils.



Paspalum Wettsteinii

Paspalum wettsteinii otherwise known as 'Broadleaf Paspalum' is a semi-prostrate, clumped perennial species with a wide crown spreading by means of short stolons. It grows well wherever Paspalum species would normally be grown and is more tolerant of poorer soils. It can withstand waterlogging, recovers well from fire, very shade tolerant and combines well with other grasses and tropical legumes.

Premier Digiteria (*Digiteria smutsii*)

Premier Digiteria or 'Digit Grass' is a tufted, robust and highly productive perennial grass that is palatable and highly persistent. Premier will grow on a wide range of soils and is even suitable for infertile soils, including the traprock soils of southern QLD. It can be slow to establish to a full sward, but once established it is very persistent under heavy grazing. Its open sward makes it very compatible with legumes. It is well adapted to inland environments with low rainfall and winter frosts, has good drought, cold and fire tolerance, while also being suitable for horses (has low oxalate concentrations).



Rhodes Grass (*Chloris gayana*)

Rhodes Grass is a summer growing, stoloniferous perennial, whose runners provide good soil cover for erosion control. Rhodes Grass is adapted to a wide range of soil types from infertile sands to fertile brigalow clays. It is however difficult to establish and persist on heavy black clays. These grasses combine well with legumes and have good salt and frost tolerance, while being quick to establish. Low oxalate concentrations make Rhodes Grass a valuable pasture grass for horses.



Katambora

Katambora Rhodes Grass is a diploid, mid-late flowering type and is characterised by strong stolon development, heavy seeding and drought tolerance. In Queensland, it is more persistent on low fertility soils than other Rhodes grass cultivars. With a finer leaf, it remains productive into autumn, as well and being cold tolerant and shooting much earlier in spring.



Callide

Callide Rhodes Grass is a later flowering, tetraploid variety that responds well to increased fertility and irrigation, maintaining feed quality further into the growing season if well managed. While more vigorous and palatable than *Katambora*, it demands higher fertility and may not persist as well on lower fertility soils and is also less drought-tolerant than *Katambora* in more arid districts. It is ideal for grazing and hay production, being well suited to coastal and higher rainfall regions of Northern NSW and Queensland.



Tolgar*

Tolgar* is the first multi-use Rhodes Grass cultivar to be bred for amenity, revegetation and soil conservation purposes, as well as first class forage and hay production, maintaining drought tolerance but exhibiting an aggressive creeping growth habit rather than being erect. Tolgar* has fine textured vegetative growth which is very palatable and is later flowering, giving it the ability to out-yield all other varieties of Rhodes Grass in the market, while being much more salt tolerant.



Toro*

Toro* is a completely new *Callide* type variety. It is later flowering with a later maturity and has exceptional salt tolerance at all growth stages, with the ability to dispose excess salts onto basal growth. Toro* is high yielding, exhibiting fine, very palatable even growth. It shows fantastic persistence under intensive grazing with an aggressive growth habit, good water use efficiency and good disease tolerance.

Setaria (*Setaria sphacelata*)

The Setarias are amongst the most cold tolerant of the tropical grasses, commonly grown in the higher rainfall districts of the sub-tropics. Well accepted by cattle, it is a tufted grass that combines well with twining legumes and can grow up to a height of over 2 metres. They require reasonable fertility, but are fairly tolerant of short-term waterlogging. Setaria species have low sodium content but high oxalate content, especially if fertilised with nitrogen. Commercial cultivars include *Kazungula*, *Narok*, *Solander* and the PBR variety *Splenda**, which was bred by the CSIRO and is later maturing.



Signal Grass - Brachi (*Urochloa decumbens*)

Signal Grass is a low growing, decumbent perennial, with trailing stems and an aggressive stoloniferous root system that roots down at the nodes. Signal Grass is well adapted to a wide range of soils in the humid and sub-humid tropics, but also grows well in the coastal subtropics, showing some drought and cold tolerance; however it cannot tolerate extended waterlogging. It tolerates heavy grazing, responds to good fertility or nitrogen applications, but can be difficult to combine with legumes. A dense mat of signal grass can give good weed control, while Signal Grass seedlings are also tolerant to a pre-emergent application of Atrazine.



Urochloa – Sabi Grass (*Urochloa mosambicensis*)

Urochloa, otherwise known as Sabi Grass, is a perennial grass either tufted or creeping with short stolons, giving it a low growth habit. It is palatable, hardy, quick to establish and is suited to the dry tropics, responding well to rainfall, good fertility and growing in a wide range of well drained soils. Urochloa should not be confused with *Liverseed Grass* (*Urochloa panicoides*), where the leaves of Urochloa are longer and more erect, having straight margins, whereas the leaves of Liverseed are crinkly along the margins.



