

PIONEER

A YATES FAMILY BUSINESS



SORGHUM

2026-2027



We enjoy growing it

The Baileys share their enthusiasm for sorghum after six decades



Getting your
crop off to a
good start

Five industry
leading forage
hybrids

Replant Plus
seed replacement
guarantee



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It's a pleasure to share with you the Pioneer Sorghum Catalogue for the 2026-27 growing season, which contains information on our latest sorghum, forage and inoculant product line-up. Thanks also to James Bailey (page 4), Will Turner (page 28) and Xander Armstrong (page 40) for sharing the stories behind their successful farming businesses.

The 2025-26 season delivered exceptional top-end sorghum yield results in those areas that received timely rainfall, while crops in areas that experienced a more traditional hot, dry growing season still delivered solid performance. The trend towards capitalising on early sowing opportunities continued with a significant portion of the main season 2025-26 sorghum crop sown before the start of October, with many positive results. If you are thinking of sowing early this season, make sure to read the technical article on page 22 for tips on how to maximise your yield potential.

This season's Pioneer sorghum line-up includes seven hybrids covering a range of maturities. We are excited to launch Pioneer® brand A30, a new mid-quick maturity hybrid with a promising agronomic and yield package. To learn more about our hybrid development and research programs, see page 10.

We have added a new brown mid-rib sudan Prime BMR to our forage range. This exciting new hybrid delivers outstanding quality and exceptional yield potential, making it the premium choice for intensive grazing or high-quality conserved feed.

Last year, Pioneer Seeds celebrated 50 years since the company first began selling seed to Australian farmers. This year marks another significant milestone - the centennial anniversary of the Pioneer brand and its global business. Sincere thanks to the generations of farmers and those others who supply and support them, who have helped shape the company's development through the years.

The Pioneer team joins me in wishing you all the very best for the 2026-27 season. As always, we appreciate your support and are committed to helping you extract the maximum return from your investment in Pioneer seed.

With warmest regards,

Ben Vercoe
Pioneer® Seeds Summer Crop Portfolio Manager



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COVER STORY



PIONEER LONG LOOK

We strive to produce the best products on the market.

We deal honestly and fairly with customers, employees and business associates.

We vigorously market our products, but without misrepresentation.

We provide helpful management information to assist customers in making optimum profits from our products.





THE BAILEY FAMILY,
BROOKSTEAD, QLD



Sorghum leads *the Bailey rotation*

At Brookstead on Queensland's Darling Downs, sorghum has been part of the Bailey family's farming system for more than six decades. From the time James Bailey's great grandfather Mervyn purchased "Denby" in 1961, to today's modern, high efficiency operation, sorghum has remained a cornerstone crop – one that continues to evolve alongside the business.

"My great grandfather came from a small dairy farm at Southbrook" James says. "He bought the farm we live on now in 1961, and since then, it's been my great grandfather, grandfather, Dad and now me farming this land. We've been growing sorghum ever since".

Today, James and his father, David, manage a diversified dryland

and irrigation operation spanning approximately 3,500 hectares, with 1,980 hectares planted to sorghum in the 2025-2026 growing season. James lives on the property with his wife, Tash, and their daughters, Elsie and Heidi, alongside his parents, Carmen and David.



While the business is grounded in long standing experience, its direction has been shaped just as strongly by a willingness to invest in new technology and efficiency gains.

"Since we bought the farm, the biggest thing we've done is expand land size and improve efficiency" James says. "We've installed lateral overhead irrigators across the farm, built significant on farm grain storage, and moved everything to an 18 metre system for planting and harvesting. Between the irrigators and the silos, those have been the best investments we've made".

Running a full zero till operation, the Baileys now operate a fully custom precision-planting system — an early move that positioned them ahead.

"In 2016, we purchased our first 18 metre planter, built locally by RBE in Dalby. At

LEFT David and James Bailey.



the time, it was a big talking point, but we haven't looked back. Every pass through the paddock now is about being as efficient as possible — fewer hours on tractors, fewer hours on people, but better timeliness".

Sorghum fits neatly into that approach. The farm typically operates on a flexible two thirds summer crop, one third winter crop program, rotating sorghum with wheat, chickpeas and a fallow.

"Sorghum is our dominant summer crop" James says. "It just works in our rotation. The stubble is one of the best we can have — whatever follows it, whether it's wheat, chickpeas or mung beans, always seems to benefit".

Under irrigation, sorghum has also proven to be one of the most water efficient crops on the farm.

"With overhead laterals, sorghum is almost like a funnel" James says. "It just channels that water straight into the root zone. It responds incredibly well, and we get a lot of return for every megalitre we put on".

The 2025–26 sorghum crop was planted under irrigation, with both Pioneer® brand A50 and A88 hybrids, on 18 September — squarely within the Baileys' preferred September–October planting window.

"That timing is ideal for us" James explains. "It brings harvest into late

January or early February, which works perfectly for temperatures and overall workload".

Planting was carried out using a fully custom 18 metre RBE bar fitted with Shoup row units, vDrive and DeltaForce, on 40 inch row spacing. Seed was sown

applied in total — once at planting on 20 September, followed by 20 October, and the final on 18 November. From November onwards, conditions shifted dramatically.

"Once November hit, things changed pretty quickly" James says. "We had

Standability on all the Pioneer hybrids was exceptional – it wasn't going anywhere. It was really good to harvest

at a rate of 100,000 seeds per hectare.

Nutrition was pre-applied to drive early biomass and support yield potential. James used 400 kg/ha of urea upfront, followed by 40 kg/ha of Starter Z placed with seed at planting.

The season got off to a difficult start, with a dry soil profile and challenging conditions.

"The start was shocking" James says. "August, September and October were hot, dry and windy, with intense south westerlies. We had a very dry profile at planting and had to water quite heavily early on".

Irrigation was applied strategically across the crop, with approximately 1.5 ML/ha

good rainfall through November and December, which looked after the crop through flowering. By that point, the season really turned in our favour".

In crop rainfall totalled approximately 270 mm across the sorghum growing period.

Weed management at planting included 0.5 L/ha Dual Gold and 1.5 L/ha Glyphosate 450. In crop control included an application of Starane® and atrazine on 9 November.

"Fleabane is probably our main weed in sorghum, along with bell vine and cow vine" James says. "If we ever get grass issues, we'll look at inter row cultivation, but we didn't need to do that this season".

Insect pressure was more challenging. One application of ViVus Max was applied at 150 mL/ha around flowering for heliothis control, though James notes pressure was unusually high across the district.

"The heliothis pressure was through the roof this year — the worst I've ever seen" he says. "Some blocks had to be sprayed twice. We were checking almost daily with the agronomist, and you'd go back a couple of days later, and the crop was heavily infested again, it was like a blizzard".

Despite the pressure, the crop held together well. The sorghum was sprayed out on 18–19 January and harvested on 29 January.

At harvest, both hybrids stood out for standability and harvestability.

"Standability on all the Pioneer hybrids was exceptional — it wasn't going anywhere" James says. "It was really good to harvest".

A50 yielded around 10.5 t/ha under irrigation, while A88 delivered between 9 and 10.5 t/ha — results James describes as slightly above average, even for a strong summer.

"The A50 tillered very evenly and had very good head size" he says. "It did take a bit longer to mature than the A88, which tends to get in, get wrapped up and get done, but everywhere we had A50, it held up with or out yielded other varieties. Across the board, it was the better crop for us".

Looking ahead, both hybrids will remain part of the program.

"We'll definitely be growing A50 and A88 again this summer" James says. "We'll probably favour A50 a bit more if we get the rain, but we'll still have a mix across the place".



TOP James and David Bailey with Pioneer Territory Sales Manager Ben Thrift (centre).



Farm *walk*

- 1,980 ha sorghum planted in 2025-26 season
- Planted Pioneer brand A50 and A88 hybrids under irrigation
- A50 yielded 10.5 t/ha and A88 9-10.5 t/ha
- Values sorghum for its rotational benefits and water efficiency

Supported by Pioneer Territory Sales Manager Ben Thrift, James values practical, in paddock advice just as much as genetics.

“He’s proactive and will come out and have a proper face to face conversation” James says. “If conditions get tough, he’ll recommend the right hybrid for the situation, and that makes a big difference”.

For the Bailey family, sorghum remains a crop that bridges generations — shaped by decades of experience, but constantly refined through technology, efficiency and informed hybrid selection.

“It works for our system” James says. “We enjoy growing it, we’re well set up for it, and when everything lines up, it really delivers”.

Scan here to see the Baileys’ A50 crop being harvested.



Breeding and research *keys to success*

The combination of a comprehensive international and Australian sorghum breeding program, coupled with industry-leading research, is allowing Pioneer Seeds to deliver new, high-yielding grain sorghum hybrids to local growers.

Each new hybrid delivered to market represents the culmination of years of investment, beginning with parent line and hybrid breeding and testing by Pioneer sorghum breeders through to comprehensive on-farm and independent research.



Steps in hybrid development

While it is relatively easy to produce hybrid seed for crops such as corn — where there is physical separation between the male and female parts of the plant — it is much more difficult in self-pollinating crops like sorghum where each flower contains both male and female parts.

The key breakthrough that made commercial hybridisation of sorghum possible was the

discovery and utilisation of a reliable cytoplasmic male-sterility (CMS) system in the 1950s. The flowers of female parents, which carry the CMS gene, produce no pollen, and they are cross-pollinated by a male that carries a fertility restorer gene. The gene is necessary to ensure that the hybrid seed (which is harvested from the female) is fertile, so that when farmers plant it, the crop can flower and self-pollinate.



Pioneer’s global breeding program

Pioneer Hi-Bred International entered the sorghum market in the 1950s. Since then, they have built a large, diverse sorghum genetic library and developed one of the most comprehensive breeding programs in the world.

Pioneer’s sorghum research group utilises three research stations in the United States and six additional stations in sorghum-growing regions around the world to develop elite parent lines and hybrids. Pioneer sorghum breeders annually evaluate over 100,000 yield plots and over 200,000 individual rows are grown in breeding nurseries for inbred development programs.

New breeding techniques and improved information management have increased the efficiency of the sorghum breeding program. The development of molecular markers for disease tolerance traits allows the identification of resistant genotypes while reducing the expense and errors associated with field screening. New statistical tools are also being developed that will combine molecular information with pedigree and trait information to further enhance breeding strategies.



Parent breeding



The Australian sorghum breeding program’s first focus is to procure and breed genetically diverse parents, which will become the parents of the next crop of hybrids.

Sorghum Breeder Ivan Calvert starts the process by using predictive breeding tools to simulate and predict the best-performing genetic combinations. Promising parents are then sourced from Pioneer breeding stations in North and South America as well as South Africa.

Australia’s strict biosecurity laws mean that only small quantities of sorghum seed can be imported into the country, and it must be grown in a glasshouse under quarantine conditions. Parent lines are inspected by an authorised person three times throughout the growing season, and the harvested seed is also inspected.

After release from quarantine, the parent lines are grown in winter and summer nurseries to multiply seed volume. While some parents enter the hybrid breeding program, the majority are used to breed genetically diverse parent lines, which are better adapted to local growing conditions.

Each parent (also known as an inbred) is a genetically uniform strain developed through several generations of self-pollination or backcrossing, resulting in a population that breeds true, meaning offspring consistently resemble the parent. Inbred breeding is a slow process that takes around five years for a male and eight years for a female line.



STRIKE trial program

Each season, the Australian research team plants and harvests around 20 grain sorghum Seed Technology Research In Key Environments (STRIKE) trials through the main growing areas of Queensland and New South Wales. Trials include a mix of commercial and pre-commercial Pioneer hybrids as well as key competitor checks.

STRIKE trials are planted in plots using precision research planters on farm within a commercial paddock of grain sorghum. Each trial has a total of three replicates and utilises diagonal check hybrids to help correct for environmental variation across the trial site. The research team monitor STRIKE trials throughout the growing season and plots are scored for a wide range

of agronomic traits. To help minimise edge effects, the centre two rows of each plot are harvested using a small-plot grain combine, which measures yield, grain moisture and test weight. Samples are collected for an assessment of grain characteristics and screenings. Agronomic management of STRIKE trials is conducted exactly the same as the surrounding commercial crop, to ensure performance is assessed under local on-farm conditions.

Each season, multi-year hybrid performance information collected from the research and STRIKE trials is collated and statistically analysed using customised statistical analysis software.



National Variety Trials

Once a hybrid has reached the second year of the STRIKE program, seed is also provided to the Grains Research and Development Corporation (GRDC) for inclusion in the National Variety Trials (NVT) program.

The NVT trials were established in 2005 to assist Australian grain growers and their advisors in decision-making by providing information on commercially available hybrids, including comparisons of yield performance, disease resistance, and grain quality.

“The NVT trials provide independent data that further validate our in-house results” says Ivan.



On-farm side-by-sides

Hybrids are tested for three years in the STRIKE program. In their final year, the handful of hybrids that possess promising agronomic, yield and grain appearance characteristics are planted in side-by-side strips alongside commercially available hybrids in growers' paddocks.

"The side-by-sides allow us to do a final 'ground truth' of the research and STRIKE trial data, giving us confidence that the hybrid will perform well under a range of commercial growing conditions" says Ivan.

Pioneer Summer Crop Portfolio Manager Ben Vercoe believes the side-by-side trials offer another benefit to growers.

"The side-by-sides provide us with data from commercial-scale plots, and at the same time, they provide growers with the opportunity to see how our new hybrids perform under their unique growing conditions" says Ben. "It's a great chance to get a look at what's coming through the research pipeline and how it compares with what you are currently growing".

Commercial release

The final stage of the process is commercial release, which occurs at least seven years after the initial test crosses were made. While the testing process starts with hundreds of new sorghum hybrids, each year only a select few make it into the Pioneer bag and into the hands of Australian growers.



If you would like to visit one of the STRIKE trials in your region, please contact your local Pioneer Territory Sales Manager (TSM) or reseller.



Ivan Calvert
Pioneer® Seeds Sorghum Breeder

According to Ivan

Sorghum breeder Ivan Calvert has been part of the Pioneer Seeds Australian breeding effort for the past 32 years.

"I love the diversity that my role delivers and the challenge of developing the next best hybrid" says Ivan. "It's great to be able to deliver to market new hybrids which have been specifically bred for our local growing conditions, and which can offer growers higher and more stable grain yields".



Sorghum hybrids

From idea to product, Pioneer® brand sorghum hybrids are developed with one clear focus – helping you succeed on farm.

Pioneer® Seeds offers Australian-bred sorghum hybrids, combining elite genetic and agronomic traits with stellar defensive characteristics in a wide range of maturities. Backed by extensive research, local testing and supported by our

knowledgeable and experienced field team, Pioneer® brand sorghum hybrids give farmers the confidence of proven performance across a wide range of growing environments.

Whether you're farming in Northern Queensland, Central West New South Wales or anywhere in between, you'll find the right product for your paddock in this season's Pioneer line-up.



Robust, consistent and resilient.

- Medium-tall hybrid with moderate tillering and strong early seedling vigour.
- Excellent height uniformity with an even, semi-open primary head and tillers.
- Very good pollen production and excellent midge resistance rating.
- Great head exertion, medium dry down and reliable standability providing confidence at harvest.



A30 is a dependable new medium–quick option for dryland environments, with strong STRIKE and NVT trial performance demonstrating competitive yield within its maturity class.

FLOWERING MATURITY	QUICK - MEDIUM		LONG			
HARVEST MATURITY	QUICK	MEDIUM		LONG		
HEAD TYPE	OPEN	SEMI OPEN	SEMI CLOSED	CLOSED		
TILLERING	LOW	MOD - LOW	MOD	MOD - HIGH	HIGH	
HEAD EXERTION						7
HEIGHT UNIFORMITY						7
STALK LODGING CHARCOAL						7
STALK LODGING DROUGHT						7
GRAIN SIZE						7
EARLY VIGOUR						7
POLLEN SCORE						7

Poor (1) - Excellent (9)

☐ Recommended for me



Reliable hybrid with a great trait package.

- Strong early vigour supports rapid, even establishment.
- High yield potential driven by significant primary head and tiller contribution, providing flexibility at different populations.
- Protects yield with an outstanding midge resistance rating.
- Fast dry down brings the primary head and tillers into maturity together, ready for a seamless harvest.



A50 is a robust hybrid with its overall trait and agronomic package suited to a wide range of soil types and a broad sowing window.

FLOWERING MATURITY	QUICK	MEDIUM	LONG		
HARVEST MATURITY	QUICK	MEDIUM	LONG		
HEAD TYPE	OPEN	SEMI OPEN	SEMI CLOSED	CLOSED	
TILLERING	LOW	MOD - LOW	MOD	MOD - HIGH	HIGH
HEAD EXERTION	● ● ● ● ● ● ● ○ ○ 7				
HEIGHT UNIFORMITY	● ● ● ● ● ● ● ● ● 9				
STALK LODGING CHARCOAL	● ● ● ● ● ● ● ○ ○ 7				
STALK LODGING DROUGHT	● ● ● ● ● ● ● ● ○ 8				
GRAIN SIZE	● ● ● ● ● ● ● ○ ○ 7				
EARLY VIGOUR	● ● ● ● ● ● ● ● ● 9				
POLLEN SCORE	● ● ● ● ● ● ● ○ ○ 7				

Poor (1) - Excellent (9)

☐ Recommended for me



Get set to be impressed.

- Very good early vigour, supporting strong crop establishment and seasonal performance.
- Impressive standability, including under drought conditions.
- Excellent grain size with an appealing grain colour at maturity.
- Impressive dry down brings the crop into harvest moisture quickly.



A88 is a versatile hybrid suited to early and main season plantings, delivering strong performance in high-rainfall, irrigated, and tougher dryland environments.

FLOWERING MATURITY	QUICK	MEDIUM - LONG				
HARVEST MATURITY	QUICK	MEDIUM	LONG			
HEAD TYPE	OPEN	SEMI OPEN	SEMI CLOSED	CLOSED		
TILLERING	LOW	MOD - LOW	MOD	MOD - HIGH	HIGH	
HEAD EXERTION						6
HEIGHT UNIFORMITY						8
STALK LODGING CHARCOAL						8
STALK LODGING DROUGHT						8
GRAIN SIZE						8
EARLY VIGOUR						8
POLLEN SCORE						7

Poor (1) - Excellent (9)

☐ Recommended for me



Steadfast hybrid for reliable performance every season.

- Outstanding height uniformity, making harvest management a breeze.
- Stable dry down following desiccation.
- Exceptional grain size with low screenings and an appealing grain colour.
- Strong midge resistance rating, providing confidence in high-pressure situations.



A14 has a proven record of consistent yield performance and is well suited to main season planting in both dryland and irrigated systems. Consider a switch to **A88** where cooler early planting conditions are expected.

FLOWERING MATURITY	QUICK	MEDIUM - LONG				
HARVEST MATURITY	QUICK	MEDIUM - LONG				
HEAD TYPE	OPEN	SEMI OPEN	SEMI CLOSED	CLOSED		
TILLERING	LOW	MOD - LOW	MOD	MOD - HIGH	HIGH	
HEAD EXERTION	● ● ● ● ● ● ● ○ ○					7
HEIGHT UNIFORMITY	● ● ● ● ● ● ● ○ ○					7
STALK LODGING CHARCOAL	● ● ● ● ● ● ● ○ ○ ○					6
STALK LODGING DROUGHT	● ● ● ● ● ● ● ○ ○					7
GRAIN SIZE	● ● ● ● ● ● ● ○ ○					7
EARLY VIGOUR	● ● ● ● ● ○ ○ ○ ○					5
POLLEN SCORE	● ● ● ● ● ● ● ○ ○					7

Poor (1) - Excellent (9)

☐ Recommended for me



Appealing hybrid with performance to match.

- Solid early seedling vigour, with exceptional below-ground root development.
- Very good tolerance to drought lodging in challenging environments.
- High yield potential.
- Long flowering maximises moisture and nutrient capture before rapid dry-down to harvest.



A90 complements the A Series line-up as a long-maturity option, offering a contrasting plant type to **A88** and **A14** and a useful maturity split alongside **A50**.

FLOWERING MATURITY	QUICK	MEDIUM	LONG			
HARVEST MATURITY	MEDIUM - QUICK		LONG			
HEAD TYPE	OPEN	SEMI OPEN	SEMI CLOSED	CLOSED		
TILLERING	LOW	MOD - LOW	MOD	MOD - HIGH	HIGH	
HEAD EXERTION						6
HEIGHT UNIFORMITY						7
STALK LODGING CHARCOAL						7
STALK LODGING DROUGHT						7
GRAIN SIZE						7
EARLY VIGOUR						8
POLLEN SCORE						6

Poor (1) - Excellent (9)

☐ Recommended for me

Also available:



Quick-Medium



Quick-Medium



TIME TO SECURE
YOUR SEED
REPLACEMENT
GUARANTEE.

ORDER YOUR
PIONEER GRAIN
SORGHUM SEED
BY 31 AUGUST.

GET THE PIONEER REPLANT PLUS SEED REPLACEMENT GUARANTEE*

Place your seed order by 31 August 2026 and if your grain sorghum crop needs replanting within 60 days of sowing, you'll receive 50% off the cost of replacement seed.

Talk to your local Pioneer representative or reseller.
www.pioneerseeds.com.au/contact-us

*Terms and conditions apply. See <https://www.pioneerseeds.com.au/replant-plus-2026>



Replant Plus *pays off*

The 2024–2025 planting season was off to a strong start for Croppa Creek NSW grower Graeme Gall, until an unexpected turn in the weather forced him to make some difficult decisions.

With a good soil moisture profile and forecasts pointing to favourable conditions, Graeme moved ahead confidently, planting 750 hectares of Pioneer® brand sorghum hybrid A14 in mid-late 2024. Early signs were promising, with the crop going into a paddock that looked well-positioned for the season ahead.

However, conditions shifted quickly after sowing.

“We had a bit of a problem with too much rain just after we planted” Graeme explains. “That rainfall came at the wrong time, and the establishment wasn’t what we would have liked”.

Poor emergence across parts of the paddock soon had Graeme reassessing his options. Replanting would mean additional cost and time, but leaving the crop as it was risked a compromised yield and an unprofitable return.

It was at this point that Graeme became aware of the Pioneer Replant Plus program. Growers who order Pioneer sorghum

seed before 31 August and take delivery before the end of September are eligible to receive 50 per cent off the cost of replacement seed if a crop fails.

“When we found out we could get 50 per cent of the seed cost back on the replant, that really made the decision easier” Graeme says. “It gave us confidence to go ahead and replant”.

With the support of the program, Graeme replanted the paddock and conditions improved significantly. Establishment was strong, plant numbers were more even, and the crop went on to fulfil its potential as the season progressed.

“It gave us confidence to go ahead and replant”

“What that meant was we could get back into the paddock quickly and set the crop up properly” he says. “Everything went well after that – the crop established the way we wanted it to, and in the end, we achieved great yields”.

| ABOVE Graeme Gall.



5 STEPS TO Establishing a high-yielding *sorghum crop*

Getting a sorghum crop off to a good start is one of the biggest drivers of final yield. From seed quality and planting timing through to weed control and nutrition, the fundamentals matter, and getting them right gives the crop

the best chance to use water efficiently and finish the season well. Whether you are farming in Northern Queensland, Central West New South Wales or somewhere in between, here are five non-negotiables for setting up a high-yielding sorghum crop.

1 Know your seed's warm germination

Before you even calibrate the planter, you need to know what's in the bag. Warm germination is the standard laboratory test used in Australia and globally to determine the percentage of seeds that will produce healthy seedlings under consistently warm conditions (typically a constant 25°C or alternating 20–30°C over 10 days).

Warm germination measures the maximum germination potential of the seed under ideal conditions, without cold or environmental stress. It varies significantly between different hybrids and seed batches. Seed with a higher warm germination

will typically have better field emergence, but it is not a 100% reliable indicator of actual field performance. That's because paddock conditions rarely match perfect laboratory conditions. Actual field emergence will depend on soil temperature, seedbed moisture, sowing depth, insects, seedling disease, and herbicide interactions. Always factor the expected field loss into your seeding rate.

If you are sowing early or into marginal conditions, planting high-germination seed is especially important to help ensure you get a viable stand.

2 Know the target established population

There is no single “right” population. The target population changes with:

- **Hybrid and maturity**, tillering characteristics, how it handles stress, and fills grain.
- **Row spacing and row configuration**, which can change canopy size and water use patterns.
- **Soil type and starting water**, which help determine your yield target in dryland paddocks.
- **Growing region temperature**, high temperatures increase water use and plant stress.
- **Expected rainfall** for the season and district.

More plants do not automatically equal higher yield. Your target established population must be tailored to the specific hybrid, your row spacing, soil type, starting soil moisture, and expected in-season rainfall.

Sorghum planted at high populations will rapidly

build up a large amount of early vegetative biomass. However, high-density planting can increase competition for moisture and nutrients, especially at critical growth stages. If rainfall stops and moisture becomes limited post-flowering, a heavily populated crop may burn through its soil water reserves and struggle to finish, potentially resulting in pinched grain or lodging.

Recent North-Western NSW work¹ points to an established target of about 5-6 plants/m² being the most reliable performer across sites and seasons west of Moree, regardless of row configuration.

Set population to suit your moisture availability and the other key points above, not your optimism.

Talk to your local Pioneer Territory Sales Manager or Farm Services Consultant for paddock-specific plant establishment targets, tailored to your row spacing, moisture profile, and hybrid choice.



Plant at the right time (and temperature)

When it comes to sowing sorghum, timing and temperature are everything. Trial data consistently shows that early-sown crops generally produce better yields, because they move the critical flowering window forward, avoiding the peak heat stress of mid-summer².

Traditionally, sorghum has been planted when the soil temperature was 16°C and rising (measured at 9:00 am at planting depth). However, multi-site research indicates planting can sometimes be moved earlier.

What matters is not only the soil temperature, but also that you are sowing into a rising temperature³. Cold shocks and a long time “sitting” in the ground increases disease and establishment risk.

Remember that irrigation is another potential source of “cold shock” for seed. The preference is to pre-irrigate and plant into moisture rather than irrigating with cold water post-sowing.

Central Queensland research shows growers can commonly achieve around 70% or more of their

target population when sowing depth temperatures are 12°C or greater, and moisture is good⁴. Another option for Central Queensland is to plant at the end of summer. This will reduce heat during the growing period, particularly during flowering and grain fill, and there is also typically a higher chance of rainfall.

Growing regions: Be mindful of your growing region. In more southern areas, there is a higher chance of soil temperature fluctuating, so there is a greater need for caution when planting below 16°C.

Soil type: Consider soil type when making early planting decisions. Black soils tend to absorb and hold heat, while red soils can lose heat more quickly.

Stubble cover: Stubble acts as a buffer for soil temperature and soil moisture. In an early planting situation, soil temperatures will rise more slowly, and they will fluctuate less with moderate to heavy stubble cover. When soil is bare, you might see higher initial soil temperatures but there will be a bigger temperature drop if air temperature falls.

Soil moisture: Adequate moisture in the seedbed ensures rapid, even germination and strong early root development. Moist soils are also less prone to temperature fluctuations. Having the right soil moisture is even more critical for early sowing.

Hybrid choice: If you are pushing the boundaries on early sowing, choose a hybrid known for strong early-season vigour and ensure you are using a high warm germination seed batch. Conversely, for later plantings, look for a hybrid with quicker maturity and a high midge resistance rating to combat late-season pest pressure.

Table 1: Sorghum planting recommendations*

IDEAL	SOME RISK	HIGHER RISK	NOT RECOMMENDED
Plant at 16°C and rising (at sowing depth).	Plant at 14°C if the moisture is right and the forecast supports a warming run, but accept a slightly higher risk of lower and slower emergence and a more uneven stand. Be especially careful in environments where the temperature can rise and then fall.	Plant at 12°C. Risks include a lower and slower emergence and a more uneven stand. Seedlings will face greater exposure to seedling diseases, insects, and herbicide stress. Do not plant at 12°C in areas where the temperature can rise and then fall.	Planting below 12°C is not recommended.

*For paddock-specific advice, talk to your local agronomist or Pioneer representative.
¹Optimising sorghum grain yield in western growing regions focus on agronomy and nutrition - GRDC. ²GRDC-GrowNotes-Sorghum-Northern.pdf
³Patience a virtue for sorghum start | GroundCover



4 Good weed control, especially grasses

Grass weeds are the enemy in sorghum. Compared to broadleaf weeds, there are fewer options for controlling them once the crop is up. This is why pre-emergent planning matters.

Metolachlor herbicides (including Dual Gold®) can damage sorghum, so sorghum seed must be safened when these products are used. Pioneer® brand sorghum is treated with Betta Strike® PLUS, which contains a seed safener, as well as fungicides and insecticides, to guard against early-season disease and insects. The safener allows Dual Gold® to be applied pre-plant, pre-emergent, and up to the sorghum five-leaf stage. It should be noted that Dual Gold® will only control weeds prior to their emergence.

Syngenta's best practice guidance for sorghum states Dual Gold® can be applied at 1 to 2 litres/ha (safened seed), and that rate choice should be matched to soil and weed pressure, with higher rates on heavier soils and lower rates on sandy soils. It also highlights the key risk management points. Dual Gold® needs incorporating moisture to work well, and residual performance changes with

soil moisture status. Also, too much rain soon after planting can move herbicide into the seed zone, increasing the risk of crop injury.

Split application is now common practice, adding benefits such as optimum weed control and extended residual control without compromising crop safety.

You must manage Dual Gold® rates according to your soil type and expected rainfall.

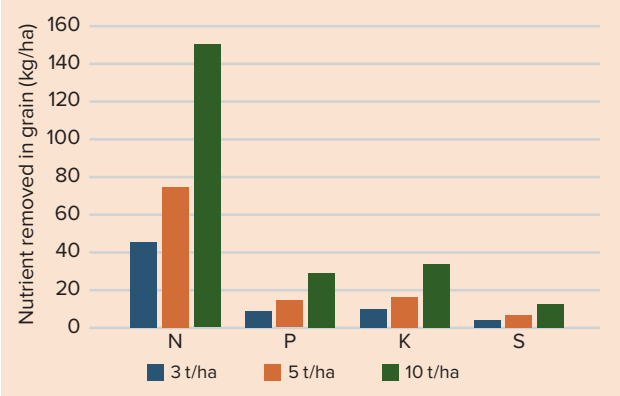
- **Heavy clay soils/good moisture:** 1.5 L/ha is appropriate for heavy clay soils with good moisture.
- **Low rainfall / lighter soils:** Pull the rate back to no more than 1.0 to 1.2 L/ha. If you apply the maximum rate on lighter soils or in low-rainfall scenarios, heavy rain post-planting can wash the herbicide directly into the seed trench. Even with Betta Strike®, a high concentration of Dual Gold® in the immediate root zone can overwhelm the safener, causing crop stunting or stand loss.

5 Apply enough nutrients to the crop

Successful sorghum requires good nutrient management. If you do not fertilise to meet the crop's requirements, you will be limiting yield potential and actively mining your soil fertility.

To visualise what a sorghum crop pulls out of your paddock, the graph below details the approximate

Figure 1: Nutrient removed in grain (kg/ha) for a 3, 5 or 10 t/ha grain sorghum crop⁶



⁴Winter sown sorghum for Central Queensland - GRDC
⁵See DUAL GOLD® I Herbicide
⁶Taken from Table 3, page 11. Growing profitable sorghum in northern NSW - the latest research Assumes removal rates of 15 kg N, 2.9 kg P, 3.3 kg K and 1.3 kg S per tonne of sorghum grain

kilograms of nitrogen (N), phosphorus (P), potassium (K), magnesium (Mg) and sulphur (S) permanently removed in a sorghum grain crop that yields 3, 5 or 10 t/ha.

The yield of any crop will be determined by the level of the most limiting nutrient. That's why it is important to conduct a pre-season soil test, then use estimated yield potential and standard nutrient requirement rates to determine an appropriate fertiliser application plan. This is particularly important when you have had a prior season with an above-average yield, and the amount of nutrient applied has not matched removal rates.

You cannot predict what the season will deliver in terms of rainfall or yield. Good crop establishment gives sorghum the best possible chance to turn available moisture into grain. Start with quality seed, set realistic populations, plant into the right conditions, control weeds early and apply nutrients to match yield potential.





Dryland sorghum delivers multiple benefits



THE TURNER FAMILY,
BELLATA, NSW



At Bellata in northern New South Wales, the Turner family farm a dryland system where workflow and reliability matter just as much as yield. Sorghum plays a central role in their mixed cropping rotation, helping the business manage labour, cash flow, and weed pressure across the year.

Will Turner farms alongside his parents, Dave and Jo, who moved into the area in 2003, and his two brothers, Gus and Charlie. The family are supported by two full time staff and seasonal labour at peak times.

“We contracted in the area from 2001 till 2020 and also started leasing country and cropping during that time” says Will.

The family purchased their first farm in 2023, and today they farm about 5,500 hectares, a mix of owned, leased and share-farmed country.

“We work with a lot of growers that are not farming themselves anymore, but they still want to be involved in their operation”.

The Bellata district receives 600 mm of rainfall, evenly split between summer and winter. The winter program typically includes canola, wheat, chickpeas and barley, while summer crops are sorghum and dryland cotton.

Will is very focused on capturing available moisture and finishing crops as well as possible under variable conditions. He generally targets one crop per year, but double cropping is used selectively when conditions allow.

“We do double crop from our summer to our winter. It depends on how much moisture we’ve got in the soil” says Will. “Often we’ll double crop after sorghum, which we harvest in January or February, and then we’ll plant chickpeas in June”.

Sorghum is typically planted on 1,000 to 1,500 hectares each year, depending on where the farm sits within its rotation.

Preparation for sorghum begins well ahead of planting. “If we’re looking at a sorghum crop, we’ll start planning in January” Will

ABOVE Will Turner.



Farm walk

- Up to 1,500 ha sorghum planted annually
- Strip till system improves soil temperature and planting efficiency
- 2025-26 program inc A14, A50 and A90 – selected for toughness and finish
- Provides reliable summer cash flow alongside winter crop income

says. Over summer, paddocks are strip tilled and fertiliser is applied in February to April, typically “around 60 to 100 kg/ha of either Starter Z MAP with two per cent zinc or Cotton Sustain blend”.

Urea is applied at 250-300 kg/ha in September, with the exact rate being determined by soil test results and how the season is shaping up.

Applying nutrients early is a deliberate strategy. “When we plant, we don’t put anything down, because we apply that fertiliser in January and February” says Will. “My theory is that by pre applying the fertiliser, it streamlines the planting process. It’s more of a logistics thing than anything else and putting the urea on ahead of the planter eliminates any risk of burning the crop”.

Strip tillage is also used to manage soil temperature ahead of planting. “Sometimes ground temperature is what’s holding us back” Will says. “By strip tilling, we’re preparing that seedbed

and removing stubble from the zone where the sorghum will be planted. That can raise ground temperatures by a couple of degrees compared to not strip tilling”.

The system allows the planting operation itself to run smoothly. “It gives us optimal planting conditions. We don’t have to drive the machine into the ground to get the seed to depth – we just set it and go” he says.

Planting dates are chosen to balance agronomic fit with labour requirements across the whole farm. “We generally look to plant sorghum from the end of September into early October,



“The later you plant into November or December, that pushes harvest into May,

As well as Pioneer sorghum, we grow around 1,000 hectares of canola every year and that's all Pioneer

depending on rainfall and soil moisture” says Will.

While the window can extend into December, later sowing brings vadditional risks.

June or even July” he explains. “It’s colder, you only get four or five hours of harvesting a day, and you end up having to dry grain, which becomes a logistical issue”.



ABOVE Will, Dave, Angus and Charlie Turner.
TOP LEFT Will Turner and Pioneer Territory Sales Manager Sam Gall.

Targeting an earlier planting window allows harvest to fall in January and February, aligning better with the business’s overall workload. “If we can get harvest done then, it works really well with how we manage labour and move straight into fertilising winter crops” Will says. “Instead of having everything going at once, we try to have one or two jobs going at a time”.

Sorghum seeding rates typically range from 50,000 to 75,000 seeds per hectare, adjusted for hybrid, seed size and row configuration. The farm is set up on wide rows, running 60 inch, or 1.5 metre spacing.

“We often struggle with a tight, dry, hot finish” Will says. “Going to 60 inch rows has allowed a softer finish for the crop. It makes the plant work harder to finish, and that’s given us the best yield results”.

Hybrid selection is driven by performance in those finishing conditions.

“We want something that’s tough and can handle periods of dry weather and heat” says Will. “But at the same time, we want something that can give us that top end yield if the season goes our way”.

“A lot of varieties are very showy but we’re not here to take photos of it. We’re here to make it perform and work in our environment”.

In the 2025-26 season, the Turners planted a mix of Pioneer® brand A14, A50 and A90.

“A14 just keeps performing for us, but I think A50 and A90 will probably replace it on our farm”.

“As well as Pioneer sorghum, we grow around 1,000 hectares of canola every year and that's all Pioneer” says Will. “The Pioneer

Farm Service Consultants are really great to deal with, and they are always around if we need them”.

Grain quality is another main consideration in hybrid selection.

“How the grain finishes from a quality point of view is pivotal” says Will. “There can be a \$20 or \$30 difference between Sorghum 1 and Sorghum 2. If you’re growing five tonnes to the hectare, that pays for the seed”.

Hosting Pioneer STRIKE trials on farm for the past five years has also influenced decision making.

“It gives you an early look at what’s coming through and how it performs on your own soil” says Will. “Some varieties suit harsher environments, others suit softer ones, and you get to see that firsthand”.

Grass weed management is an increasing challenge across the Turners cropping rotations and growing sorghum helps reduce the pressure.

“Winter grass, especially ryegrass, is a massive issue moving forward and we’re starting to see more issues with herbicide resistance, particularly in grasses” says Will. “Growing sorghum gives us a chance to get a crack at ryegrass through winter fallow and we can use Dual Gold to give us a couple of cracks at the summer grass”.

Beyond weed control, sorghum also supports the business financially. “From a cash flow point of view, it’s a real benefit to have that income stream in summer” says Will. “You’ve got your main return after winter harvest, then a second one in February”.

For Will, the appeal of sorghum is its consistency within a complex system. “It just works for our farm” he says. “And when things line up, it performs”.





Summer forage for flexible feed

Pioneer forage sorghum hybrids are the perfect solution to help meet your summer feed objectives. Whether you're looking for an irrigated or dryland crop option for grazing, silage or hay, you'll find the right product for your paddock amongst our industry-leading summer forage range.

NEW

PIONEER
BRAND • SEEDS

PRIME BMR

SUDAN HYBRID

EARLY SEEDLING VIGOUR	●●●●●●●●○	8
FAST FEED	●●●●●●●●●	9
LATE SUMMER/CARRY OVER FEED	●●●●○○○○○	4
BEEF GRAZING	●●●●●●●●●	9
DAIRY GRAZING	●●●●●●●●●	9
SHEEP GRAZING	●●●●●●●●●	9
HAY MAKING	●●●●●●●●○	8
PIT SILAGE	●●●●●○○○○	5
ROUND BALE SILAGE	●●●●●●●●●	9

Poor (1) - Excellent (9)

Outstanding quality, exceptional yield.

- Highly identifiable brown mid-rib (BMR) sudan hybrid with multiple BMR genes present.
- Excellent lower leaf retention, extending the window of quality feed availability.
- Exceptional biomass production supported by strong stems and roots, keeping the crop standing.
- Medium maturity provides management flexibility while maintaining feed quality.
- Low prussic acid risk, suitable for grazing at around 75 cm.

Prime BMR delivers standout forage quality with dependable agronomic performance, making it a premium choice for intensive grazing or high-quality conserved feed.

☐ Recommended for me

PIONEER
BRAND • SEEDS

SSS

SUDAN HYBRID

EARLY SEEDLING VIGOUR	●●●●●●●○○	7
FAST FEED	●●●●●●●●●	9
LATE SUMMER/CARRY OVER FEED	●●●●○○○○○	4
BEEF GRAZING	●●●●●●●●●	9
DAIRY GRAZING	●●●●●●●●●	9
SHEEP GRAZING	●●●●●●●●●	9
HAY MAKING	●●●●●●●●●	9
PIT SILAGE	●●●●●○○○○	5
ROUND BALE SILAGE	●●●●●●●●○	8

Poor (1) - Excellent (9)

A unique Australian hybrid, bred for Aussie conditions.

- Exceptional quick regrowth supports multiple cuts and grazings across the season.
- Super fine stems deliver exceptional hay quality and bale-wrapped silage – suitable for grazing by all stock types.
- Lower prussic acid potential compared with sorghum-type forages improves grazing safety.
- Strong tillering ability drives fast recovery and reliable biomass production.
- Super sweet leaf and stem mean SSS is highly palatable at all stages of growth, giving better utilisation by all stock.

SSS is quick to graze and highly responsive to intensive grazing management while also producing consistently high-quality hay and round-bale silage for sheep and cattle systems.

☐ Recommended for me



**PIONEER**
BRAND · SEEDS

MEGA FEED

SORGHUM X
SUDAN HYBRID



EARLY SEEDLING VIGOUR	●●●●●●●●●●	9
FAST FEED	●●●●●●●●○	8
LATE SUMMER/CARRY OVER FEED	●●●●●●●●○	7
BEEF GRAZING	●●●●●●●●●●	9
DAIRY GRAZING	●●●●●●●●●●	9
SHEEP GRAZING	●●●●●●●●○	7
HAY MAKING	●●●●●●●●●●	9
PIT SILAGE	●●●●●●○●○	5
ROUND BALE SILAGE	●●●●●●●●●●	9

Poor (1) - Excellent (9)

An ultra-late all-rounder.

- Ultra-late maturity (120 days+ to flower), maintains high-quality and biomass late into the season.
- Flexible and adaptable all-rounder hybrid that is well-suited to grazing, baling or silage.
- Excellent early vigour, giving the option to sow early and extend the growing period.
- High leaf to stem ratio for increased palatability and quality yield.
- High sugar content and energy availability in the leaf and stem convert dry matter into liveweight and milk production.

Mega Feed is suited to most situations; with its ultra-late maturity, it retains its high-quality feed later than anything else. Its combination of early vigour and very late maturity can help to reduce spring feed gaps while maintaining production late into the season. Mega Feed is an excellent option for almost all forage situations.

☐ Recommended for me

**PIONEER**
BRAND · SEEDS

MEGA SWEET

SWEET X
SORGHUM HYBRID



EARLY SEEDLING VIGOUR	●●●●●●●○	7
FAST FEED	●●●●●○●○	5
LATE SUMMER/CARRY OVER FEED	●●●●●●●●●●	9
BEEF GRAZING	●●●●●●●●●●	9
DAIRY GRAZING	●●●●●●●○	6
SHEEP GRAZING	●●●●●○●○	4
HAY MAKING	●●●●●○●○	5
PIT SILAGE	●●●●●●●●●●	9
ROUND BALE SILAGE	●●●●●●○●	6

Poor (1) - Excellent (9)

The flexible forage sorghum.

- Flexible grazing option for beef, providing stand-over feed late in the season.
- High-energy stover and white grain produce quality silage for meat and milk production.
- Strong regrowth enables extended grazing or multiple silage cuts.
- Highly sweet and palatable, improving utilisation in the field and in the feed trough.

Mega Sweet continues to increase in sweetness and feed value as it matures. It fits all sowing windows and is a top choice for quality silage, and late-season carry-over feed.

☐ Recommended for me

**PIONEER**
BRAND · SEEDS

GRAZE N SILE

SORGHUM X
SORGHUM HYBRID



EARLY SEEDLING VIGOUR	●●●●●●○●	6
FAST FEED	●●●●●○●○	4
LATE SUMMER/CARRY OVER FEED	●●●●●○●○	5
BEEF GRAZING	●●●●●○●○	5
DAIRY GRAZING	●●●●●○●○	4
SHEEP GRAZING	●●●●●○●○	4
HAY MAKING	●●●●●○●○	5
PIT SILAGE	●●●●●●●●●●	9
ROUND BALE SILAGE	●●●●●●○●	6

Poor (1) - Excellent (9)

The best choice for pit silage production.

- A water-efficient hybrid delivering silage quality comparable to corn silage.
- High white grain content produces proven, high metabolizable energy silage for meat and milk systems.
- Good leaf disease resistance for better silage quality and yield.
- Regrows after cutting, meaning it can be cut a second time or grazed.
- Greater tolerance to Fall Armyworm than corn, with improved control due to Graze-N-Sile's open head.

Graze N Sile is a tall, grain-bearing forage sorghum designed to deliver high yields of energy-dense silage. It is an excellent alternative to corn silage in dryland or limited irrigation environments.

☐ Recommended for me



Table 1: Forage seeding rates for a range of growing environments

Limited		PLANT AVAILABLE NUTRITION & WATER			Excellent
PRIME BMR					
Target established plant population (plants/ha)	95,000 to 145,000	145,000 to 280,000	280,000 to 450,000	450,000 to 1,000,000	
Approx sowing rate (kg/ha)	2 to 3	3 to 5	5 to 8	8 to 15	
SSS					
Target established plant population (plants/ha)	95,000 to 145,000	145,000 to 280,000	280,000 to 450,000	450,000 to 1,000,000	
Approx sowing rate (kg/ha)	2 to 3	3 to 5	5 to 8	8 to 15	
MEGA FEED					
Target established plant population (plants/ha)	45,000 to 50,000	65,000 to 100,000	140,000 to 225,000	225,000 to 350,000	
Approx sowing rate (kg/ha)	2 to 3	3 to 5	6 to 10	10 to 15	
MEGA SWEET					
Target established plant population (plants/ha)	30,000 to 50,000	50,000 to 80,000	80,000 to 110,000	110,000 to 150,000	
Approx sowing rate (kg/ha)	2 to 2.5	2.5 to 4	4 to 5	5 to 6	
GRAZE N SILE					
Target established plant population (plants/ha)	30,000 to 55,000	55,000 to 75,000	75,000 to 110,000	110,000 to 150,000	
Approx sowing rate (kg/ha)	2 to 3	3 to 4	4 to 5	5 to 6	



Whether you are making forage sorghum, pasture, cereal, lucerne or corn silage, using a proven Pioneer inoculant promotes a faster, more efficient fermentation resulting in lower

dry matter loss and/or improved stability and fibre digestibility. Talk to your local Pioneer representative about which product is right for your farming system.



Pioneer® brand

1174

Improves dry matter recovery and silage quality of all forage crops.



Pioneer® brand

11G22

A grass/lucerne/cereal silage inoculant with *L. buchneri* designed to reduce heating and improve silage quality. Rapid React aerobic stability technology provides less heating and stable feed in 7 days¹.



Pioneer® brand

11C33

Corn silage specific inoculant with *Lactobacillus buchneri* designed to reduce heating and improve silage quality. Rapid React aerobic stability technology provides less heating and stable feed in 7 days¹.

Also available

Pioneer® brand 1127 (pasture silage)

Pioneer® brand 11CFT (corn silage)

Pioneer® brand 11GFT (grass/cereal)

¹Improved aerobic stability and reduced heating is relative to untreated silage. Actual results may vary. The effect of any silage inoculant is dependent upon management at harvest, storage and feedout. Factors such as moisture, maturity, chop length and compaction will determine inoculant efficacy.



PIONEER
HUNDRED YEARS

**MANY CROPS.
100 YEARS.
ONE
LONG
LOOK.**

PIONEER LONG LOOK

- We strive to produce the best products on the market.
- We deal honestly and fairly with customers, employees and business associates.
- We vigorously market our products, but without misrepresentation.
- We provide helpful management information to assist customers in making optimum profits from our products.



Last year, Pioneer Seeds celebrated 50 years since they first began selling seed to Australian farmers in 1975. This year marks another significant milestone, with the centennial anniversary of the Pioneer brand and its global business.



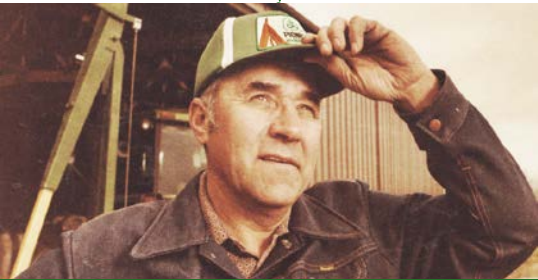
1926 - 1945

THE HYBRID REVOLUTION

Founded by Henry Wallace in 1926, Pioneer began as a bold experiment in corn breeding which quickly grew into a driving force for agricultural progress. Wallace’s vision and scientific curiosity laid the foundation for a company that would revolutionise crop genetics, empower farmers, and set enduring standards for quality and agronomic support.

THE GOLDEN AGE OF CROP SCIENCE

As the space race took off, so too did farm yields — soaring to new heights thanks to innovations like on-farm mechanisation and nitrogen fertiliser. Pioneer pushed progress even further, building research centres focused on improving yields and stress tolerance in hybrid corn and creating its first agronomy team. The company went on to expand its product offerings to include grain and forage sorghum, canola, silage inoculants and beyond.



1946 - 1985



1975

PIONEER LAUNCHES ITS AUSTRALIAN VENTURE

In 1975, the Pioneer Hi-Bred Seed Company was established in Australia. This allowed the company to make their knowledge and experience with hybrid seeds available to local farmers. Since 2016, the Yates family has been producing and distributing Pioneer brand products in Australia and continuing Pioneer’s legacy of supporting local growers with innovative products and dependable in-field advice.

THE RISE IN TECHNOLOGY

While the first 60 years saw yield growth through traditional breeding methods, the last four decades have delivered advancements in the science of genomics. Pioneer scientists now use DNA fingerprinting to help unlock the potential of seeds, while new technologies like AI and automation are being used to increase the rate of genetic gain.



1986 - today

Pioneer’s 100-year milestone reflects more than longevity — it represents a legacy built on science, integrity and partnership. Sincere thanks to the generations of farmers and those others who support them, who have helped shape the company’s growth and development through the years. Thank you for trusting Pioneer products in your fields.



Proven performance in Central Queensland

extremes



**XANDER ARMSTRONG,
EMERALD, QLD**

Consistency is rarely guaranteed in Central Queensland. Heat, humidity, intense rainfall events and prolonged dry periods all form part of the same seasonal equation. For Xander Armstrong, growing sorghum that can withstand those extremes isn't just a preference, it's fundamental to keeping the business productive year in, year out.

Based near Emerald, Xander alongside his father Ross and brother Johnno, operate a large-scale family farming operation supported by two full-time staff and casual employees during busy periods. Their business spans approximately 8,500 hectares, combining dryland cropping with overhead pivot irrigation. Sorghum has been part of the system for more than four decades, evolving alongside the business but remaining a constant in some of the most challenging growing conditions in the country.

"We get everything here" Xander says. "Extremely hot summers, cool winters, flooding rain – it's all normal for us. You've got to build a system that can handle both ends of the spectrum".

Pioneer® brand sorghum is a mainstay of the Armstrong operation alongside their winter crop rotation of wheat.



“We’ve been long-term Pioneer growers, probably for 40 years” Xander says. “We’ve tried different companies over time, but Pioneer hybrids have just been the most consistent for us. If it isn’t broke, don’t fix it”.

In the 2025–26 season, the Armstrongs planted approximately 2,400 hectares of sorghum across both dryland and irrigated country. The majority of the crop was planted in Pioneer brand A14, A66 and A88, with A30 planted for the first time on a smaller area.

“We find that A14, A66 and A88 yield very consistently for us, and they’re tough enough to handle these conditions” Xander says.

A14 continues to perform strongly under irrigation, while A66 and A88 are particularly valued on dryland country that tends to finish hard.

“We’ve got some floodplain country where standability really matters. A66 and A88 handle that extremely well” Xander says.

Total in-crop rainfall measured around 300 mm, close to the district average,

albeit delivered in sharp, intense periods rather than gradual falls.

“That rainfall can come fast” Xander explains. “It might be 50 to 70 mm in half an hour, or like this season where we had 200 mm in two days straight after planting. Those events really test your system”.

On irrigated country, the crop was planted into a topped-up moisture profile. Initially sitting at around half a

over several applications, before rainfall events reduced the need for further irrigation.

“We didn’t need to put any more water on after that big storm” Xander says. “The rain did the rest”.

All sorghum was planted using the same double-disc opener precision planter, set up on 75 cm row spacings. While the machinery remains consistent, seeding rates are adjusted carefully based on

“We find that A14, A66 and A88 yield very consistently for us, and they’re tough enough to handle these conditions”

profile, 50 mm of water was applied in early December ahead of sowing to ensure even establishment. Following planting, the irrigated crop received an additional 150 mm of applied water

moisture availability and yield targets. “For dryland, we plant at about 40,000 seeds per hectare” Xander explains. “That gives us about three seeds per

metre along the row, which we’ve found works best under dryland conditions”.

Irrigated sorghum is planted at approximately 80,000 seeds per hectare, with the goal of increased biomass and higher yield potential.

“In irrigation, we’re chasing more yield, so the higher population makes sense”.

The irrigated sorghum was planted on 15 December, slightly earlier than the usual Christmas window, while the dryland crop followed on 28 January once moisture conditions allowed.

Across both systems, nutrition was applied entirely pre-plant to set the crop up early and streamline in-season logistics.

“It’s really important for us to get nutrients right at the start” Xander says. “Once we’re planting, we just want to worry about getting seed in the ground”.

On dryland sorghum, 120 kg/ha of coated, slow-release urea was applied ahead of planting. The irrigated sorghum received a heavier nutrition program, with 350 kg/ha of a blended fertiliser containing urea, sulphur, potassium and phosphorus.

That early nutrient availability proved important following establishment challenges after a major storm event.

“We had a massive thunderstorm straight after planting, and it created a bit of a crust” Xander explains. “Emergence was slower than we wanted, but it pushed through, and once it did, the crop really took off”.

Despite flooding on several hundred

hectares, the sorghum that remained above water stood up strongly.

“The standability was excellent. Anything that didn’t go right underwater powered through without issue”.

Given the fast-moving season, chemical inputs were kept to a minimum. Only one herbicide spray was applied, targeting weeds at the five to six-leaf stage.

“We only sprayed once this season, with 2 kg/ha of atrazine and 700 ml/ha of Flagship” Xander explains.

While fall armyworm has posed a new threat in recent seasons in Central QLD, planting slightly earlier has helped limit its impact in the Armstrongs’ sorghum program.

“We still had some pressure, but the crop seemed to outgrow it” he says. “It was advanced enough that we didn’t need to come back in with an insecticide and damage was definitely reduced”.

After spraying out on 10 April, harvest of the irrigated sorghum began in late April, and dryland crops are expected to follow in mid to late June. Early harvested blocks averaged 5.5 tonnes per hectare.

Late-season rainfall encouraged higher tillering across all hybrids, contributing to yield where conditions allowed.

“That late rain helped finish those tillers. With our plant population and row spacing, the crop can flex when it needs to”.

Most of the sorghum is sold locally into nearby feedlots.

“We’ve got plenty of buyers close by and we’re well set up to sell into those markets”.

It was Xander’s first year growing Pioneer® brand A30, and he is thoroughly impressed with its performance to date.

“It’s still in the ground, but we’re very impressed with how it’s looking. It had good early vigour, the potential yield to come off it looks promising, and it seems to have handled everything the season has thrown at it very well” says Xander. “Proof is in the pudding, and we’ll see how it yields, but at this stage, we’ll definitely be looking to put more A30 in next year”.



Farm walk

- Planted 2,400 ha sorghum in 2025–26 season
- Planted across systems: irrigation (mid-Dec) and dryland (late Jan)
- Excellent standability across A14, A66 and A88 in challenging conditions
- Early harvested blocks averaged 5.5 t/ha

For Xander, success with sorghum in Central Queensland comes down to controlling what can be controlled, and choosing hybrids with the resilience to handle everything else.

“Luck’s always part of farming” he says. “But strong early set-up, right planting populations, good nutrition and reliable hybrids give us the best chance, no matter what the season throws at us”.

In a region defined by extremes, resilient sorghum continues to deliver where it counts most.



TOP LEFT Xander Armstrong and Pioneer Territory Sales Manager Murray Dempsey.

NEW

NEW

1. Flowering maturity:

Rating for the dry down of the crop after desiccation: Q = Quick, MQ = Medium Quick, M = Medium, ML = Medium Long, L = Long

3. Head type:

H = High, MH = Moderate to High, M = Moderate, ML = Moderate to Low, L = Low

5. Head exertion:

A measure of the distance from the flag leaf to the bottom of the head. A lower rating indicates less head exertion from the flag leaf.

6. Height uniformity:

Height uniformity is a rating to describe the overall "neatness" of a hybrid at harvest, capturing the height and architecture of the primary head and tillers. A higher number indicates a more desirable, even row.

7. Stalk lodging charcoal:

A measure of a hybrid's ability to stay standing in the presence of charcoal rot. A higher rating indicates the plant is less affected by charcoal rot and is less likely to lodge.

8. Stalk lodging drought:

This rating is an indicator of a hybrid's ability to remain standing under severe dry conditions. A higher score means the hybrid is less likely to fall over in drought conditions compared to a hybrid with a lower score.

9. Grain size:

Grain size is a measured rating that combines the physical size and the weight of the grain with data captured across a range of seasons and environments. Higher ratings indicate larger grain.

10. Early vigour:

Early vigour ratings are based on a hybrid's ability to establish evenly under cooler-than-ideal conditions. A hybrid with a higher score is less likely to display cool shock traits (e.g. purpling) and will be more even in its establishment under cool conditions.

11. Pollen score:

Pollen score is based on an assessment of pollen quantity from a hybrid. A hybrid with a higher score is less likely to display a scattered grain set.

12. Midge resistance score:

This score is an official and independent rating from the Midge Testing Scheme run by DAF and falls under the National Variety Trials (NVT) industry testing: 1 = Highly Susceptible, 8+ = Highest Resistance.

*interim result

Publication abbreviations

ha = hectare
t/ha = tonnes per hectare



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