



# FORAGE SEED GUIDE

Quality . Innovation . Production

selectedseeds.com.au



### Why choose Selected Seeds?

When you work with Selected Seeds, you work with:

- A team with over five decades of experience and expertise in subtropical and tropical forage production.
- Agronomists and sales representatives who partner with top specialists in Australia and around the globe to ensure continued supply and high quality of product.
- A business that focuses on tight quality control, that tests and trials all the seed we sell, and uses advanced production and processing techniques.
- Staff who are committed to supporting you, advising you and listening to you. Our sales staff aren't just order takers we know our product and we're here to help.

We are here to maximise your forage productivity.

Our team is committed to helping farmers get the best production out of their forage systems.





### The Story of Selected Seeds

Selected Seeds is a proud Australian owned business that has served the seed industry here and around the world for over fifty years.

We have faced variable markets and environmental conditions for fifty years. We are here to help you meet the challenges that agriculture can present.

Our business began in Biloela, Queensland, Australia in 1970, when our director Phil Smith decided to service the growing beef industry. In the 1980's there was a demand in the Middle East for new cultivars of tropical grasses. Selected Seeds met this market demand and bred Finecut Rhodes grass and later RECLAIMER Rhodes grass.

Domestically we now have branches in Pittsworth, Rockhampton, Perth and Tolga, with agents servicing farmers right across Queensland, New South Wales, Western Australia, and the Northern Territory. Selected Seeds also has branches in the Middle East and Africa. We work with agents in the Americas, Asia and the subcontinent and export to over 15 countries.





### Quality, production, and innovation

Selected Seeds focuses on three main factors - quality, innovation, and production.

### Quality

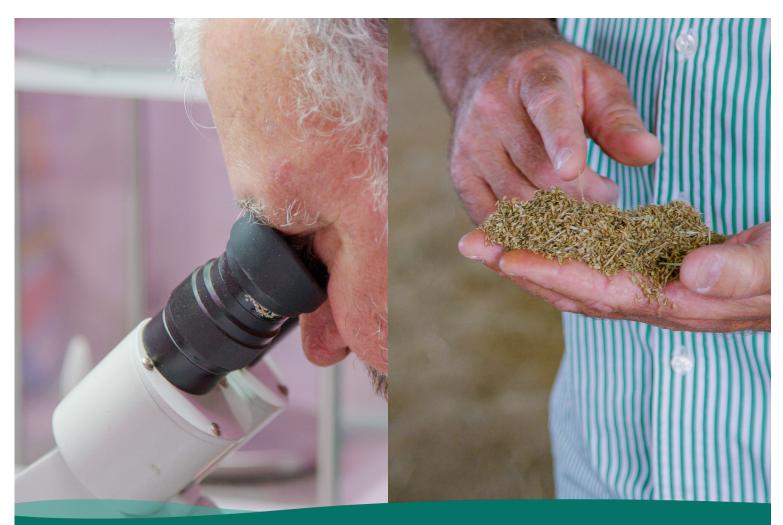
We ensure a quality product through our research, quality insurance testing and paddock inspections. Each line of seed is inspected by professionals. When we look down the microscope, we can see the quality of the seed and if adequate fertilizer and water was applied to reach production goals. We then relay this information back to our seed producers working closely with them each season to ensure quality and continuous supply.

#### Innovation

Over our fifty-year history, we have helped drive the innovation of subtropical forage varieties. We have faced many environmental and market challenges over those decades, and we are always evolving our products to meet the challenging environmental and market conditions. Our team listens to our farmers to provide new cultivars and pasture management practices to ensure each farmer meets their production goals.

#### Production

Our innovation is focused on breeding advancements that increase your productivity. Our existing and new cultivars are designed to improve on-farm efficiencies. Our whole team is focused on this, along with the continuous supply of quality seed.





### Seed coating and custom blends

### Seed coating

Bettaflow Xtralite coating technology has been developed, tried, and tested over 24 years. Our primary objective has been to improve the handling characteristics of light and "fluffy" subtropical pasture seeds coupled with ensuring our seeds are well protected from soil diseases and pests. Our coat is one of the lightest coats on the market, meaning more seed per bag, resulting in improved establishment.



### Custom blends and bag sizes

We understand that no two farmers, or paddocks, have the same fertility, climate conditions or production goals.

There's no one-mix solution to your pasture needs. We get that.

That's why Selected Seeds offers custom blending of tropical and subtropical grasses and legumes. We'll often do this within the working day, ready for dispatch from Toowoomba or Rockhampton.

Domestically we have seed specialists based in Pittsworth, Rockhampton, Perth, Tolga and a seed distributor in Tamworth.

We also understand that pasture establishment is a significant investment. If you'd like smaller amounts, we'll do up custom bag sizes for you, to the nearest kilogram.

Contact one of our representatives to arrange a custom blend or call our office on 07 4693 1800.





### Steps to successful production systems

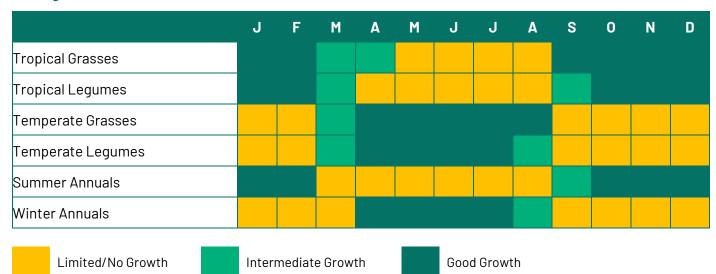
Ask yourself these questions – they will help you plan your production system and get better results.

Get the pen and paper out, work straight into the computer or use the voice recorder on your phone.

•	What is my production goal (meat/milk/progeny)?
•	When do I need the feed?
•	What are my climatic patterns?
•	What species will fit my demand, climate, and soil?
Planti	ng
•	What type of planter suits my soil/species?
•	Is my temperature and moisture correct for the species?
•	How do I ensure seed to soil contact?
•	What is an adequate planting rate?
Grazin	g or cutting
•	When is my forage ready for grazing/cutting?
•	What is the optimum growth stage to graze/cut?
•	How long to graze for?
•	How low to graze/cut?



### **Forage Production Guide**



Production guides are based on Southern Queensland averages. Variation occurs with geographic location, management, and climate. Graphs represent the peak growth periods for each species group. Quality is not uniform with continued growth.

Generally, the highest quality perennial grass/legume forage is achieved at 10 percent seed head emergence (grasses) and 10 percent flowering (legumes).

For annual crops, these times vary according to species. Peak feed quality is the best time to store crops as hay or silage.





### Rhodes grass

### Rhodes grass is:

- perennial
- very palatable
- highly productive
- suited to a wide range of animals
- adapted to a large range of soil conditions and soil types

Rhodes grass is used in permanent pastures or in short to medium term ley pastures.

It is excellent at restoring soil structure, improving organic matter and reducing nematode numbers.

Selected Seeds identified the need to develop cultivars with quality attributes such as small stem size, high leaf to stem ratio, high yield, high salt tolerance and aggressive spreading habits.

Diploid Rhodes grasses are characterised by:

- rapid response to moisture and temperature
- high production grasses/rapid growth
- water efficiency
- ability to handle repeated cutting or grazing over a number of years

Well managed diploid Rhodes grass can produce over 20 t/ha of dry matter per year, with no oxalate or prussic acid problems.

Tetraploid Rhodes grasses are more suited to higher rainfall and longer season environments. They are later flowering and less cold tolerant. Tetraploids are generally more palatable due to increased sugar content.

Rhodes grass is the ideal grass for feeding all ruminant animals.





# RECLAIMER PR Rhodes grass (diploid type)

RECLAIMER Rhodes grass is our third generation Rhodes grass. It was selected for its higher leaf to stem ratio, increased salt tolerance and higher production. RECLAIMER has shown an increase of up to 20% dry matter production compared to Katambora Rhodes.

### **Advantages**

- Excellent water use efficiency
- Highly palatable
- No oxalate or prussic acid
- Fine leaf and stem
- Suited to silage, grazing and hay enterprises
- Suited to a wide range of soil types
- 600 mm+ rainfall
- High soil tolerance

### Seeding rate

Dryland: 6-15 kg/ha

Irrigated: 20-35 kg/ha

### About RECLAIMER Rhodes grass

RECLAIMER is an early maturing, erect, warm season Rhodes that is suited to many different soil types and can be used for grazing, silage or hay production. It can also be used for erosion control due to its aggressive stolon production and quick early growth.

Weight gains of up to 1 kg/head/day on beef cattle are not uncommon in some well managed production systems. Dry matter yields of up to 2 t/cut with 14% protein is also common in hay production. Good management of soil nutrition is key to achieving these results.

RECLAIMER is a diploid Rhodes, meaning it produces large bulk during warmer months. Its reproductive stage is driven primarily by temperature and is suited to rainfall zones 600 mm and above. The higher leaf to stem ratio of RECLAIMER can provide increased palatability compared to older types e.g. Katambora.

### General fertilization requirements

- Nitrogen requirements 30 kgs of nitrogen/t of hay grown.
- Phosphorous, potassium and other elements should be guided by local soil conditions.
- All fields vary in their fertilizer requirements so consult your local agronomist for sitespecific advice.

#### Pests and diseases

RECLAIMER Rhodes grass has no specific pests and diseases.

### Cutting

To maximise yield and ensure hay quality, cut when 10% of seed heads have emerged, with a minimum cutting height of 15 cm.

Cutting at this height ensures plants stay in a vegetative state.





# EPICA PR Rhodes grass (tetraploid type)

Our newest Rhodes grass release, selected to meet the need for a tetraploid type with high dry matter production.

### **Advantages**

- Suited to wide range of soil types
- 600 mm+ rainfall
- High leaf to stem ratio
- No oxalate or prussic acid
- Excellent water use efficiency
- Excellent palatability, leading to higher feed intake

### About EPICA Rhodes grass

EPICA is Selected Seeds' newest Rhodes grass release, selected to meet the need for a tetraploid type with high dry matter production. EPICA goes into its reproductive phase when daylight length is shortened instead of responding as vigorously to heat like diploid types.

Grazing rotations will be longer in tetraploid types as they do not respond to heat as vigorously as diploids. However, the growing season is longer in tetraploids as they are not reproductive until shorter days.

Dry matter yields of up to 2 t/cut with 14% protein is also common in hay production. Good management of soil nutrition is key to achieving these results. EPICA Rhodes grass has high sugar content making it extremely palatable to stock.

### Seeding rate

Dryland: 6 - 15 kg/ha

Irrigated: 20 - 35 kg/ha

### General fertilization requirements

- Nitrogen requirements 30 kgs of nitrogen/t of hay grown.
- Phosphorous, potassium and other elements should be guided by local soil conditions.
- All fields vary in their fertilizer requirements so consult your local agronomist for sitespecific advice.

### Pests and diseases

Rhodes grass is not subject to any specific pest and diseases. However, tetraploids may be more susceptible to pest and diseases then other Rhodes grass types.

#### Cutting

To maximise yield and ensure hay quality, cut when 10% of seed heads have emerged, with a minimum cutting height of 15 cm.

Cutting at this height ensures plants stay in a vegetative state.





### Other Rhodes grass varieties

#### Gulfcut

An improved diploid cultivar bred for its extremely fine stem and erect growth habit. These characteristics make it the ideal cultivar for hay production.

Dryland	Irrigation	Hay	Grazing
<b>///</b>	<b>////</b>	<b>////</b>	<b>/ / /</b>

#### **Finecut**

Our first diploid cultivar. When it was released, it was Australia's first improved Rhodes cultivar in 30 years. Bred for its fine stem and high leaf to stem ratio. Finecut out-yields traditional, generic diploid types such as Katambora and Pioneer by over 20%.

Dryland	Irrigation	Hay	Grazing
<b>///</b>	<b>////</b>	<b>////</b>	<b>////</b>

#### Katambora

Katambora is a generic diploid type Rhodes grass. Higher performing cultivars are available but Katambora is still popular due to its higher stem ratio and thicker stems. This means that it does not compost as quickly, resulting in longer lasting mulch cover. This may be desirable, depending on your intended use.

Dryland	Irrigation	Hay	Grazing
<b>V V V</b>	<b> </b>	<b>///</b>	<b> </b>

#### Callide

Callide is a generic tetraploid type Rhodes grass. Its extended growing season makes it well suited to longer season environments.

Dryland	Irrigation	Hay	Grazing
<b>///</b>	<b>////</b>	<b>////</b>	<b>////</b>

	Planting Rate (Bettaflow) (kg/ha)	Frost tolerance	Drought tolerance	Water logging	Rainfall (mm)	Soil
Rhodes grass  RECLAIMER PER Finecut, Katambora  Callide and EPICA	10 - 40	$\checkmark\checkmark\checkmark$	<b>√√√</b>	<b>√</b> √	650+	Versatile, from light sandy - medium clays.

<sup>\*</sup>lower sowing rates for mixes

<sup>\*</sup>higher sowing rates for pure swards.





### Perennial tropical and subtropical grasses

Many summer crops grown today are annual tropical grasses. Perennial tropical grasses offer the same benefits as these in terms of growth response to moisture, temperature, and dry matter production. There are a wide range of species, adapted to varying conditions.

Selected Seeds' tropical/subtropical grass breeding program has brought cultivars such as Bisset Creeping Bluegrass and Finecut Rhodes grass to the market.

Some excellent tropical grasses are:

### **Premier Digitaria**

A tussocky, very persistent, drought tolerant cultivar. Premier Digitaria tolerates fire and grows well into autumn.

#### **Bambatsi Panic**

A standout in heavy country, Bambatsi Panic is tussocky, high yielding and palatable. It has good drought tolerance and will tolerate waterlogging. Great for melon hole country and heavy clay soil.

### **Bisset Creeping Bluegrass**

Bisset Creeping Bluegrass is a late flowering, long season cultivar. It is suited to a wide range of soil types and regions. Bisset is a proven performer that even retains its palatability after frost. Making it ideal to fill the autumn/winter feed gap. Bisset Creeping Bluegrass works well when mixed with Rhodes grass.

### Floren Bluegrass

Another heavy soil standout, Floren Bluegrass is a highly palatable, tussocky grass. It loves flooding and has good drought tolerance.

#### **Gatton Panic**

This well-known grass is tussocky, very palatable and suited to well drained, fertile soils. It grows fast after rain.





### Tropical and subtropical planting guide

Species	Planting Rate Bettaflow coated seeds (kg/ha)	Frost Tolerance	Drought Tolerance	Water Logging	Minimum Rainfall (mm)	Soil Preferences
Bisset Creeping Bluegrass Bothriochloa insculpta	3-10	<b>////</b>	<b>////</b>	<b>/ /</b>	650	Loamy, clay-loam soils and light clay soils.
Floren Bluegrass Dichanthium aristatum	3-10	<b>/ / /</b>	<b>////</b>	<b>/////</b>	600	Basaltic clays- heavy alluvial soils.
Premier Digitaria Digitaria eriatha spp. Eriantha	2-6	<b>////</b>	<b>////</b>	<b>√</b>	550	Lightly textured, sandy, loamy and clay soils.
Buffel Grass Biloela, USA, and Gayndah Cenchrus ciliaris	3-10	<b> </b>	<b>////</b>	✓	300	Prefers light to medium textures. Can grow on heavy soil types.
Bambatsi Panic Panicum coloratum	4-6	<b>\ \ \ \ \</b>	<b>/ / / / /</b>	<b>/////</b>	600	Self mulching heavy clay soil types.
Gatton Panic Panicum maximum	2-10	<b>///</b>	<b>V V V</b>	✓	650	Fertile well drained clay loamy soil types.
Kikuyu Pennisetum clandestinum	1-2	<b>////</b>	<b>V V V</b>	<b>////</b>	700	Red basaltic loams, friable basaltic clays.
Paspalum Paspalum dilatatum	3-7	<b>////</b>	<b>\</b> \ <b>\</b> \ <b>\</b>	<b>/////</b>	800	Alluvial flats that receive runoff or irrigation.
Sabi Urochloa mosambicensis	2-7	<b>√</b>	<b>\</b> \ <b>\</b> \ <b>\</b> \	✓	500	Versatile- loams to heavy clays. Prefers alkaline soils.
Setaria Setaria sphacelata	3-7	<b>////</b>	✓	<b>////</b>	800	Wide range of soil types.
Signal Grass Urochloa decumbens	3-10	✓	<b>////</b>	<b>///</b>	1000	Wide range of soil types.
Strickland Digitaria milanjiana	2-6	✓	1111	✓	550	Light textured loams and clays.

<sup>\*</sup>please note these grasses are suited to tropical and subtropical environments.





### Perennial tropical and subtropical legumes

Legumes are popular for their ability to fix atmospheric nitrogen.

Legumes come in both temperately adapted and tropically adapted species. Perennial tropical and subtropical legumes are ideal to use in permanent pastures as pure swards or in combination with other grasses. They are also suited as a rotational crop. Suitable legume selection is dependent on the production system, climate, and physical/chemical soil characteristics.

Legumes have different growth habits to grasses. Careful management is needed to maintain over longer time periods.

### **Aztec Atro**

A rust resistant Sirato, but with typical yields 25% higher than Sirato. Vigorous twining, high seed levels. Aztec Atro provides excellent dry matter and plant regeneration. Suited to 750 mm+ rainfall zone.

### Wynn Cassia

Adapted to low fertility soils, Wynn Cassia is primarily used in long-term pasture systems to improve pasture composition. Being a prolific seeder, Wynn Cassia can self-regenerate readily. It tolerates heavy grazing and is palatable to cattle during autumn and winter months.

### Stylos (Seca/Verano)

Suited to long-term pasture systems with annual rainfall between 600 mm-1500 mm. Stylos are primarily used in long-term pasture systems to improve pasture composition. Stylos are a hardy, vigorous legume.

### Legume planting guide

Species	Planting Rate Bettaflow coated seeds (kg/ha)	Frost Tolerance	Drought Tolerance	Water Logging	Minimum Rainfall (mm)	Soil Preferences
Aztec Atro (Siratro) Macroptilium atropurpureum	2-6	<b>√</b>	<b>\ \ \ \ \</b>	<b>///</b>	650	Sandy loams to heavy clays.
Burgundy Bean Macroptilium bracteatum	5-10	√ √	<b>////</b>	<b>///</b>	600	Loams to heavy soil types.
Butterfly Pea Clitoria ternatea	5-10	✓	<b>///</b>	<b>///</b>	700	Heavy clays and loams.
Verano Stylo Caribbean Stylo Stylosanthes hamata	3-7	<b>√</b>	<b>////</b>	<b>√</b>	600	Well drained soils of low to moderate fertility.
Seca Stylo Shrubby Stylo Stylosanthes scabra	2-5	<b>√</b>	<b>/////</b>	<b>///</b>	500	Sandy loams to light clays of low to moderate fertility.
Cavalcade Centurion Centrosema pascuorum	2-5	<b>√</b>	<b>////</b>	<b>/////</b>	800	Wide range of soil types.
Leucaena Leucaena leucocephala	4-6	$\checkmark\checkmark\checkmark$	<b>////</b>	<b>√</b>	750	Well drained, alkaline soil, clay or clay-loam soils.
Wynn Cassia Chamaecrista rotundifolia	2-5	√	<b>////</b>	<b>√</b>	600	Well drained soils of low to moderate fertility.



### **Annual forage crops**

Annual forage crops are great at providing quick growth to fill feed gaps and/or to protect emerging seedlings.

Annual forage crops may also be used as a tool to control weed regrowth, an opportunity crop or as part of a rotational crop program.

These crops are excellent for producing quick, quality fodder. They respond well to moisture, fertility, and temperature to produce forage at desired times.

Annual forages can be grown in dryland or, for higher production, under irrigation. Dryland annual forage crops perform best when there is soil moisture and minimal weed competition.

Need advice? Give us a call on 07 4693 1800 or email admin@selectedseeds.com.au.





# DASH (Lablab purpureus)

DASH lablab is a fast growing annual, tropical legume. It is renowned for high dry matter production over a range of soil types.

### **Advantages**

- Fast growing tropical legume
- Ideal for grazing
- Ideal for ley legume/cover crop
- High protein fodder (>22% CP)
- Excellent water use efficiency
- Very palatable
- Large seed, easy sowing
- Adapted to a wide range of soil types

### Seeding rate

 $10 - 30 \, \text{kg/ha}$ 

### Growing

- DASH lablab is a fast-growing annual tropical legume.
- Its twining/climbing growth habit can make it a good option for companion cropping.
- It is well suited to fattening cattle and lambs, as well as for dairy production.
- DASH recovers quickly after grazing and has growth into late autumn.
- DASH lablab puts large amounts of nitrogen back into the soil, provided it is inoculated.
- Water use efficiency is excellent, it is drought tolerant and produces bulk rapidly.
- DASH lablab reaches flowering 30-40 days faster than other lablabs.

- Average yields are still being evaluated.
   However early trials over dryland sites that
   received no in-crop rain are showing green
   fodder yields more than 15 t/ha, and dry
   matter production more than 3 t/ha.
- Peak dry matter is reached at about 80 days from sowing, when flowering occurs.

### Cultivation and planting

- Starts germinating when soil temperatures are at least 16°C.
- Can be planted up to 10 cm seeding depth.
- Germination usually takes up to 7 days at ideal temperatures, with good moisture.
- Tolerant of light frost.

### General fertilisation guide

- DASH Lablab is a tropical legume so the seed should be treated with a suitable inoculant to ensure rhizobia is present for nodulation.
- Phosphorous, potassium, sulfur and other nutrients should be guided by local soil conditions.
- All fields vary in their fertilizer requirements so consult your local agronomist for sitespecific advice.

### Forage quality

Typical crude protein levels exceed 22%.





## BRIGALOW (Description Ont (Avena Sativa)

BRIGALOW Oat is a new forage oat variety that has been trialled and developed in Australia. BRIGALOW has been trialled in several locations all demonstrating good performance. Providing quick growth, it provides a good feed solution for graziers to fill in winter feed gaps. Being a prolific tillering variety means faster regrowth after grazing.

### **Advantages**

- Warm soil emergence
- Strong initial growth
- High total season dry matter yield
- Prolific tillering ability for strong recovery after cutting or grazing
- Medium-late maturity
- Suitable for grazing and hay production
- Good drought tolerance

### Plant type

• BRIGALOW has a semi-erect growth habit, with prolific tillering.

- A proportion of thinner tillers assists in recovery after cutting or grazing.
- Leaves are wide and dark green.

### Forage yield ability

BRIGALOW has good initial growth dry matter yield and good regrowth yield with a strong tillering habit.

### Maturity

BRIGALOW is a medium-late maturity forage oat, flowering a little later than Drover.

### **Annual Forage Guide**

Species	Planting Rate (kg/ha)	Summer	Autumn	Winter	Spring	Comments
Oats Avena spp.	25-80		<b>\ \ \ \ \ \ \</b>	<b>/////</b>		Outstanding winter feed.
Namoi Vetch Vicia villosa spp. Dasycarpa	6-10		1111	<b>////</b>		Hard seeded, regenerating annual legume.
Popany Vetch Vicia spp.	6-25		<b>/////</b>	<b>\</b> \ <b>\</b> \ <b>\</b> \		Quick growing annual legume, soft seeded.
Forage Barley Hordeum Vulgare	25-50		<b>///</b>	<b>/////</b>		Widely adapted winter forage.
Forage Wheat Triticum Aestivum L	25-50		<b>///</b>	<b>////</b>		Useful winter forage.
Forage Sorghum Sorghum spp.	3-20	<b>/ / / / /</b>	<b>\</b> \ <b>\</b> \ <b>\</b>		<b>/ / / / /</b>	Great summer forage. Can be combined with summer legumes.
Millets Pennisetum glaucum	6-10	<b>/////</b>	<b>///</b>		<b>/////</b>	Suited to light soils. Quick forage producers. No prussic acid issues.
Cow Pea Vigna Unguiculata	15-25	$\checkmark$ $\checkmark$ $\checkmark$ $\checkmark$	<b>√</b> √		<b>/////</b>	Good producing summer legume.
Lab Lab Lablab purpureus	10-45	<b>////</b>	<b>√</b> √		<b>/////</b>	Summer growing annual legume. Very productive. Suited to companion cropping.



### **Planting**

Ensure seed is planted with the intent of seed to soil contact and available moisture. Incorrect planting management will affect the viability of initial germination.

For tropical grasses seed depth is also important. Planting any deeper than 2 cm will significantly lower germination rates.

Ideally plant into a clean seedbed, with adequate moisture and follow up rain predicted. Follow the planter with a roller to assist in achieving seed to soil contact. If you are unsure about the best planting method for your soil conditions, planting equipment, soil moisture and species, please contact the Selected Seeds team.

Need advice? Give us a call on 07 4693 1800 or email admin@selectedseeds.com.au.





### **Rain Chart**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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RAIN YTD												
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TOTAL												
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### Get in touch with us

Our team is here to help you, whether you need specialised technical advice or have a general query. selectedseeds.com.au

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