



2021/22 Summer crop Variety guide

Grow with
Confidence

BARENBRUG



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Introduction

Barenbrug brings a wide selection of summer crops of sorghum and sunflower varieties to Australian agriculture. These have been developed through extensive research and innovation to suit our vast climates and environments.

The range of grain, forage and sunflower varieties is designed to give producers highly productive pasture to meet the demands of livestock, and grain and seed markets.

Managing pasture is just as important as having the best seed varieties. Our highly experienced and knowledgeable team of territory managers offer valuable, timely advice to support you. With an intimate knowledge of the local region and climate you are sure to be best placed to make the best decisions for your needs.





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Barenbrug's Cracka grain sorghum, the great all-rounder for best performance based on yield, stability and standability.



Grain sorghum

Barenbrug grain sorghum has been extensively evaluated to give the best possible performance based on yield, stability and standability. Tested across major growing districts of Queensland and New South Wales, you can be sure that each variety stands up to the test of yield, lodging, seed size, maturity, tillering, end use and disease and stress tolerance. Our continued commitment to developing grain sorghum germplasm that is adapted to Australian growing conditions continues to deliver advancements in yield and hybrid attributes to allow Australian farmers to grow with confidence.

Grain sorghum breeding program

Barenbrug has a major self-funded internal breeding program based out of Toowoomba, Queensland, employing a full-time breeding team dedicated to delivering new grain sorghum varieties to Australian growers. This breeding program has a long history, with the acquisition of Lefroy Seeds in 2008 and the purchase of the HSR sorghum breeding assets and germplasm in 2013 by Nuseed. Since then, Nuseed has developed a strong position in grain sorghum and Barenbrug is driving this program forward utilising new and existing germplasm from Nuseed and their partners.

The breeding program aims to improve the productivity of Australian grain sorghum growers by developing germplasm adapted to Australian growing conditions, while delivering advancements in yield and enhancing hybrid attributes. Barenbrug collaborates strongly with domestic and international grain sorghum breeding industry partners. We have access to domestic and global Nuseed genetics, in conjunction with Australian genetic resources, strengthening the depth and breadth of the Barenbrug breeding program.



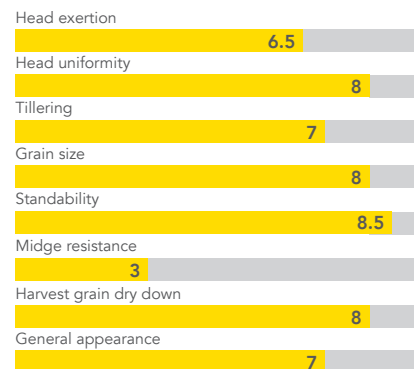
Cracka Grain sorghum



Cracka is the ideal choice for growers seeking a 'great all-rounder'. It has superior standability, meaning less lodging, resulting in an easier harvest and less grain loss. Cracka has shown consistent test weights in tough conditions, consistently going above the threshold for Sorghum 1 classification.

Features

- Mid maturity option
- 70–72 days to flowering
- Medium height
- Excellent seed size
- Semi-open head type
- Low-moderate stay green (dries off well pre-harvest)
- Well suited to dryland and irrigation
- Handles tough conditions
- Solid performer year-in, year-out



Rating: 1 = Poor / 9 = Excellent



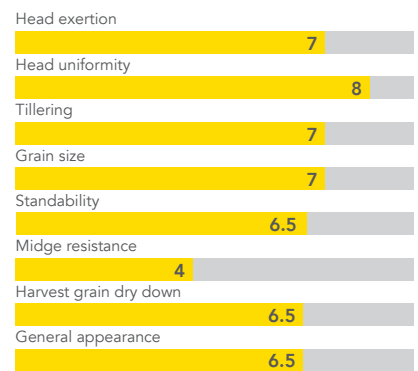
Liberty Grain sorghum



Growers looking for a water efficient headlage and silage option will see Liberty white grain sorghum as a standout choice. It is perfect for growers who wish to add real value to livestock feed rations or diversify their farming operations.

Features

- Mid to late maturity option
- 75–80 days to flowering
- Medium – tall height
- White grain sorghum
- Semi-open head type
- Large, creamy white grain for improved feed values
- Well suited to dryland and irrigation
- Water use efficient silage option
- White grain for diversified markets (livestock feed rations)



Rating: 1 = Poor / 9 = Excellent



White sorghum: A smart choice

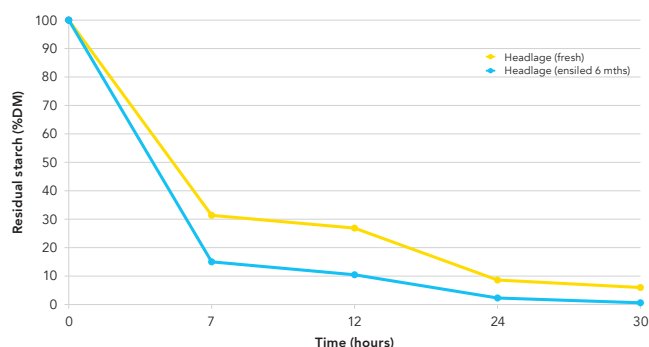
In recent times, white grain sorghum as a summer crop has made a resurgence for the feedlot, dairy and silage industries where efficient water use is a must. White grain sorghum provides an alternative to maize with its ability to handle tough conditions and still produce a cost-effective quality feed source.

Many producers are turning to white grain sorghum for its potential to accumulate dry matter (DM) in warm conditions. It is an ideal rotation crop that tolerates heat and moisture stress.

Australian agriculture has seen an increase in recent years in the number of producers investing in more effective sources of starch content of all grains. Starch digestibility can be increased by 10% with the adoption of different varieties (red vs white grain), combined with harvesting methods (such as headlage). This is where Liberty white grain sorghum stands out. Harvesting as headlage, chopping below the flag leaf produces a high quality forage source without milling.

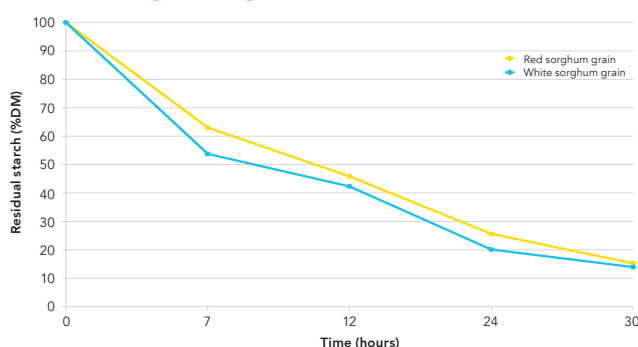
As an added benefit, the adoption of white grain sorghum has a potential role in double cropping following late cut winter cereals.

Starch digestibility of white headlage



Source: DAF, Dairy Australia.

Starch digestibility of red and white sorghum grain



With white sorghum grain, there is a 10% increase in starch availability in the rumen at 7 hours (see Fig 2). A 600kg cow fed 6kg of white sorghum can potentially produce an extra 1.4 litres of milk per day.

6Kg with 15% more available (10% of 66% starch) = 900g of grain utilised



Liberty for headlage

Liberty white grain sorghum has been extensively tested for headlage quality and yield in both dryland and irrigated or high rainfall conditions. Liberty white grain sorghum can be harvested as headlage (the grain portion), footlage (the remaining forage after the grain is harvested) and as silage. After the first harvest of headlage, the remaining plant residue can be harvested as footlage and ensiled.

Why grow headlage

- Higher starch digestibility
- Palatable
- Lower cost source of starch
- No processing required – ready to feed
- Further gains if ensiled
- Retention of stubble improves soil health
- Reduces reliance on high cost concentrates

Harvesting

- Cut below first leaf
- Grain should be just past soft dough stage
- Use a draper style front (Honey Bee) with rollers closed up to crack all grain
- Aim for 50–55% DM of heads
- Inoculate at 1.5X rate of silage
- Demonstration yield – 11.5MT/Ha

Seeding rate

- Irrigated 4.5–6Kg/Ha
- Approx. 140,000–200,000 seeds/Ha
- Dryland 2–4.0Kg/Ha
- Approx. 60,000–120,000 seeds/Ha

When to cut for headlage

	Vegetative phase				Floral phase			Grain filling phase		
Stage	0	1	2	3	4	5	6	7	8	9
	Emergence	3 leaves fully emerged	5 leaves fully emerged	Head initiation	Flag leaf visible	Boot	Flowering	Soft dough	Hard dough	Physiological maturity
Height (cm)		0	10	20	35		100			120
Days	-10	3	9 12	24	35	45 50 55	60–72	75	90	95–110

Harvest timing of headlage/silage





Summer forages

Sow, grow, graze, bale, ensile

Barenbrug's long standing experience in pasture and forage seed research and innovation brings high yielding, high quality hybrid summer forage products to market with leading genetics, including the use of technologies like brown mid rib traits, photoperiod sensitivity and herbicide tolerance.

Breeding focuses on developing market leading forage yields to maximise live weight gains and animal productivity, via grazing, baling or ensiling.

The range of summer forage hybrids available from Barenbrug are second to none, with a product to suit every situation and purpose.

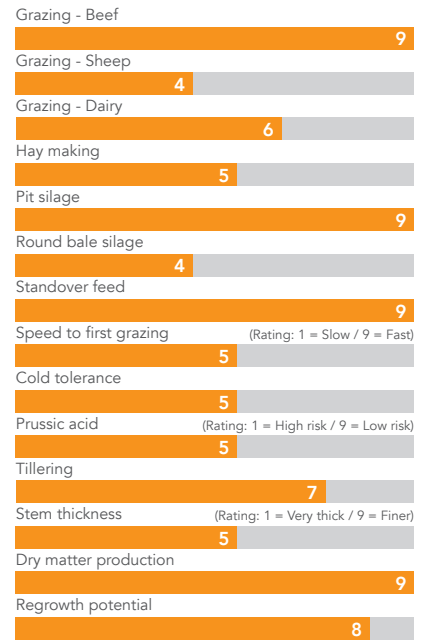


Hunnigreen Forage sorghum

Hunnigreen is a highly palatable, sweet forage that is very late to flower that will not run to head quickly and is an ideal choice for a standover feed.

Features

- Sweet sorghum x sweet sorghum
- High energy feed with superior sugar content
- Quality increases with maturity
- Excellent standover feed for late grazing into autumn and winter
- Late flowering reduces ergot risk
- Suitable for grazing and some hay making situations
- Excellent for silage
- Leafy with excellent palatability
- Can be grazed all summer



Rating: 1 = Poor / 9 = Excellent

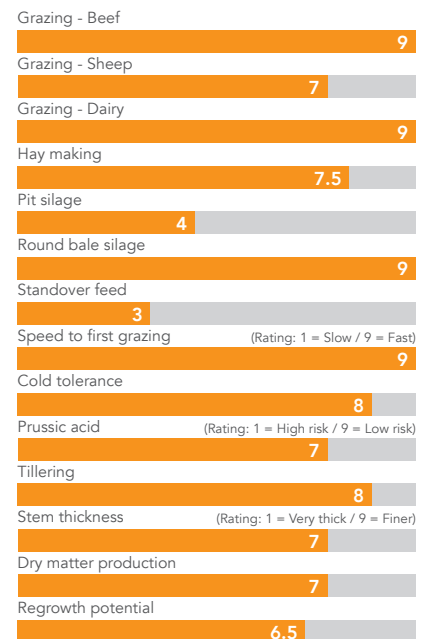


Lush Forage sorghum

When quick and plentiful feed is needed, Lush lends itself to intensive grazing and is reliable and proven across all summer forage areas of Australia.

Features

- Sorghum x sudan grass
- Lower prussic acid levels
- Fine stemmed, especially at higher planting rates
- Very leafy forage with excellent leaf to stem ratio
- Suits intensive grazing and high stocking rates
- Ideal for early grazing
- Makes excellent hay due to high leaf ratio and regrowth ability



Rating: 1 = Poor / 9 = Excellent

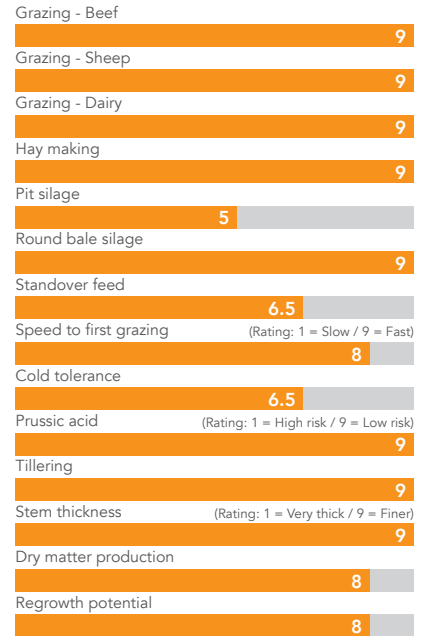


Nudan Forage sorghum

Nudan is ideally suited to dairy, sheep/prime lamb production and haymakers to provide high quality forage sorghum for grazing and hay production.

Features

- Sudan x sudan grass
- Lower prussic acid levels
- Fine stemmed for quicker drydown after cutting
- Excellent leaf to stem ratio resulting in reduced wastage
- Rapid regrowth and recovery
- Ideal for intensive grazing for sheep and cattle
- Well suited to earlier grazing
- First choice for quality hay production



Rating: 1 = Poor / 9 = Excellent

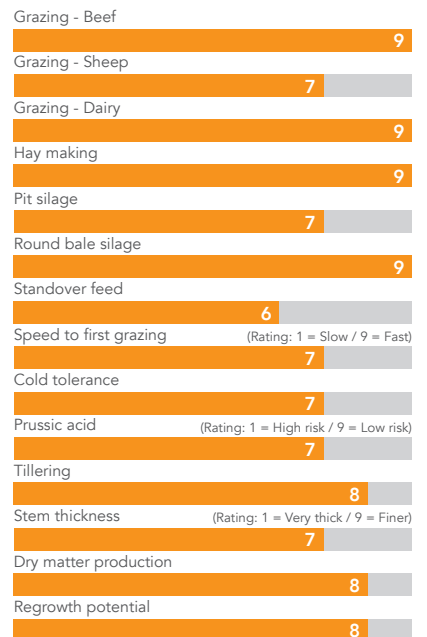


Revolution BMR Forage sorghum

Livestock producers seeking highly palatable, high quality and high yield production, Revolution BMR is the perfect choice for intensive grazing, quick regrowth, hay and silage

Features

- BMR sorghum x BMR sudan
- Superior 12 gene BMR release
- Extremely vigorous hybrid well suited to early sowing
- Lower prussic acid levels - recommended for early grazing
- Fine stemmed and very leafy ideal for hay making and silage
- BMR technology may boost weight gain and milk production by around 20%
- Contains lower amounts of lignin



Rating: 1 = Poor / 9 = Excellent



Sunflower

Barenbrug recognises the critical role sunflower seeds and oil play in promoting healthier living. Delivering sunflower growing solutions that enhance seed production and benefit both the grower and consumer is the major focus of the work that goes into Barenbrug’s sunflower breeding program. The range of sunflower hybrids available from Barenbrug enable producers to capitalise on niche markets, including oil, confectionary, human consumption and birdseed. With market leading yield, oil and disease packages, including the best commercial tolerance to Tobacco Streak Virus (TSV), growers using Barenbrug sunflowers can be sure to grow with confidence.



Ausistripe 14 Sunflower

Ausistripe 14 grain is in high demand for both the birdseed and confectionary markets. The large, even striped grain is a feature of this exciting hybrid, with an ability to produce high tonnages of market preferred grain reliably and consistently.

Features

- Grey stripe hybrid
- Mid oleic oilseed
- Birdseed and confectionary markets
- Medium maturity
- Semi-erect head type
- Medium to tall plant height
- Strong seedling vigour
- Excellent standability
- Spring and summer plantings
- Early or late season planting option
- Superior TSV tolerance

Market - Birdseed	9
Market - Oil	5
Oil production	5
Seed size & shape	7
Seedling vigour	9
Early seedling vigour	8
General appearance	8
Lodging	8
Disease tolerance - Tobacco Streak Virus (TSV)	9
Disease tolerance - Rust	8
Disease tolerance - Alternaria	7

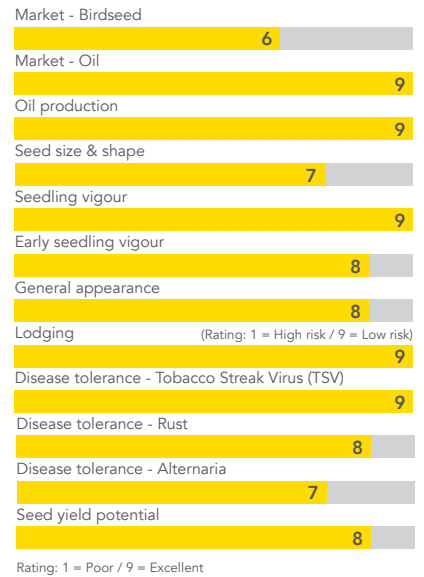


Ausigold 62 Sunflower

Any farmer wanting to grow a proven monounsaturated oilseed hybrid, which is in high demand from processors due to the consistently high oleic oil levels produced and the capability of maximising both grain and oil yield, should have Ausigold 62 as their sunflower hybrid of choice.

Features

- Black seed hybrid
- High oleic (monounsaturated) oilseed
- Market leading oil content (%)
- Medium maturity
- Semi-erect head type
- Medium plant height
- Shorter plant - excellent standability
- Spring and summer planting suitable
- Ideal for early spring plantings
- Excellent grain to oil yield
- High seed yielding potential
- Best commercial TSV tolerance
- High market acceptance

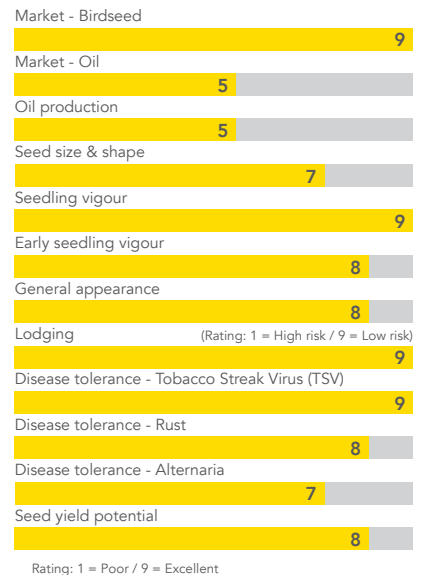


Ausiclear 20 Sunflower

Ausiclear 20 is the first herbicide tolerant sunflower hybrid to be released in Australia. It is tolerant to the herbicide Intervix® from BASF.

Features

- Black seed hybrid
- High oleic (monounsaturated) oilseed
- Early/medium maturity
- Semi-erect head type
- Short/medium plant height
- Herbicide tolerant – for use with Intervix® from BASF



Product trait comparison table

Trait	Cracka	Liberty	Lush	Revolution BMR
Product type	Grain	Grain	Forage	Forage
Hybrid type	Sorghum x sorghum	Sorghum x sorghum	Sorghum x sudan	BMR Sorghum x BMR sudan
Maturity	Medium	Medium - late	Early	Medium
Head type	Semi-open	Semi-open	Open	Open
Photo period sensitive	No	No	No	No
Grain colour	Red	White	Red	Red
Brown mid rib trait	No	No	No	Yes
Planting time	Spring / Summer	Spring / Summer	Spring / Summer	Spring / Summer
Planting soil temperature	16°C and rising	16°C and rising	16°C and rising	16°C and rising
End use	Grain, livestock ration, feed	Grain, headlage, silage, livestock ration, feed	Grazing, hay, green manure, plough down, feed pellets	Grazing, hay, premium hay, green manure, plough down, silage, feed pellets
Production zones	All	All	All	All
Tillering	Medium - high	Medium - high	Medium	High
Regrowth potential	Low	Low	High	High
Quick feed	Not ideal	Not ideal	Yes	Yes
Standover feed	No	No	Not ideal	Not ideal
Headlage	Not ideal	Yes	Not ideal	Not ideal
Silage	Not ideal	Yes	Not ideal	Yes
Green manure / plough down	Not ideal	Not ideal	Yes	Not ideal
Cover crop	Yes	Yes	Yes	Yes
Marginal dryland / extensive	Yes	Not ideal	Yes	Not ideal
Good dryland	Yes	Yes	Yes	Yes
Irrigation	Yes	Yes	Yes	Yes
Coastal	Yes	Yes	Yes	Yes
Narrow rows	Yes	Yes	Yes	Yes
Wide rows	Yes	Yes	Yes	Yes
Seed treatment(s)*	Thiram, OptiCOTE Plus®	Thiram, OptiCOTE Plus®	Thiram, OptiCOTE Plus®	Thiram, OptiCOTE Plus®
Bag size	20Kg	20Kg	20Kg	20Kg



Nudan	Hunnigreen	Pearler	Ausigold 62	Ausiclear 20	Ausistripe 14
Forage	Forage	Forage	Grain	Grain – lmi tolerant	Grain
Sudan x sudan	Sweet x sweet	Hybrid pennisetum	Hybrid sunflower	Hybrid Sunflower	Hybrid sunflower
Late	Ultra late	Ultra late	Medium	Early – Medium	Medium
Open	Open	Panicle	Semi-erect	Semi-erect	Semi-erect
No	Yes	No	No	No	No
Red	Red	Brown	Black	Black	Grey stripe
No	No	No	No	No	No
Spring / Summer	Spring / Summer	Spring / Summer	Spring / Summer	Spring / Summer	Spring / Summer
16°C and rising	16°C and rising	18°C and rising	10°C and rising	10°C and rising	10°C and rising
Grazing, hay, premium hay, silage, feed pellets	Grazing, hay, silage, green manure, plough down, feed pellets	Grazing, hay, silage, premium hay, feed pellets	Oil (primary), birdseed, livestock ration, grain, ornamental	Oil (primary), birdseed, livestock ration, grain, ornamental	Birdseed (primary), confectionary (primary) oil, livestock ration, grain, ornamental
All	All	All	All	All	All
Prolific	High	Medium - high	Nil	Nil	Nil
High	Medium	Medium	Nil	Nil	Nil
Yes	Yes	Yes	Not ideal	Not ideal	Not ideal
Not ideal	Yes	Not ideal	No	No	No
Not ideal	Not ideal	Not ideal	No	No	No
Yes	Yes	Yes	No	No	No
Not ideal	Yes	Not ideal	No	No	No
Yes	Yes	Yes	Not ideal	Not ideal	Not ideal
Yes	Not ideal	No	No	No	No
Yes	Yes	Not ideal	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Not Ideal	Not Ideal	Not Ideal
Yes	Yes	Yes	Yes	Yes	Yes
Thiram, OptiCOTE Plus®	Thiram, OptiCOTE Plus®	Thiram	OptiCOTE® Select	OptiCOTE® Select	OptiCOTE® Select
20Kg	20Kg	20Kg	200,000 kernels	200,000 kernels	150,000 kernels

For more information please contact your local Territory Manager:
<https://barenbrug.com.au/contact-us/sales-agronomy>.



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