

# S&W

SEED COMPANY

## SEED GUIDE



[www.swseedco.com.au](http://www.swseedco.com.au)

*Your partner in the paddock.*

**S&W**  
SEED COMPANY



- 5** FORAGE CEREALS
- 15** WINTER CEREALS
- 19** WINTER LEGUMES
- 23** PASTURE GRASSES
- 29** CLOVER & PASTURE LEGUMES
- 41** LUCERNE
- 59** FORAGE HERBS & BRASSICA
- 67** TROPICAL GRASSES
- 71** FORAGE SORGHUM & MILLET
- 77** GRAIN SORGHUM
- 81** SUNFLOWER
- 83** SOWSMART® BLENDS

## 'Why Choose S&W Seed?'

S&W Seed Company is dedicated to providing the world's farmers with the very best seed varieties and hybrids to maximize their yields and profits, while providing products for peak performance, just as we have for over 40 years.

Our journey began in 1980 with a group of innovative farmers looking to optimise lucerne stock feeds. Over forty years on, S&W Seed Company is now a global leader in lucerne, wheat, pasture species, grain & forage sorghums, sunflower, and other key crops.

Since going public in 2010, S&W has dramatically opened new markets and expanded its research and development focus. Our R&D team collaborates with genetic providers and breeding organisations worldwide, using our proprietary germplasm to create market-leading products for modern cropping and forage systems.

Get in touch with us to learn more about how our Australian expert team can work with you and our premium range of seeds to achieve maximum returns - this season, and every season for your enterprise.



## Establishment Guarantee<sup>®</sup>

At S&W Seed Company Australia, we are so confident in our seed genetics and the quality of our proprietary products, we will replace seed at half the original purchase price if it fails to establish satisfactorily.

Unfortunately, establishment failures can occur, so S&W Seed Company Establishment Guarantee<sup>®</sup> program\* is available for the vital 30-day period after planting, and provides growers with substantial savings should they need to replant their paddocks.

S&W is the only forage company in Australia to offer Establishment Guarantee<sup>®</sup>. Plant with peace of mind and the support of S&W Seed Company Australia.

\* Terms and Conditions apply.

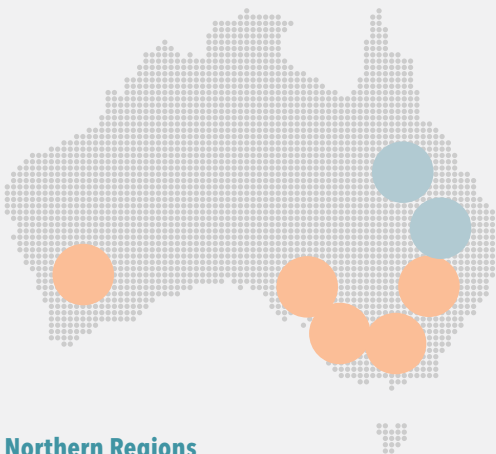
# FORAGE CEREALS



**S&W**

SEED COMPANY

# FORAGE CEREALS



## Northern Regions

Bronco Forage Oats, Kraken Forage Barley

## Southern Regions

Kraken Forage Barley, S&W Overland® Forage Oats and Severn Dual Purpose Wheat

## Forage cereal planting options to get you through the winter feed gap

S&W Seed Company now offers a complete range of forage cereals, offering planting dates from early autumn through until early spring. With the differences in maturity and development, it is possible to start with Severn, switch to either S&W Overland® Forage Oats or Bronco Forage Oats, and then sow Kraken Forage Barley in the early winter. Alternatively, both S&W Overland® and Bronco can be sown at a similar time as Kraken. These planting options ensure there is grazing available until spring pasture growth has occurred.

## Planting Guide



### Early Autumn

Bronco Forage Oats, S&W Overland® Forage Oats and Severn



### Winter

Bronco Forage Oats, Kraken Forage Barley and S&W Overland® Forage Oats



### Early Spring

Bronco Forage Oats and S&W Overland® Forage Oats

# Bronco Forage Oats

Avena sativa



## THE IDEAL FORAGE OATS CHOICE FOR NORTHERN AUSTRALIA



**PROVEN STRONG LEAF  
RUST RESISTANCE**



**SUITABLE TO PLANT IN  
QLD & NORTHERN NSW**



Fast establishing autumn-spring growing fodder crop with high feeding value



Wide leaf, true forage oat with high leaf to stem ratio



Excellent recovery from grazing



Suitable for grazing, silage, or hay production

### Seeding Rate

**kg/ha**

Dryland

30-50

High Rainfall/Irrigation

50-80

### Seed Treatment

None / XLR8™ optional

### Features & Benefits

Crown rust resistant

Long season of production

Excellent warm soil emergence

Flexible option when season extends

### Rating scale

Early sowing



Tillering



Maturity



Recovery from grazing



Forage yield



Animal performance



### Rating scale: 1-9

1 - not recommended

9 - excellent



# S&W Overland™ Forage Oats

Avena sativa



A MID-LATE MATURING FORAGE OAT WITH IMPROVED TILLER PRODUCTION



HIGH YIELDING HIGH TILLER DENSITY



SUITABLE TO PLANT IN NSW, VIC, SA, TAS & WA



Fast establishing autumn-spring growing fodder crop with high feeding value



Wide leaf, true forage oat with high leaf to stem ratio



Excellent recovery from grazing



Suitable for grazing, silage, or hay production

### Seeding Rate

kg/ha

Dryland

30-50

High Rainfall/Irrigation

50-80

### Seed Treatment

None / XLR8™ optional

### Features & Benefits

Mid-late maturity

High yielding variety

Excellent recovery from grazing

Suitable to grazing or hay production

### Rating scale

Early sowing



Tillering



Maturity



Recovery from grazing



Forage yield



Animal performance



### Rating scale: 1-9

1 - not recommended

9 - excellent



# Kraken Forage Barley

Hordeum vulgare

NEW  
RELEASE

AN EARLY MATURING FORAGE BARLEY PERFECT  
FOR SOWING LATE AND GRAZING EARLY



2 ROW AWNLESS  
FORAGE BARLEY



SUITABLE TO PLANT  
IN QLD, NSW, VIC, SA  
& WA



Good disease resistance package



Sow late and graze early



Can be used to provide weed control and soil  
preparatory



Fast to establish, very quick feed grown on farm and  
excellent hay option

## Seeding Rate

kg/ha

Dryland

30-50

High Rainfall/Irrigation

50-80

## Seed Treatment

None / XLR8™ optional

## Features & Benefits

White seeded, awnless

Early vigour and excellent winter growth

Sow late and graze early

Fast to establish, very quick feed grown on farm and excellent  
hay option

## Rating scale

Early sowing



Tillering



Maturity



Recovery from grazing



Forage yield



Animal performance



### Rating scale: 1-9

1 - not recommended

9 - excellent

# Forage Oats Grazing Trial

## 2019 | Penfield Research Station

- An irrigated six hectare paddock was divided into 12 half-hectare sections. On May 13, four of these sections were each sown with Bronco Forage Oats, Drover Oats, and Comet Oats.
- Sowing rate was 75 kilograms per hectare.
- 30 Angus x Hereford steers and heifers were split into three grazing groups of 10 animals each, with an average starting weight of 229 kilograms and began grazing the trial on August 19, 15 weeks after sowing.
- The three groups simultaneously grazed each of the varieties throughout the duration of the trial.
- The trial ran for 12 weeks until October 21, each variety at least would be grazed for an equal duration by each group of cattle.
- No other feed or supplements were given to the animals.

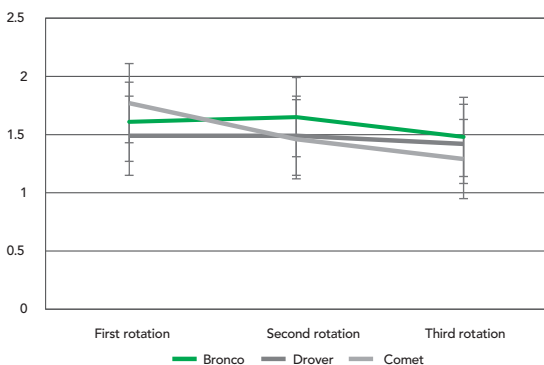
### DISCUSSION:

This trial was designed to showcase the quality differences and live weight gain performance between leading and commonly grown oat varieties available now in Australia. With equal grazing time and identical conditions for each of the varieties, the idea behind the trial protocol was to have the individual oat variety as the only variable measured.

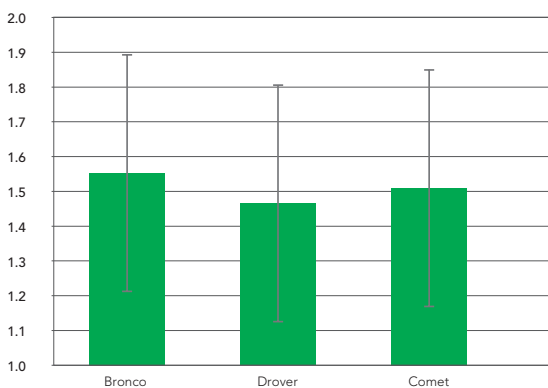
All three varieties established well in a fairly late break to the season and were grazed around 15 weeks after sowing. Grazed from mid-August through to late-October, 12 weeks of solid rotational grazing tested the productivity of all three varieties. Early on, Comet had excellent weight gain as a result of having the most feed at the time of first grazing, however it did not recover as well as the Bronco and Drover and had a poorer finish to the season.

Bronco performed well all throughout the trial. In a year where moisture stress was relevant, the ability of the Bronco to regrow and recover from tough grazing conditions was showcased by the consistency of the weight gain results throughout the duration of the trial. Also, there could have easily been another one or two grazing events from the Bronco if the season did not cut out early drying off. This was very different in comparison with the Drover which was starting to go to head in the last rotation of the trial, and regrowth after the third grazing event was extremely poor.

### Daily average kg/day weight gain



### Total average kg/day weight gain



Feed test taken prior to first grazing. Samples were taken from fresh pasture cuts and analysed for the following quality characteristics:

	<b>Bronco</b>	<b>Drover</b>	<b>Comet</b>
Dry Matter %	13.0	13.0	12.8
Neutral Detergent Fibre %	36.2	39.3	39.1
Crude Protein %	32.0	29.5	31.7
Digestibility (DMD) %	90.1	87.7	87.1
ME (MJ/Kg DM)	13.9	13.5	13.4

# Forage Barley Grazing Trial

2020 | Penfield Research Station

AIM:

This trial was undertaken to assess the performance of later sown forage barley varieties, for winter production and also performance post-grazing late into the season. Kraken Forage Barley is a new, 2 row, white seeded, awnless forage barley that is being released commercially in 2020. The comparator varieties chosen are both market leaders in Moby Forage Barley and Dictator 2 Barley.

## METHODS:

- An irrigated six hectare paddock was divided into 12 half-hectare sections. On May 1, four of these sections were each sown with Kraken, Moby and Dictator 2.
- Sowing rate was 75 kilograms per hectare.
- 27 Angus x Hereford steers and heifers were split into three grazing groups of nine animals each, with an average starting weight of 201 kilograms and began grazing the trial on August 7, 14 weeks after sowing.
- The three groups simultaneously grazed each of the varieties throughout the duration of the trial.
- The trial ran for 12 weeks until October 30, each variety at least would be grazed for an equal duration by each group of cattle.
- No other feed or supplements were given to the animals.

## RESULTS & DISCUSSION:

All three varieties had excellent vigour out of the ground, and impressive growth rates leading up to the first grazing. All varieties were tested for quality and digestibility prior to first grazing (Table 1). After 14 weeks, the trial was grazed for the first time, and the rotation of the cattle groups through each variety commenced.

Early performance from the varieties for weight gain per day was very similar (Figure 1). Dictator 2 and Moby however did not appear to have the regrowth that the Kraken did in the second, and particularly the third rotation. With a drop in the growth rate of the forage, the live weight gain per day on the cattle dropped performance as well. While not statistically different, the trends shown from the results indicate that Kraken would maintain higher weight gains as the trial went on.

In the final grazing rotation, the Kraken also continued to produce leaf, and digestible forage. Moby and Dictator 2 moved into the reproductive phase, forage production dropped as seed heads emerged (Figure 2). Due to its significantly longer vegetative phase compared to the other varieties, Kraken could have had another round of grazing with continued high weight gains expected if the trial was continued further. However, the trial was concluded as there was little growth or quality forage left in the other sections.

### Daily average kg/day weight gain

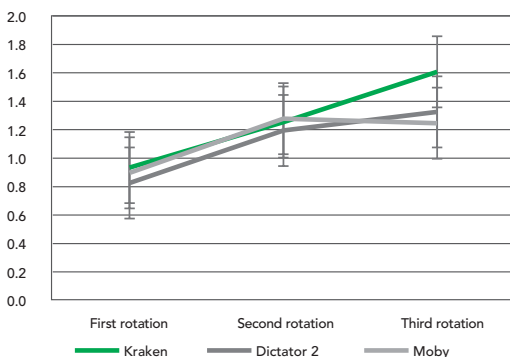


Figure 1: Average weight gain of cattle over the three rotations.

### t DM/Ha forage production

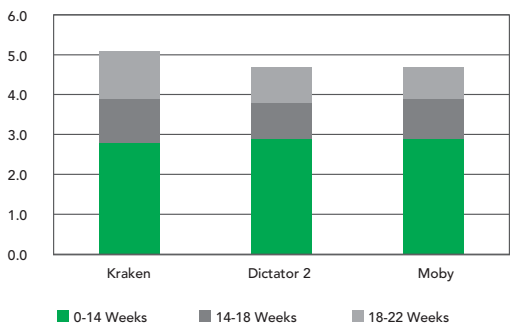


Figure 2: Dry matter production comparison between the three varieties and grazing rotations.

### Total average kg/day weight gain

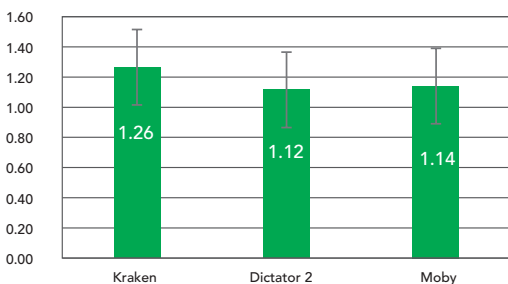


Figure 3: Total average weight gain for each variety for the duration of the trial.

Feed test samples were taken prior to the first grazing from fresh pasture cuts and analysed for standard quality characteristics as shown in Table 1.

Table 1: Feed quality results prior to first grazing.

	Kraken	Dictator 2	Moby
Dry Matter %	11.6	11.2	11.6
Neutral Detergent Fibre %	42.9	44.7	46.2
Crude Protein %	27.4	27.0	26.9
Digestibility (DMD) %	87.2	86.8	85.7
ME (MJ/Kg DM)	13.4	13.3	13.1

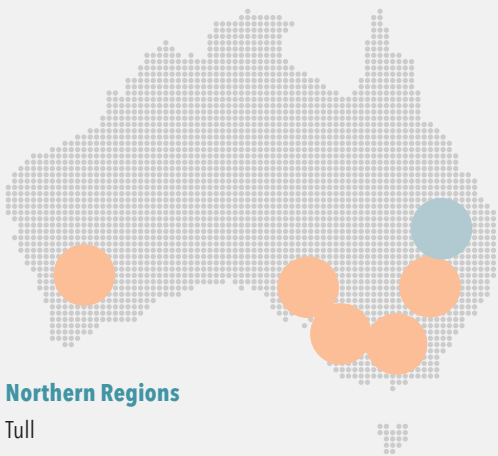


# WINTER CEREALS



**S&W**  
SEED COMPANY

# WINTER CEREALS



## Northern Regions

Tull

## Southern Regions

Bennett, Severn and Pascal

## Winter cereal planting options.

### Planting Guide



#### Autumn

Bennett, Severn,  
Pascal and Tull



#### Winter

Pascal and Tull





# Severn Dual Purpose Wheat

Triticum aestivum



NEW  
RELEASE

AN EARLY PLANT OPTION FOR WINTER & SPRING  
GRAZING, HAY AND SILAGE PRODUCTION



AWNLESS QUICK WINTER  
FEED WHEAT



SUITABLE TO PLANT IN  
QLD, NSW, VIC, TAS, SA  
& WA



Good disease resistance package



Strong straw strength with excellent standability and dense tillering



Improved weed control options compared to oats



Excellent forage yields

## Grain Quality

All Regions: Feed

### Features & Benefits

Good disease package with strong straw strength and excellent standability

Early sowing forage option due to dense early tillering and winter habit

Excellent forage and grain yields

Flexible management for forage or grain options

## Rating scale

Early sowing



Tillering



Maturity



Recovery from grazing



Forage yield



Animal performance



### Rating scale: 1-9

1 - not recommended

9 - excellent



## Bennett Dual Purpose Wheat

*Triticum aestivum*

LONG SEASON AWNLESS WHITE WINTER WHEAT

### Grain Quality

W: Feed | S & SE: ASW | N: Feed

### Features & Benefits

Suited to high and medium rainfall zones  
Ability to be planted early in the sowing window due to its strong winter habit and stable flowering window  
Provides alternative herbicide control options compared to oats and other forage crops  
Highest grain yielding milling grade wheat in many regions



## Pascal Wheat

*Triticum aestivum*

AWNED HEAD TYPE MILLING WHEAT

### Grain Quality

W, S & SE: APW | N: AH

### Features & Benefits

Good Powdery Mildew tolerance  
High yielding, early season  
Industry leading pre-harvesting sprouting tolerance  
Early/main season sowing opportunity with high yield potential  
Excellent yield under irrigation with lower risk of weather damaged grain at harvest



## Tull Wheat

*Triticum aestivum*

COMPACT PLANT AND HEAD TYPE WITH GOOD EARLY VIGOUR AND MODERATE TILLERING

### Grain Quality

SE: APH

### Features & Benefits

High yielding, main season variety  
Compact plant type with medium - short height  
Develops a glaucous leaf appearance from early booting  
Excellent Stripe rust resistance  
Low risk of lodging due to plant architecture  
Suited for irrigation

# WINTER LEGUMES

**S&W**  
SEED COMPANY

# WINTER LEGUMES



## Planting Guide

New South Wales, Victoria, South Australia and Western Australia.

**S&W Seed Company Studenica Vetch has the best early vigour of all existing common vetch varieties in Australia. In early growth stages, Studenica has medium to large leaves without anthocyanin, the plant is green (RHS group 139B) with narrow to medium leaves, it is early flowering (85-95 days from seeding) with white flowers, medium pod size, medium seed size, greyish seed testa and greyish/brown cotyledons.**

## Planting Guide



Fantastic early vigour



Higher yield - limited moisture



Seedling frost tolerance



Late sowing allows for better weed control



White flowers from 'Blanchefleur' parentage



High dry matter and grain yields in short season areas

## Studenica Vetch

*Vicia sativa*

LATEST RELEASE COMMON VETCH  
WITH SEEDLING FROST TOLERANCE

NEW  
RELEASE

Seeding Rate	kg/ha	Seed Treatment
Dryland	30-45	None / XLR8™ optional

### Features & Benefits

Fantastic early vigour  
Seedling frost tolerance  
White flowers from 'Blanchefleur' parentage  
Can be sown late due to seedling frost tolerance  
Late sowing allows for better weed control post season break  
High dry matter and grain yields in short season areas

## Timok Vetch

*Vicia sativa*

ALL-PURPOSE COMMON VETCH

Seeding Rate	kg/ha	Seed Treatment
Dryland	30-45	None / XLR8™ optional

### Features & Benefits

Maturity between Rasina and Morava  
High yield and rust resistance  
Very good vigour at flowering  
Early dry matter production in short season environments  
Excels even in low rainfall situations  
High forage quality, ideal feed for livestock operations

## Presto® Purple Vetch

*Vicia benghalensis*

VERY EARLY MATURING PURPLE VETCH

Seeding Rate	kg/ha	Seed Treatment
Dryland	30-45	None / XLR8™ optional

### Features & Benefits

Earliest maturing purple vetch option  
Quick emergence and forage production  
Approx 35 days earlier than Popany  
Good winter growth  
Excellent quality legume for dry matter production  
High nitrogen fixation potential for a short season



“

**The Timok has been very impressive, it will be a good fit for our business, replacing the current variety Rasina.**

Phil Combe  
Crystal Brook, SA



# PASTURE GRASSES

**S&W**  
SEED COMPANY



## Tetrone Tetraploid Annual Ryegrass

Lolium multiflorum/Westerwolds

**MID-MATURING WITH EXCELLENT SEEDLING VIGOUR**

### Seeding Rate

Dryland 10-15  
High Rainfall/Irrigation 25-30

### kg/ha

### Seed Treatment

None / XLR8™ optional

### Features & Benefits

Excellent establishment vigour  
Low-cost winter feed production  
Quick recovery after grazing  
Heading date +5 days



## Koga Tetraploid Annual Ryegrass

Lolium multiflorum/Westerwolds

**MAXIMISES WINTER AND SPRING PRODUCTION PLUS LATE SPRING QUALITY AND GROWTH**

### Seeding Rate

Dryland 10-18  
High Rainfall/Irrigation 25-30

### kg/ha

### Seed Treatment

None / XLR8™ optional

### Features & Benefits

Rapid establishment  
Fast regrowth during winter  
Increased winter and spring feed  
Heading date +10 days



## Loader Tetraploid Annual Ryegrass

Lolium multiflorum/Westerwolds

**MAXIMISES WINTER AND SPRING PRODUCTION PLUS LATE SPRING QUALITY AND GROWTH**

### Seeding Rate

Dryland 10-15  
High Rainfall/Irrigation 25-30

### kg/ha

### Seed Treatment

None / XLR8™ optional

### Features & Benefits

Rapid establishment  
Fast regrowth during winter  
Extended spring growth  
Heading date +16 days



## Sorrento Diploid Italian Ryegrass

Lolium multiflorum

**MODERN RYEGRASS BRED FOR HIGH  
WINTER AND SPRING PRODUCTION**

**NEW  
RELEASE**

### Seeding Rate

Dryland 15-20  
High Rainfall/Irrigation 20-25

### kg/ha

### Seed Treatment

None / XLR8™ optional

### Features & Benefits

Rapid establishment  
Fast regrowth during winter  
High stock performance  
Heading date +16 days

## Maheno Tetraploid Italian Ryegrass

Lolium multiflorum

**MID-MATURING WITH EXCELLENT SEEDLING  
VIGOUR**

**NEW  
RELEASE**

### Seeding Rate

Dryland 10-15  
High Rainfall/Irrigation 25-30

### kg/ha

### Seed Treatment

None / XLR8™ optional

### Features & Benefits

Rapid establishment  
Fast regrowth during winter  
Extended spring growth  
Heading date +18 days



## Valley® Diploid Perennial Ryegrass

Lolium perenne

**VERY EARLY FLOWERING (-17 DAYS) SELECTED FOR EXCELLENT WINTER GROWTH**

### Seeding Rate

Dryland 8-14  
High Rainfall/Irrigation 20-25

### kg/ha

### Seed Treatment

None / XLR8™ optional

### Features & Benefits

Summer dormant  
Very early heading  
Suited to dry environments  
Heading date -17 days



## Drylander Diploid Perennial Ryegrass

Lolium perenne

**HIGHLY PERSISTENT PERENNIAL GROWN ONLY ON DRYLAND PADDOCKS TO MAINTAIN SURVIVABILITY**

### Seeding Rate

Dryland 8-14  
High Rainfall/Irrigation 20-25

### kg/ha

### Seed Treatment

None / XLR8™ optional

### Features & Benefits

Good persistence  
Grazing tolerance  
Suited to marginal perennial ryegrass country  
Heading date -7 days



## Impact® Diploid Long Rotation Ryegrass

Lolium perenne

**HIGHLY RELIABLE - PROVEN TO HAVE EXCELLENT PERSISTENCE AND TOTAL FEED PRODUCTION**

### Seeding Rate

Dryland 10-15  
High Rainfall/Irrigation 20-25

### kg/ha

### Seed Treatment

None / XLR8™ optional

### Features & Benefits

Very late heading date  
Excellent persistence  
Maintains good pasture density for several years  
Heading date +21 days

## Origin Winter Active Tall Fescue

*Festuca arundinacea*

**DROUGHT TOLERANT BRED FOR EXCELLENT WINTER GROWTH AND SUMMER DORMANCY**

Seeding Rate	kg/ha	Seed Treatment
Dryland	10-15	None / XLR8™ optional
High Rainfall/Irrigation	20-25	

### Features & Benefits

Exceptional winter growth  
Truly summer-dormant  
Soft leaves  
Tolerant of climates with hot and dry summers

## Convoy® Continental Cocksfoot

*Dactylis glomerata*

**ROBUST COCKSFOOT BRED FOR HIGH PALATABILITY AND PERSISTENCE IN TOUGH CONDITIONS**

Seeding Rate	kg/ha	Seed Treatment
Dryland	4-6	None / XLR8™ optional
High Rainfall/Irrigation	6-10	

### Features & Benefits

Early-mid maturity  
Excellent tolerance to acid soils  
Tolerance of light and infertile soils  
Summer growth

## Australis® Australian Phalaris

*Phalaris aquatica*

**AN IMPROVED VARIETY SELECTED FOR PERSISTENCE AND PRODUCTIVITY**

Seeding Rate	kg/ha	Seed Treatment
Dryland	3-5	None / XLR8™ optional
High Rainfall/Irrigation	6-8	

### Features & Benefits

Very persistent  
Drought tolerant  
Reliable persistence  
Summer growth

## Understanding the importance of ryegrass heading dates

Ryegrass heading date is when a paddock has 50% of the plant seed heads visually emerged.

Ryegrass heading date influences pasture production in two ways.

- Early to mid-season flowing ryegrass produces increased dry matter throughout winter and early spring.
- Later heading ryegrass produce high-quality leafy / feed later in the season.

### Very Early

Valley Diploid Perennial Ryegrass

Drylander Diploid Perennial Ryegrass

### Early

Nui Diploid Perennial Ryegrass  
Tetila Tetraploid Annual Ryegrass

Tetrone Tetraploid Annual Ryegrass

### Mid

Rocket Tetraploid Annual Ryegrass

Koga Tetraploid Annual Ryegrass

### Late

Diplex Diploid Italian Ryegrass  
Loader Tetraploid Annual Ryegrass  
Sorrento Diploid Italian Ryegrass  
Maheno Tetraploid Italian Ryegrass

### Very Late

Impact Diploid Long Rotation Ryegrass



# CLOVER & PASTURE LEGUMES

**S&W**  
SEED COMPANY



**NEW  
RELEASE**

## Enduromax<sup>®</sup> Balansa Clover

Trifolium michelianum

**EARLY MATURING BALANSA WITH ELITE WINTER PRODUCTION**

Seeding Rate	kg/ha	Seed Treatment
--------------	-------	----------------

Dryland	4-6	Goldstrike <sup>®</sup>
---------	-----	-------------------------

High Rainfall/Irrigation	8-12	
--------------------------	------	--

### Features & Benefits

Earliest balansa clover variety

Very high hard seed levels

Good early winter growth compared to other balansa clover varieties

Reliable hard seed base for long term regenerating pastures



## Border Balansa Clover

Trifolium michelianum

**MID-MATURITY BALANSA WITH EXCELLENT PERSISTENCE**

Seeding Rate	kg/ha	Seed Treatment
--------------	-------	----------------

Dryland	4-6	Goldstrike <sup>®</sup>
---------	-----	-------------------------

High Rainfall/Irrigation	8-12	
--------------------------	------	--

### Features & Benefits

Heading date similar to Paradana

High hard seed levels

Waterlogging tolerant

Excellent regenerating annual for late season environments with wet winters

Highly digestible feed source



**NEW  
RELEASE**

## Baler Balansa Clover

Trifolium michelianum

**VERY LATE MATURING BALANSA FOR MAXIMUM YIELD POTENTIAL**

Seeding Rate	kg/ha	Seed Treatment
--------------	-------	----------------

Dryland	4-6	Goldstrike <sup>®</sup>
---------	-----	-------------------------

High Rainfall/Irrigation	8-12	
--------------------------	------	--

### Features & Benefits

Very late maturing

Waterlogging tolerant

Good cold tolerance

Excellent regrowth from grazing and cutting

## Renegade Red Clover

Trifolium pratense

**BIG YIELDING, SHORT-TERM RED CLOVER**

Seeding Rate	kg/ha	Seed Treatment
--------------	-------	----------------

Dryland	3-4	Goldstrike®
---------	-----	-------------

High Rainfall/Irrigation	5-8	
--------------------------	-----	--

### Features & Benefits

Tetraploid type

Erect growing 'hay type'

High yielding

Good disease tolerance

Excellent hay type for top end forage yield and annual mixes



## Turbo Persian Clover

Trifolium resupinatum sub species majus

**LATE SEASON PERSIAN WITH EXCELLENT RECOVERY FROM GRAZING OR HARVEST**

Seeding Rate	kg/ha	Seed Treatment
--------------	-------	----------------

Dryland	6-10	Goldstrike®
---------	------	-------------

High Rainfall/Irrigation	10-15	
--------------------------	-------	--

### Features & Benefits

Excellent seedling establishment and winter growth

Very late maturing variety

Good frost tolerance

Highly digestible source of forage



## SARDI® Persian Clover

Trifolium resupinatum

**HARD SEEDED TYPE WITH MID MATURITY**

Seeding Rate	kg/ha	Seed Treatment
--------------	-------	----------------

Dryland	5-8	Goldstrike®
---------	-----	-------------

High Rainfall/Irrigation	10-15	
--------------------------	-------	--

### Features & Benefits

Highly digestible forage legume

Tolerant of waterlogging

Hard seeded Persian clover 'resupinatum' type

Excellent feed conversion for grazing animals





## Dalsa® Sub Clover

Trifolium subterranean

**EARLY MATURITY CONVENTIONAL SUB WITH GREAT EARLY VIGOUR**

Seeding Rate	kg/ha	Seed Treatment
Dryland	8-14	Goldstrike LongLife®
High Rainfall/Irrigation	15-20	

### Features & Benefits

Early maturing with high levels of hard seed  
 Strong burr burial strength  
 Excellent base legume for regenerating pasture  
 Reliable seed set in early seasons, high hard seed for drought proofing



## Hatrik® Sub Clover

Trifolium subterranean sub species yannicum

**MID MATURITY WHITE SEEDED SUB CLOVER WITH WATERLOGGING TOLERANCE**

Seeding Rate	kg/ha	Seed Treatment
Dryland	8-14	Goldstrike LongLife®
High Rainfall/Irrigation	15-20	

### Features & Benefits

White seeded 'yannicum' type  
 Excellent tolerance to waterlogging  
 Persistent in high rainfall and irrigated environments with particularly wet winters  
 Versatile regenerating variety



## Clare2® Sub Clover

Trifolium subterranean sub species brachycalycinum

**MID MATURITY, LARGE LEAF 'BRACHY' TYPE SUB CLOVER**

Seeding Rate	kg/ha	Seed Treatment
Dryland	8-14	Goldstrike LongLife®
High Rainfall/Irrigation	15-20	

### Features & Benefits

Large leaf 'brachycalycinum' type  
 Mid maturity variety  
 Excellent early vigour  
 Adaptable to a range of soil types



## Ovaflow® Sub Clover

Trifolium subterranean

LATE MATURITY CONVENTIONAL SUB FOR HIGH YIELDS IN REGENERATING PASTURES

Seeding Rate	kg/ha	Seed Treatment
Dryland	8-14	Goldstrike LongLife®
High Rainfall/Irrigation	15-20	

### Features & Benefits

Late maturing conventional sub clover  
Good burr burial strength  
Tolerant to hard levels of grazing  
High yield potential in late season environments



## Casper White Clover

Trifolium repens

EARLY MATURING VARIETY WITH LARGE LEAF SIZE

Seeding Rate	kg/ha	Seed Treatment
Dryland	3-4	Goldstrike®
High Rainfall/Irrigation	5-8	

### Features & Benefits

Early maturing variety  
Large leaf trait  
Excellent permanent pasture option  
Quick recovery from grazing, suits rotational grazing systems with a grass base



## Jumbo White Clover

Trifolium repens

LATE MATURING 'LADINO' TYPE

Seeding Rate	kg/ha	Seed Treatment
Dryland	3-4	Goldstrike®
High Rainfall/Irrigation	5-8	

### Features & Benefits

'Ladino' type with large leaves  
Excellent recovery from grazing  
High heat tolerance gives 'year-round' production  
Highly digestible feed for elite animal performance





## Riesling White Clover

*Trifolium repens*

**EARLY MATURING VARIETY WITH HIGH STOLON DENSITY**

Seeding Rate	kg/ha	Seed Treatment
Dryland	3-4	Goldstrike®
High Rainfall/Irrigation	5-8	

### Features & Benefits

High stolon density  
 Strong root system  
 Highly persistent in higher rainfall environments  
 Highly digestible forage



## SARDI Rose Clover

*Trifolium hirtum*

**HIGH PERSISTENT ROSE CLOVER WITH IMPROVED HARD SEEDS**

Seeding Rate	kg/ha	Seed Treatment
Dryland	5-8	Goldstrike®
High Rainfall/Irrigation	10-15	

### Features & Benefits

Highest hard seed levels of any rose clover  
 Pioneering species  
 Tolerant to mildly acidic soils  
 Persists and regenerates in soils with low fertility



## Zulumax® Arrowleaf Clover

*Trifolium vesiculosum*

**LONG SEASON VARIETY WITH HIGH YIELD POTENTIAL**

Seeding Rate	kg/ha	Seed Treatment
Dryland	6-10	Goldstrike®
High Rainfall/Irrigation	10-15	

### Features & Benefits

Late heading date  
 Adaptable to heavy and low pH soils  
 Low bloat potential  
 Very high potential yield

## Alexandria® Berseem Clover

Trifolium alexandrinum

### TRUE MULTI-CUT BERSEEM CLOVER

Seeding Rate	kg/ha	Seed Treatment
Dryland	8-10	Goldstrike®
High Rainfall/Irrigation	10-15	

#### Features & Benefits

Quick establishment vigour  
Multiple cut variety  
Low bloat potential  
High forage yield potential



## Bartolo Bladder Clover

Trifolium spumosum

### ADAPTABLE OVER WIDE SOIL TYPES, VERY HIGH LEVELS OF HARD SEED

Seeding Rate	kg/ha	Seed Treatment
Dryland	8-14	Goldstrike®
High Rainfall/Irrigation	15-20	

#### Features & Benefits

Adaptable to a wide range of soil types  
Some tolerance to RLEM  
Very high hard seed levels  
Suitable for low rainfall pastures



## Emperor Barrel Medic

Medicago truncatula

### LATE MATURING BARREL MEDIC WITH POWDERY MILDEW RESISTANCE

Seeding Rate	kg/ha	Seed Treatment
Dryland	10-15	Goldstrike LongLife®
High Rainfall/Irrigation	15-20	

#### Features & Benefits

Powdery Mildew resistant  
Excellent dry matter production and grazing recovery  
Good grazing tolerance

Product developed in collaboration with MLA, S&W & SARDI





**NEW  
RELEASE**

## Penfield Barrel Medic

Medicago truncatula

**EARLY MATURING SPINELESS BARREL MEDIC  
WITH SU HERBICIDE RESIDUE TOLERANCE**

### Seeding Rate

Dryland 10-15  
High Rainfall/Irrigation 15-20

### kg/ha

### Seed Treatment

Goldstrike LongLife®

Product developed in  
collaboration with MLA,  
S&W & SARDI



### Features & Benefits

Spineless barrel medic  
SU herbicide residue tolerance  
First medic variety with elite combination  
of spineless trait and SU herbicide residue  
tolerance in a barrel medic



## Bindaroo Button Medic

Medicago orbicularis

**A PROSTRATE GROWING MEDIC WITH HIGH  
HARD SEEDS AND PERSISTENCE**

### Seeding Rate

Dryland 10-15  
High Rainfall/Irrigation 15-20

### kg/ha

### Seed Treatment

Goldstrike LongLife®

### Features & Benefits

Button shaped seed pod  
Ultra high hard seed level  
Semi-prostrate growth habit



## Caliph Barrel Medic

Medicago truncatula

**VERY EARLY MATURING APHID RESISTANT  
BARREL MEDIC**

### Seeding Rate

Dryland 10-15  
High Rainfall/Irrigation 15-20

### kg/ha

### Seed Treatment

Goldstrike LongLife®

### Features & Benefits

Very early maturing  
Barrel shaped seed pod  
Aphid resistance  
Excellent base legume for low rainfall pasture grazing

## Cavalier Spineless Burr Medic

*Medicago polymorpha* var *brevispina*

**HIGHLY ADAPTABLE ANNUAL MEDIC WITH VERSATILE USES**

### Seeding Rate

Dryland

High Rainfall/Irrigation

**kg/ha**

10-15

15-20

### Seed Treatment

Goldstrike LongLife®

### Features & Benefits

Very early maturing

Barrel shaped seed pod

Aphid resistance

Excellent base legume for low rainfall pasture grazing



## Seraph Strand Medic

*Medicago littoralis*

**POWDERY MILDEW RESISTANT, SU RESIDUE TOLERANT STRAND MEDIC**

**NEW RELEASE**

### Seeding Rate

Dryland

High Rainfall/Irrigation

**kg/ha**

10-15

15-20

### Seed Treatment

Goldstrike LongLife®

### Features & Benefits

Excellent early vigour and winter production

Resistant to SU Herbicide and Powdery Mildew

Good adaptation to alkaline sandy loam in low rainfall

Palatable at all growth stages



## Silver Snail Medic

*Medicago scutellata*

**SNAIL MEDIC VARIETY WITH EXCELLENT VIGOUR AND PERSISTENCE**

### Seeding Rate

Dryland

High Rainfall/Irrigation

**kg/ha**

15-18

18-25

### Seed Treatment

Goldstrike LongLife®

### Features & Benefits

Early maturing

'Snail' shaped seed pod

Erect growth habit with very early bulk

Excellent hay option

Some tolerance to lower pH soils



# Clover – Species Identification and Agronomic Traits

Variety & Species	Annual/ Perennial	Maturity	Hard Seed
Turbo Persian	Annual	Very late/ multi-cut	Low
Sardi Persian	Annual	Mid	High
Zulumax Arrowleaf	Annual	Late	High
White Cloud Crimson	Annual	Mid	Soft
Alexandria Berseem	Annual	Mid-late	Low
Sardi Rose	Annual	Early-mid	Medium
Bartolo Bladder	Annual	Early	High
Enduromax Balansa	Annual	Early	High
Border Balansa	Annual	Mid	High
Baler Balansa	Annual	Late	High
Renegade Red	Perennial	Mid	-
Haifa White	Perennial	Early	-
Casper White	Perennial	Early	-
Jumbo White	Perennial	Late	-
Palestine Strawberry	Perennial	Early	High
Dalsa® Sub	Self-regenerating	Early (97 d)	High
Hatrik Sub	Self-regenerating	Mid (114 d)	Low
Clare 2 Sub	Self-regenerating	Mid (130 d)	Low
Ovaflow Sub	Self-regenerating	Late (140 d)	Low

<b>Waterlogging</b>	<b>Other Traits</b>
Tolerant	Good heat and frost tolerance, low bloat, large leaf.
Tolerant	Low growth points. Regenerates from hard seed.
Poor	Deep taproot, low bloat, poor winter growth. Regenerates from hard seed.
Poor	Taproot, good early vigour, and winter growth. White colour reduces bitter compounds.
Tolerant	Good early vigour, susceptible to frost, some salt tolerance.
Poor	Pioneering species (acidic, dry, low fertility).
Poor	Susceptible to frost. Regenerates from hard seed.
Tolerant	Good winter production. Regenerates from hard seed.
Tolerant	Frost tolerant. Regenerates from hard seed.
Tolerant	Spring sow – slow establishment. Regenerates from hard seed.
Moderately tolerant	Upright/hay type
Moderately tolerant	Common, large leaf, high stolon density
Moderately tolerant	Large leaf, improved early vigour
Moderately tolerant	Ladino type, vigour, heat tolerance
Tolerant	Deep-rooted, drought and salt tolerant. Regenerates from hard seed.
Poor	Subterranean, burr burial 9
Tolerant	Yannicum, burr burial 5
Poor	Brachycalycinum, burr burial 1
Poor	Subterranean, burr burial 6

# Medic Identification



**Cavalier Spineless Burr**



**Bindaroo Button**



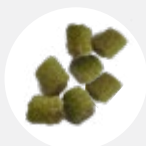
**Burr**



**Caliph Barrel**



**Paraggio Barrel**



**Penfield Spineless Barrel**



**Silver Snail**



**Seraph Strand**



# LUCERNE



**S&W**  
SEED COMPANY



## SW9720 Lucerne

Medicago sativa

**OUTSTANDING YIELDS AND QUALITY UNDER SALTY CONDITIONS**

### Seeding Rate

Dryland 4-8  
High Rainfall/Irrigation 10-20

kg/ha

### Seed Treatment

Goldstrike LongLife® XLR8™

### Features & Benefits

Highly winter active  
Developed in saline conditions  
Extended cutting and grazing opportunities in autumn and winter  
Produces high quality and exceptional yields



## L92 Lucerne

Medicago sativa

**MULTIPLE HAY AND SILAGE OPPORTUNITIES THROUGHOUT THE SEASON & RANGE OF ENVIRONMENTS**

### Seeding Rate

Dryland 4-8  
High Rainfall/Irrigation 10-20

kg/ha

### Seed Treatment

Goldstrike LongLife® XLR8™

### Features & Benefits

Highly winter active  
Very quick regrowth after cutting or grazing  
Persistent under a wide range of conditions  
Suited to a wide range of soil types



## L91® Lucerne

Medicago sativa

**AN ECONOMICAL OPTION WITH STRONG GROWTH IN AUTUMN/WINTER MAXIMISING YEAR ROUND PRODUCTION**

### Seeding Rate

Dryland 4-8  
High Rainfall/Irrigation 10-20

kg/ha

### Seed Treatment

Goldstrike LongLife®

### Features & Benefits

Highly winter active  
Outstanding seedling vigour  
Extended grazing ability and hay in autumn and winter  
Good for rotations in both dairy and cropping

## Q75<sup>®</sup> Lucerne

Medicago sativa

DEMONSTRATED SUPERIOR QUALITY CHARACTERISTICS  
IN LABORATORY TESTS AND ANIMAL FEEDING TRIALS



### Seeding Rate

Dryland

High Rainfall/Irrigation 10-20

### kg/ha

4-8

### Seed Treatment

Goldstrike LongLife<sup>®</sup> XLR8<sup>™</sup>

### Features & Benefits

Excellent leaf retention with large leaf size

Increased greenness in the bale

Improved forage quality and winter production

Produces high quality feed

## L71 Lucerne

Medicago sativa

AN ECONOMICAL OPTION WITH STRONG GROWTH IN  
AUTUMN/ WINTER MAXIMISING YEAR ROUND PRODUCTION



### Seeding Rate

Dryland

High Rainfall/Irrigation 10-20

### kg/ha

4-8

### Seed Treatment

Goldstrike LongLife<sup>®</sup> XLR8<sup>™</sup>

### Features & Benefits

Highly grazing tolerant

High pest and disease rating

Offers a high quality flexible option

Produces high quality hay

## L70 Lucerne

Medicago sativa

COST EFFECTIVE, RELIABLE AND ROBUST  
ALTERNATIVE TO AURORA



### Seeding Rate

Dryland

High Rainfall/Irrigation 10-20

### kg/ha

4-8

### Seed Treatment

Goldstrike LongLife<sup>®</sup>

### Features & Benefits

Economical option

Good pest and disease package

Reliable yields under wide conditions

Covered by S&W Seed Company Establishment Guarantee<sup>®</sup>  
program



**NEW  
RELEASE**

## ML66 MultiLeaf® Lucerne

Medicago sativa

**OFFERS A NEW GENERATION OF MULTILEAF LUCERNE  
WITH IMPROVED PERSISTENCE AND QUALITY**

### Seeding Rate

Dryland 4-8  
High Rainfall/Irrigation 10-20

### kg/ha

### Seed Treatment

Goldstrike LongLife® XLR8™

### Features & Benefits

Highly expressive MultiLeaf® trait  
Low crown  
Produces high quality hay and silage  
Persistent under heavy traffic  
Can be used in multi operation farming systems



## SW6330 Lucerne

Medicago sativa

**RECOVERS RAPIDLY FROM GRAZING AND CUTTING  
AND HAS EXCELLENT PERSISTENCE**

### Seeding Rate

Dryland 4-8  
High Rainfall/Irrigation 10-20

### kg/ha

### Seed Treatment

Goldstrike LongLife® XLR8™

### Features & Benefits

High pest and disease rating  
Produces high quality and exceptional yields  
Recovers rapidly after cutting and grazing  
High stand persistence



## GTL60® Lucerne

Medicago sativa

**BROAD LOW SET CROWN, HIGH FORAGE VALUES,  
RUMINANT PALATABILITY AND PEST & DISEASE RATINGS**

### Seeding Rate

Dryland 4-8  
High Rainfall/Irrigation 10-20

### kg/ha

### Seed Treatment

Goldstrike LongLife® XLR8™

### Features & Benefits

Rapid regrowth after grazing or cutting  
Very high grazing tolerance  
Produces high quality forage  
Increased grazing rotations

## L56<sup>®</sup> Lucerne

Medicago sativa

THE BENCHMARK DUAL PURPOSE GRAZING AND HAY  
LUCERNE IN AUSTRALIA



### Seeding Rate

kg/ha

### Seed Treatment

Dryland 4-8  
High Rainfall/Irrigation 10-20

Goldstrike LongLife<sup>®</sup> XLR8<sup>™</sup>

### Features & Benefits

Produces high quality and high yielding hay and forage  
Semi winter dormant  
Highly persistent

## Q31<sup>®</sup> Lucerne

Medicago sativa

PREMIUM QUALITY, SUPERIOR LEAF RETENTION TRAIT,  
AND HIGHEST NUTRITIVE VALUE IN HAY, SILAGE & CHAFF



### Seeding Rate

kg/ha

### Seed Treatment

Dryland 4-8  
High Rainfall/Irrigation 10-20

Goldstrike LongLife<sup>®</sup> XLR8<sup>™</sup>

### Features & Benefits

Winter dormant  
Premium grade hay, chaff and silage  
High quality option with increased flexibility in cutting times



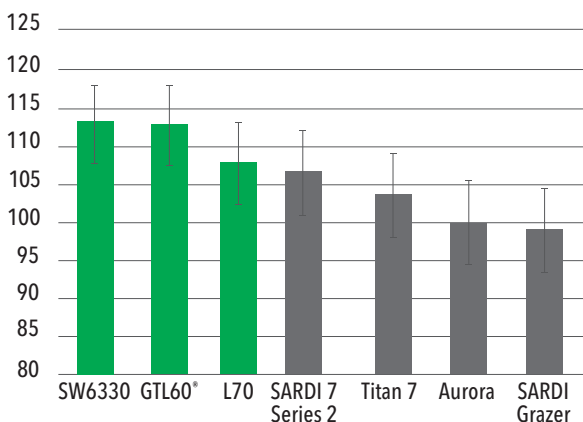
# Lucerne Dormancy Characteristics

	<b>DORMANT &amp; SEMI-WINTER DORMANT</b>
<b>Growth</b>	95% summer 5% winter
<b>Cutting Schedule</b>	38-42 Days
<b>Number of cuts</b>	4-5/season
<b>Crown type</b>	Broad & Crown below ground
<b>Utilization</b>	Specialist (hay/silage/chaff) Long term hay or pasture mix High rainfall or Irrigation
<b>Stand Life</b>	7+ years with good management
<b>Recommended Variety</b>	<b>GTL60<sup>*</sup>, SW6330, ML66 MultiLeaf<sup>*</sup>, L56<sup>*</sup>, Q31<sup>*</sup></b>
	<b>WINTER ACTIVE</b>
<b>Growth</b>	90% summer 10% winter
<b>Cutting Schedule</b>	33-35 days
<b>Number of cuts</b>	5-7/Season
<b>Crown type</b>	Broader & Lower Crown
<b>Utilization</b>	Dual purpose (grazing/hay) Longer term pasture or hay Dryland and Irrigation
<b>Stand Life</b>	5-7 years with good management
<b>Recommended Variety</b>	<b>L70, L71, Q75<sup>®</sup></b>
	<b>HIGHLY WINTER ACTIVE</b>
<b>Growth</b>	80% summer 20% winter
<b>Cutting Schedule</b>	25-28 days
<b>Number of cuts</b>	7-10/season
<b>Crown type</b>	Narrow & Higher Crown
<b>Utilization</b>	Dual purpose (grazing/hay) Short term cropping rotation Dryland and Irrigation
<b>Stand Life</b>	3-4 years with good management
<b>Recommended Variety</b>	<b>SW9720, L91<sup>®</sup>, L92</b>



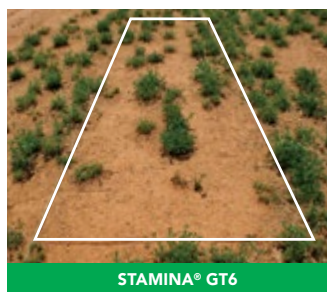
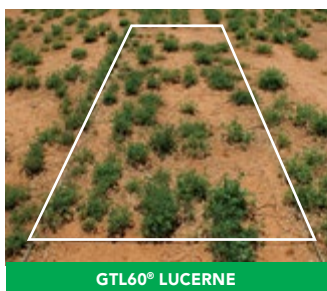
## TRIAL RESULTS

Multi year, multi site Dorm 6/7 Lucerne dry matter production, kg DM/ha expressed as % of check variety Aurora



No. Trials: 5 / No. Years: 5 / CV: 12.99 / LSD: 0.57

## Active material has distinctly dropped off in the recent two years

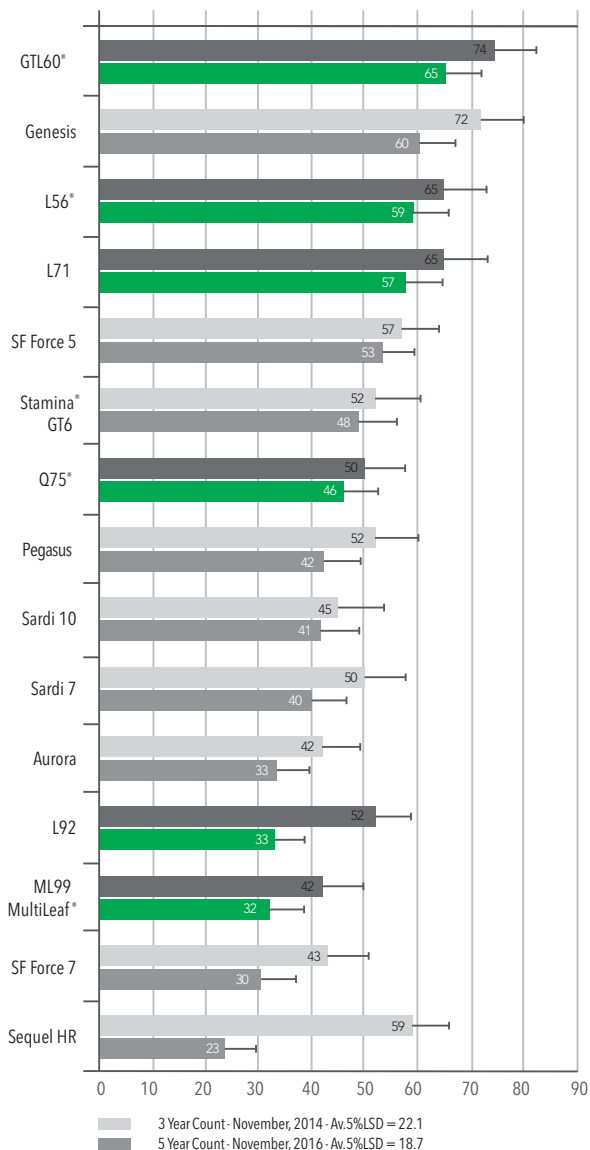


S&W Seed company has taken the term 'grazing tolerant' very seriously with its selection of new lucerne material. The ability to select plant germplasm through a five-year intensive grazing trial has proven critical to giving farmers confidence in new lines coming through the S&W lucerne breeding program. The strength of this trialling model will be replicated in the future with more selections being made with this key grazing tolerance trait.



## Percentage of residual plants after three and five years of grazing.

Lucerne stands are grazed to restrict flowering over a three year period to increase pressure on plants.



## The L70 Advantage

- L70 Lucerne offer higher winter growth over Aurora
- Superior forage genetics - higher leaf to stem ratio.
- Minimum 85 per cent germination standards exceed the current minimum the certified standard for Aurora of only 65 percent.
- These attributes, combined with superior plant genetics makes L70 Lucerne an excellent new alternative to Aurora.

L70 Lucerne offers producers higher returns and allows them to plant with confidence knowing they are covered by the Establishment Guarantee™ program, whereas common lucernes are not.

## Agronomic Features

S&W Seed Company L70 Lucerne has become a leading winter active lucerne variety in the Australian market and an excellent fit for both grazing or forage production. The L70 Lucerne advantage compared to Aurora include the following agronomic characteristics:

### Better establishment vigour

Consistently faster to establish, providing a competitive edge. Ideal for undersowing crops or in pasture mixes.

### Higher winter production (activity rating of 7 vs. 6)

Faster to recover after cutting or grazing and extends growth to bridge late-autumn and early spring feed gaps.

### High resistance to more pests and diseases

Improved persistence across all rainfall zones.

### Very good forage quality

Fine stems and superior leaf retention compared to other winter active varieties.

# Disease Rating Comparison

VARIETY	L70 Lucerne	Aurora
SPOTTED ALFALFA APHID	HR	HR
BLUE GREEN APHID	HR	HR
PHYTOPHTHORA ROOT ROT	R	R
ANTHRACNOSE	R	MR
BACTERIAL WILT	R	LR
STEM NEMATODE	R	R



## LEAF TRAIT COMPARISON

L70 LUCERNE (LEFT) EXHIBITING HIGHER LEAF CARRYING TRAIT COMPARED TO OLDER PLANT GENETICS EXHIBITED IN AURORA (RIGHT)

# TRIAL RESULTS

## L70 LUCERNE V AURORA

### YIELD RESULTS & PRICING COMPARISON

L70 Lucerne offers very competitive pricing to Aurora and therefore similar per hectare input seed costs.

	L70	AURORA
Total yield	18.5 t/ha	17.0 t/ha
Hay returns/ha at \$300t	\$5,550/ha	\$5,100/ha

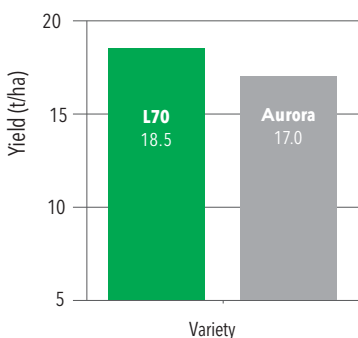
#### ▲ EXTRA HAY RETURNS

#### \$300 PER HECTARE, PER YEAR

Source: S&W Seed Company, L70 Lucerne Grazing Trial, 2011, Penfield Research Station.

Five years, four irrigated sites, 46 cuts.

Locations: Virginia SA, Struan SA, Forbes NSW & Wagga Wagga NSW.



#### ▲ EIGHT PERCENT YIELD INCREASE

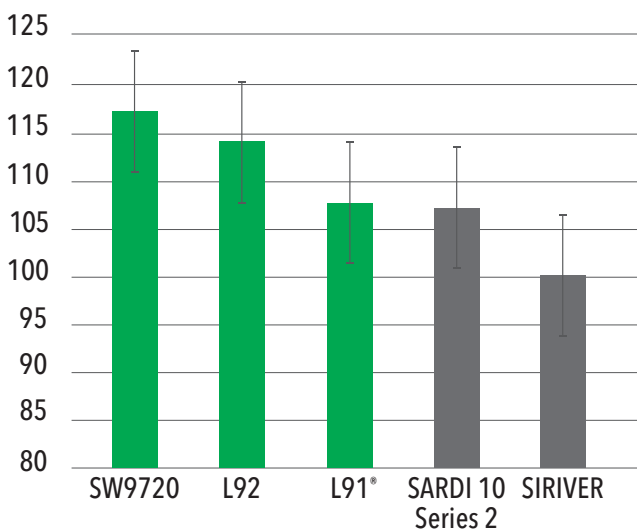
	L70	AURORA
Increased Forage Quality	✓	✗
Better Disease Profile	✓	✗
Higher DM Production	✓	✗
Increased Germination %	✓	✗
Establishment Guarantee®	✓	✗

# New Highly Winter Active Genetics

The S&W Lucerne breeding program has a long history of developing highly winter active varieties with outstanding forage yields and quality, with robust pest and disease packages. The current commercial highly winter active portfolio available for customers is no exception.

Over the last five years, the S&W lucerne breeding team has developed new lucerne varieties in the 8 to 10 dormancy ranges that consistently outperform current commercial varieties. The graph below shows that customers can produce up to an extra 16% kg DM/ha per year, growing S&W elite varieties, based in the extensive multi-season and multi-site evaluation program.

## Multi year, Multi Site Dorm 9 Lucerne dry matter production, kg DM/ha expressed as % of check variety Siriver



*No. Trials: 5 / No. Years: 5 / CV: 12.99 / LSD: 0.57*

# Pests and Diseases



## **PHYTOPHTHORA ROOT ROT - *PHYTOPHTHORA MEDICAGINIS***

**DESCRIPTION:** Plants turn yellow, wilt and die. Areas of light brown discoloration up to five centimetres long occur on the taproot up to 30 centimetres below the crown. The Taproot below the discoloured area will rot away completely.

**INCIDENCE:** Occurs in Australia, particularly in heavy and/or poorly drained soils and wet conditions. The disease can be severe, killing large numbers of seedlings, scattered plants or large patches in mature stands. In irrigated stands, plants can survive. Water availability keeps the taproots immediately below the crown alive, but forage yields are reduced.

**SPREAD:** The fungus spreads rapidly in water over considerable distances.

**MANAGEMENT:** Use resistant varieties and spell the paddock from lucerne. Do not rotate with chickpeas. Avoid waterlogging irrigated stands on heavy soils.



## **COLLETOTRICHUM CROWN ROT OR STEM ANTHRACNOSE - *COLLETOTICHUM TRIFOLII***

**DESCRIPTION:** Brown-black spots on the stems develop into well defined boat shaped lesions that are up to 25 millimetres long, dark around the edges with pale centres, and covered in raised dark spots.

The fungus can also enter the crown, causing a blue-black discolouration of five to eight centimetres into the taproot. In mature stands, the dead stems are white or straw coloured with a shepherd's crook appearance. Plant death occurs gradually.

**INCIDENCE:** Occurs throughout Australia in warm environments with high humidity. It is more severe from late summer to autumn. It is less likely in drier and cooler climates.

**SPREAD:** Spores spread in warm, wet weather from plant debris and from the crown of infected plants by raindrop splash and harvesting equipment.

**MANAGEMENT:** Use disease resistant varieties and, if crown rot and anthracnose have been severe, rotate the crop every three years with non-host plants.

Photos supplied by Queensland Department of Primary Industries

# Pests and Diseases



## PEA APHID (PA) - *ACYRTHOSIPHON PISUM*

**DESCRIPTION:** Green in colour, though some may be yellow or pink. They are four to five millimetres long with dark bands around the antennae and spine-like projections on both sides at the rear of their bodies. Adults may have wings. Nymphs are smaller and wingless.

**DAMAGE:** PA sucks sap from the leaves causing wilting, stunting and curling, and odd-shaped plants. The top leaves often turn light green while the lower turn yellow and die. Honeydew excreted by PA makes foliage sticky, affecting hay and pasture quality. PA is a significant carrier of the alfalfa mosaic virus.

**INCIDENCE:** Common in southern Australia, Western Australia and New South Wales during dry conditions in spring and autumn, although economic levels of damage are rare.

**MANAGEMENT:** Monitor beneficial insects. Irrigate or graze the stand to reduce PA numbers. In irrigated hay stands, use insecticides if the infestation is heavy.



## FUSARIUM WILT - *FUSARIUM OXYSPORUM F.SP.MEDICAGINIS*

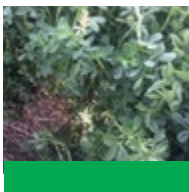
**DESCRIPTION:** Initially, plants are stunted with wilted shoots and yellow leaves. The infection then bleaches the leaves and stems, eventually causing plant death. Dark red-brown streaks develop in a layer under the bark at the base of the stem forming a reddish-brown ring in the centre of the root.

**INCIDENCE:** Fusarium wilt is not common. The Fusarium fungus is widespread but rarely causes wilt. Fusarium wilt has not been identified in New South Wales.

**SPREAD:** The fungus survives for long periods in decaying plants. It invades small roots or wounds in the taproot during warm, wet weather.

**MANAGEMENT:** Controlled by crop rotation and resistant varieties.

# Pests and Diseases



## **STEM NEMATODE - *DITYLENCHUS DIPSACI***

**DESCRIPTION:** Microscopic eelworms are individually difficult to see with the naked eye. Sometimes they mass on or just below the surface to form visible "eel-worm wool."

These can survive desiccation and be transported in hay to start new infestations.

**DAMAGE:** Plants are dwarfed and distorted, with swollen shoots. Leaves are distorted and clustered towards the ends of stems. Plants die in patches.

**INCIDENCE:** Occur in southern Australia, common in irrigated stands on river flats, with the greatest severity in the spring.

**MANAGEMENT:** Sow resistant varieties, plough out badly infested stands and practice crop rotation.



## **BACTERIAL WILT - *CLAVIBACTER MICHIGANENSIS SSP. INSIDIOSUS***

**DESCRIPTION:** Yellow and stunted plants with small leaves are scattered through the stand. The inner bark of the taproot is white, while the exposed root centre is yellowish.

**INCIDENCE:** Common in southern Australia but has not been reported in the southeast of South Australia. It often occurs in autumn in irrigated stands. It is not found in the dry, inland subtropics of Queensland and northern New South Wales.

**SPREAD:** The bacteria persist in soil for more than ten years. The disease is spread by stem nematodes and through hay and machinery.

**MANAGEMENT:** Sow certified seed of resistant varieties.



# Pests and Diseases



## **SPOTTED ALFALFA APHID (SAA) - *THERIOAPHIS TRIFOLII***

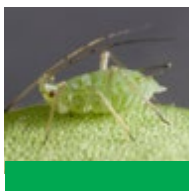
**DESCRIPTION:** Adults are pale yellowish-green, two millimetres long, with six or more rows of black spots along their backs. Adults may have wings. Nymphs are smaller and wingless.

**DAMAGE:** Adults and nymphs suck sap from the stems or the undersides of lower leaves. Before that, leaf veins become yellow or white, and the leaves curl and drop off. SAA inject a toxin that can kill seedlings and mature plants.

Honeydew excreted by SAA causes foliage to become sticky and develop a black, sooty mould.

**INCIDENCE:** Occur throughout Australia in dry conditions, mainly in the spring and autumn.

**MANAGEMENT:** Plant resistant varieties. Monitor beneficial insects. Irrigate or graze the stand to reduce SAA numbers. In irrigated hay stands, use insecticides if the infestation is heavy.



## **BLUEGREEN APHID (BGA) - *ACYRTHOSIPHON KONDOI***

**DESCRIPTION:** Adults vary from pale green-grey to dark green-blue and are three millimetres long and have tube-like projections on either side at the rear of their bodies. Adults may have wings. Nymphs are smaller and wingless.

**DAMAGE:** Adults and nymphs suck sap from the leaves and stems at the growing points, causing shortened internodes between the leaves at the top of each stem, stunted plants, leaf curling, and leaf yellowing. Honeydew excreted by BGA makes the foliage sticky and affects hay and pasture quality. BGA does not kill mature plants.

**INCIDENCE:** Occur throughout Australia, and most active during the cooler months, particularly dry conditions.

**MANAGEMENT:** Plant resistant varieties. Monitor beneficial insects. Irrigate or graze the stand to reduce BGA numbers. In irrigated hay stands, use insecticides if the infestation is heavy.

# Why Choose a S&W Lucerne?

- ✓ Range of winter activity, with dormancy available from 3-10
- ✓ Elite forage yields and quality
- ✓ Rapid regrowth after cutting or grazing
- ✓ High resistance to pests and diseases
- ✓ Suited to a variety of environmental conditions
- ✓ Increased grazing tolerance and persistence
- ✓ Flexibility in a mixed farming operation
- ✓ S&W Seed Company Establishment Guarantee Program

A close-up photograph of a cluster of purple flowers with long, thin stamens. The flowers are in various stages of bloom, with some showing the intricate details of the petals and stamens. The background is a soft, out-of-focus green, suggesting a natural outdoor setting. The overall composition is vertical and detailed.

# FORAGE HERBS & BRASSICA

**S&W**  
SEED COMPANY

# FORAGE HERBS & BRASSICA



## Planting Guide

Queensland, New South Wales, Victoria, Tasmania, South Australia and Western Australia.



### Autumn

Compass Chicory, Balance® Chicory, Subzero Hybrid Forage, Ranger® Plantain, Samurai White Mustard™, Smart Radish, Surge Buckwheat™ and Royal Phacelia™



### Winter

Bouncer Hybrid Forage, Subzero Hybrid Forage, Samurai White Mustard™, Smart Radish, Surge Buckwheat™ and Royal Phacelia™



### Spring

Compass Chicory, Balance® Chicory, Bouncer Hybrid Forage, Subzero Hybrid Forage, Ranger® Plantain and Royal Phacelia™

## Compass Chicory

*Chicorium intybus*



### SHORT TERM CHICORY

Seeding Rate	kg/ha	Seed Treatment
Dryland	3	None / XLR8™ optional
High Rainfall/Irrigation	5	

#### Features & Benefits

Short term type  
Excellent establishment vigour  
High digestibility and preferred intake  
Lowers bloat potential in pasture mixes

## Balance® Chicory

*Chicorium intybus*



### TRUE PERENNIAL-TYPE CHICORY

Seeding Rate	kg/ha	Seed Treatment
Dryland	3	XLR8™
High Rainfall/Irrigation	5	

#### Features & Benefits

True perennial type  
Highly digestible dry matter  
Excellent pasture mix option  
Lowers bloat potential in pasture mixes

## Bouncer Hybrid Forage Brassica

*Brassica napus*



### EARLY-MATURING HYBRID FORAGE BRASSICA

Seeding Rate	kg/ha	Seed Treatment
Dryland	3	None / XLR8™ optional
High Rainfall/Irrigation	5	

#### Features & Benefits

Leafy turnip  
Very quick to graze, 5 weeks from emergence  
Quick to recover from grazing  
No ripening of forage required before grazing



## Subzero Hybrid Forage

*Brassica napus*

**LONG SEASON FORAGE BRASSICA WITH COLD TOLERANCE**

Seeding Rate	kg/ha	Seed Treatment
Dryland	5	XLR8™
High Rainfall/Irrigation	8	

### Features & Benefits

- Leafy rape
- Withstands frosts as a mature plant
- Spring or autumn sowing option
- Quick to establish
- Nine weeks to first grazing



## Ranger® Plantain

*Plantago lanceolata*

**PERENNIAL GRAZING PLANTAIN**

Seeding Rate	kg/ha	Seed Treatment
Dryland	1-3	XLR8™
High Rainfall/Irrigation	4-8	

### Features & Benefits

- Nutrient accumulator
- Highly palatable and digestible forage
- Improved livestock weight gains
- Forage is an excellent source of trace elements and has drenching properties



## Samurai White Mustard™

*Sinapis alba*

**EARLY/MID MATURING FLORAL RESOURCE FOR BEE FORAGE AND INSECT HABITATION**

Seeding Rate	kg/ha	Seed Treatment
Dryland	2-8	XLR8™ optional
High Rainfall/Irrigation	8-20	

### Features & Benefits

- Abundant floral production
- Sustained flowering period
- High levels of attraction to bees and other beneficial insects
- Additional soil borne disease mitigation

## Smart Radish

Raphanus sativus L



TILLAGE TYPE RADISH WITH 'PULL-DOWN' BULB

Seeding Rate	kg/ha	Seed Treatment
Dryland	5	Fungicide / XLR8™ optional
High Rainfall/Irrigation	8	

### Features & Benefits

- 'Pull-down' bulb grows further into the ground
- Very quick to establish
- Increases water infiltration in soils and reduces compaction
- Highly digestible forage source

## Surge Buckwheat™

Fagopyrum esculentum



EARLY VIGOUR COVER CROP TO PROVIDE WEED SUPPRESSION AND QUALITY FLORAL RESOURCES

Seeding Rate	kg/ha	Seed Treatment
Dryland	40-60	XLR8™ optional
High Rainfall/Irrigation	60-80	

### Features & Benefits

- Scavenger of phosphorous and calcium
- Quality weed suppressant
- Attractive to bees with prolific flowering capacity and high nectar flow
- Fast establishing

## Royal Phacelia™

Phacelia tanacetifolia



PROLONGED FLORAL RESOURCE WITH HIGH LEVELS OF QUALITY POLLEN AND NECTAR FOR BEE FORAGE

Seeding Rate	kg/ha	Seed Treatment
Dryland	5-10	XLR8™ optional
High Rainfall/Irrigation	10-15	

### Features & Benefits

- Adapted to autumn or spring sowing
- Highly attractive to bees and other beneficial insects producing high quality pollen and nectar
- Nitrogen scavenger
- Flowers abundantly for a sustained period of time

## Choose your Forage...

Product	Species	Crop	Time to graze (from emergence)	Lifespan
Bouncer	Hybrid forage brassica	Leafy turnip	6 weeks	3-6 mths
Subzero	Hybrid forage brassica	Leafy rape	8-9 weeks	6-18 mths
Compass	Chicory	Short-term	12+ weeks	12-18 mths
Balance	Chicory	Perennial	12+ weeks	2-3 yrs
Ranger	Plantain	Perennial	12+ weeks	2+ yrs
Rebound	Millet	Multi-cut	10+ weeks	3-6 mths





## Case Study:

### Calculating crop requirements and making it pay!

#### Scenario

I have 100 young steers that I want to feed from December to February on a crop of Subzero Forage Brassica and Rebound Millet.

**What area do I need to sow, and will I make a return?**

#### Assumptions

- A 250kg steer, gaining 1 kg/day has a DSE rating of 9
- Maximum daily feed intake =  $0.8 \times \text{DSE}$   
(or use  $1.2 \times \text{liveweight} \div \text{NDF}\%$ )
- The crop provides the energy, protein, and fibre requirements for this class of stock and has grown 8 t/ha of Dry Matter (DM)
- Allow 30% wastage in a set stocked grazing system

#### Calculations

##### Step 1: How much crop?

Intake =  $0.8 \times 9 = 7.2$  kg DM/head/day

$7.2$  kg + 30% wastage = 9.4 kg DM/head/day

$9.4$  kg  $\times$  100 head = 940 kg DM/day

$940$  kg  $\times$  100 days = 94 tonne to fully feed all steers

$94$  t  $\div$  8t/ha supplied = 11.75 ha required

##### Step 2: What's the cost?

Knockdown herbicide/insecticide \$16

Lime & fertiliser \$350

Cultivation/contractor \$300

Seed \$84

Total cost = \$750/ha


##### Step 3: What have I made?

Stocking rate =  $100$  steers  $\div$  11.75 ha = 8.5 steers/ha

Gaining 1 kg/head/day for 100 days = 850 kg/ha

$850$  kg  $\times$  \$4.00/kg = \$3,400.00/ha

Total potential income = \$3,400/ha

A close-up photograph of the leaves of a Subzero Forage Brassica plant. The leaves are large, green, and have a prominent network of veins. Some of the leaf edges are slightly damaged or eaten. The background shows a clear blue sky and some out-of-focus trees.

| **Subzero**  
Forage Brassica

# TROPICAL GRASSES



**S&W**  
SEED COMPANY



## Gatton Panic Grass

*Panicum maximum*

**SUBTROPICAL GRASS ADAPTABLE TO A WIDE VARIETY OF SOIL TYPES**

<b>Seeding Rate</b>	<b>kg/ha</b>	<b>Seed Treatment</b>
High Rainfall/Irrigation	6-12	Goldstrike XLR8™

### Features & Benefits

- Suitable to a variety of soil types
- Moderately tolerant to drought
- Suited for grazing or cutting for hay
- Adaptable, clumping type
- Long term pasture option
- Highly productive in good fertility



## Bambatsi Panic Grass

*Panicum maximum*

**SUBTROPICAL GRASS WELL SUITED TO HEAVY SOILS**

<b>Seeding Rate</b>	<b>kg/ha</b>	<b>Seed Treatment</b>
High Rainfall/Irrigation	6-12	Goldstrike XLR8™

### Features & Benefits

- Cold tolerant and drought tolerant
- High forage quality
- High levels of animal performance
- Reliable grass for heavy soils
- Tolerant to short periods of waterlogging



## Premier Digitaria

*Digitaria eriantha*

**SUBTROPICAL GRASS WITH HIGH PALATABILITY AND INTAKE POTENTIAL**

<b>Seeding Rate</b>	<b>kg/ha</b>	<b>Seed Treatment</b>
High Rainfall/Irrigation	6-12	Goldstrike XLR8™

### Features & Benefits

- Persists well on light soils
- Good acid tolerance
- Highly palatable
- Fine stems result in high animal intake
- Clumping type, allows for companion species to thrive
- Excellent feed conversion rates

## Capricorn® Rhodes Grass

*Chloris gayana*



### LATER MATURING SUBTROPICAL FORAGE RHODES GRASS

<b>Seeding Rate</b>	<b>kg/ha</b>	<b>Seed Treatment</b>
High Rainfall/Irrigation	6-12	Goldstrike XLR8™

#### Features & Benefits

Later maturing than Katambora

Finer stems

Vigorous regrowth from grazing and cutting for hay

Highly palatable for grazing

Quicker drying for hay cutting due to finer stems

Good salt tolerance

## Callide Rhodes Grass

*Chloris gayana*



### IMPROVED SUBTROPICAL RHODES GRASS VARIETY

<b>Seeding Rate</b>	<b>kg/ha</b>	<b>Seed Treatment</b>
High Rainfall/Irrigation	6-12	Goldstrike XLR8™

#### Features & Benefits

Drought tolerant

Later flowering than Katambora

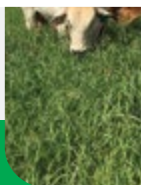
Improved palatability

More productivity than Katambora

Greater palatability gives better feed conversion

## Bisset Creeping Bluegrass

*Bothriochloa insculpta*



### HIGH QUALITY SUBTROPICAL GRASS WITH EXCELLENT GROUND COVER

<b>Seeding Rate</b>	<b>kg/ha</b>	<b>Seed Treatment</b>
High Rainfall/Irrigation	6-12	Goldstrike XLR8™

#### Features & Benefits

Highly palatable

Excellent drought tolerance

Grazing tolerant

Long term perennial grass base for a pasture

Grows in a range of conditions

Later maturity provides longer window of production

| **Capricorn**  
Rhodes Grass



# FORAGE SORGHUM & MILLET



**S&W**  
SEED COMPANY



## Chomper Forage Sorghum

Sorghum x Sudan grass hybrid

**MID-MATURING SORGHUM X SUDAN FORAGE**

Seeding Rate	kg/ha	Seed Treatment
Dryland	4-8	Enhanced or Standard
High Rainfall/Irrigation	15-20	

### Features & Benefits

- Large seed size
- Good early season vigour
- Quick regrowth after cutting or grazing
- High leaf to stem ratio



## FlexiGraze™ Forage Sorghum

Sudan x Sorghum Sudan

**NEW  
RELEASE  
2022**

**SUDAN X SUDAN GRASS HYBRID -  
PHOTOPERIOD SENSITIVE**

Seeding Rate	kg/ha	Seed Treatment
Marginal dryland	3-5	Enhanced or Standard
Dryland	8-15	
High Rainfall/Irrigation	20-30	

### Features & Benefits

- Ultra late flowering
- Grazing flexibility and hay production



## Calibre BMR® Forage Sorghum

Sorghum x Sudan grass hybrid

**EARLY TO MID-MATURING BMR  
FORAGE SORGHUM**

Seeding Rate	kg/ha	Seed Treatment
Dryland	4-8	Enhanced or Standard
High Rainfall/Irrigation	15-20	

### Features & Benefits

- 12 gene BMR
- Highly digestible forage
- Excellent yield potential
- Increased livestock weight gain
- High quality dry matter



## Sweet As Forage Sorghum

Sorghum bicolor hybrid



### SWEET FORAGE SORGHUM HYBRID

#### Seeding Rate

Dryland

High Rainfall/Irrigation

kg/ha

4-8

15-20

#### Seed Treatment

Enhanced or Standard

#### Features & Benefits

Large seed size

Late maturing

High sugar content

## Rebound Forage Millet

Echinochloa esculenta



### FAST GROWING SUMMER FORAGE MILLET

*Annual Spring & Summer Option*

#### Seeding Rate

Dryland

High Rainfall/Irrigation

kg/ha

10-15

30-40

#### Seed Treatment

None/XLR8™ optional

#### Features & Benefits

Fast growing summer grass

Safe, good quality feed

Excellent regrowth after cutting

Plant on 14 degrees Celsius soil temperatures and rising



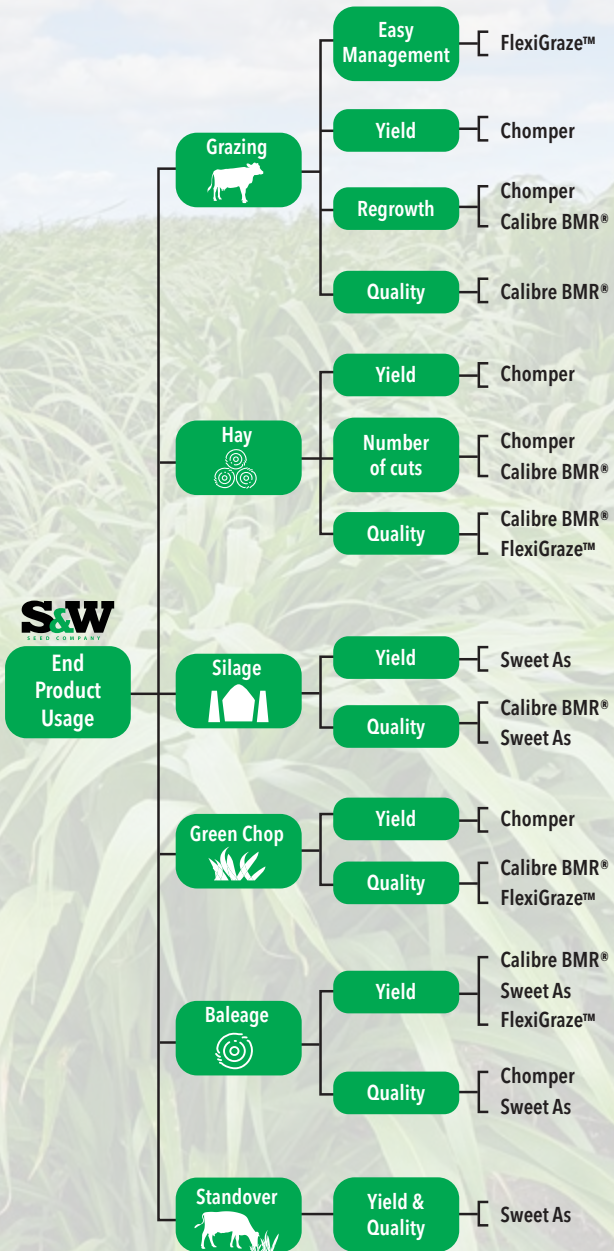


## Choose Your Forage Sorghum...

Product	Chomper	Calibre BMR®	FlexiGraze™	Sweet As
<b>Intensive Grazing</b>	Good	Excellent	Excellent	Satisfactory
<b>Range Grazing</b>	Excellent	Excellent	Excellent	Good
<b>Hay</b>	Good	Excellent	Excellent	Satisfactory
<b>Silage</b>	Bale wrap	Bale wrap	Bale wrap	Pit/Bunker
<b>Standover</b>	Satisfactory	Satisfactory	Satisfactory	Excellent
<b>Feed Quality</b>	Good	Excellent	Good	Excellent
<b>Comments</b>	High forage yield	Best digestibility	Grazing flexibility	Quality silage

# S&W Forage Sorghum Options

Find the ideal product for your needs



# FlexiGraze™ Forage Sorghum For Hay And Grazing

During wet weather or when new cattle spend time in the yards, Kody Kajewski grows forage sorghum on his property near Dalby, Queensland, to sell to the local hay market and feed his own stock.

Despite having the option of irrigation, the summer growing season in 2021 was so wet he didn't require it.

In his selection process, Kody looks for fine stem varieties that produce as much bulk as possible off the paddock. In past summers, "Nudan" has been the mainstay of his program. Kody allocated a small spot for some "FlexiGraze™" to go in beside.

In late November, planting began with decent early rains leading to a successful start, and wet conditions continued throughout the growing season. The first cut was baled in February with a lucky break in the weather, allowing the 4x4 round bales to be taken off the paddock and stored.

In the first cut yield data, "Nudan" led, but the second cut later in the season was where things got interesting.

"The FlexiGraze™ recovered quickly from the cutting and shot away again with lots of tillers," claimed Kody. On the 2nd cut, he found the FlexiGraze™ had evened up the score. "Best of all the FlexiGraze™ didn't push out all the heads as the Nudan had," said Kody. The FlexiGraze™ demonstrated the "photo period sensitivity" trait of this variety.

"Interestingly, we also find the cows will sniff out a bale of FlexiGraze™ over the Nudan when we put them in the hay feeder. They really demolish it," Kody noted. "We also found this on the piece we grazed where the cattle chewed it right to the ground, even when there was green grass on the edges of the paddock."



A close-up photograph of several panicles of grain sorghum. The panicles are densely packed with small, round, reddish-brown grains. The background is a soft, out-of-focus blue sky. The image is framed by a red vertical bar on the right side.

# GRAIN SORGHUM

**S&W**  
SEED COMPANY



# Tanami Grain Sorghum

Sorghum bicolor hybrid



**MEDIUM-QUICK MATURITY RED GRAIN SORGHUM**  
**SPRING & SUMMER SOWN FEED GRAIN**

- Medium - quick maturity red grain sorghum
- Low tillering trait with excellent flag leaf separation
- Offers residual herbicide rotation options in cropping program
- Best suited for stored soil moisture or "watered up" irrigation situations due to lower tillering trait

Seeding Rate	kg/ha	Seed Treatment
Dryland	2.5-5	Enhanced
High Rainfall/Irrigation	4-6	

### Features & Benefits

Highly drought tolerant  
 Midge rating 5  
 Semi-Compact head type  
 High staygreen and low tillering habit for improved drought tolerance and standability  
 Good head exertion allowing easy harvest

### Rating scale

Midge rating



Stability



Seedling vigour



Grain size



Tillering



Irrigation



#### Rating scale: 1-9

1 - not recommended

9 - excellent

# Gibson Grain Sorghum

Sorghum bicolor hybrid



**MEDIUM MATURITY RED GRAIN SORGHUM  
SPRING & SUMMER SOWN FEED GRAIN**

- Medium maturity red grain sorghum
- Moderate tillering with larger grain size & higher grain test weight
- Offers residual herbicide rotation options in cropping program
- Will benefit from late rain or supplementary irrigation to maximise grain size

Seeding Rate	kg/ha	Seed Treatment
Marginal dryland	2.5-5	Enhanced
Dryland	4-6	

## Features & Benefits

Good head exertion  
Drought tolerant  
Midge 6 rating  
Semi-Compact head type  
Highly adapted to most grain sorghum growing regions

## Rating scale

Midge rating



Stability



Seedling vigour



Grain size



Tillering



Irrigation



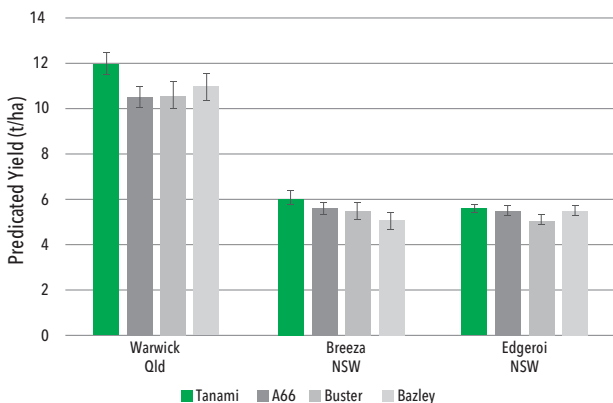
### Rating scale: 1-9

1 - not recommended

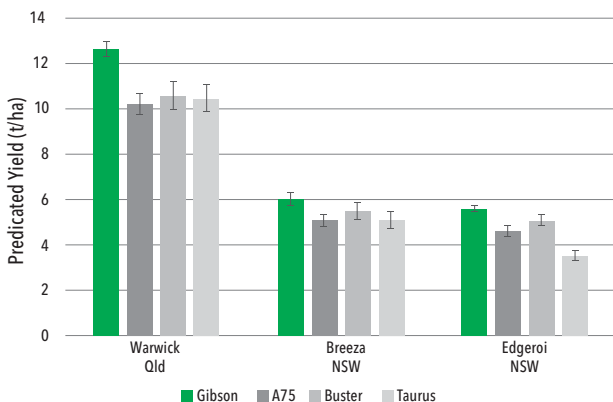
9 - excellent

# TRIAL RESULTS

## Tanami Grain Sorghum



## Gibson Grain Sorghum



*Data collected as part of the S&W Seed Company Australia Research and Development program*





# SUNFLOWER

**S&W**

SEED COMPANY



# SuperSun 66 Sunflower

Helianthus annuus

## HYBRID POLYUNSATURATED BLACK SEEDED SUNFLOWER



Proven to perform under marginal dryland in tough seasonal conditions



Semi pendulous head reduces sunburn, head rot and bird damage



Excellent yield potential under favourable conditions with access to premium human consumption markets (dehulling)

### Seeding Rate

Marginal dryland  
Dryland  
High Rainfall/Irrigation

### kernels/ha

25,000-35,000  
35,000 -45,000  
55,000-65,000

### Seed Treatment

Cosmos Insecticide

### Rating scale

Standability



Disease resistance



Adaption



Weed competitiveness



Grown on soil moisture



Irrigation



TSV resistance



#### Rating scale: 1-9

1 - not recommended  
9 - excellent



**SOWSMART<sup>®</sup>**  
**BLENDS**

**S&W**  
SEED COMPANY

# SOWSMART® BLENDS



## Planting Guide

Queensland, New South Wales, Victoria, Tasmania, South Australia and Western Australia.



## Perennial HR SOWsmart® Blend



<b>Min Rainfall (mm)</b>	650
<b>Soil Type</b>	Light & Heavy
<b>Seeding Rate</b>	25-30 kg/ha
<b>Usage</b>	Pasture production
Impact® Diploid Long Rotation Ryegrass	50%
Shootout Perennial Ryegrass	30%
Casper White Clover Goldstrike®	10%
Riesling White Clover Goldstrike®	10%

## Southern Horse HR SOWsmart® Blend



<b>Min Rainfall (mm)</b>	650
<b>Soil Type</b>	Light & Heavy
<b>Seeding Rate</b>	12-18 kg/ha
<b>Usage</b>	Southern equine pastures
Enduromax® Balansa Clover	5%
Convoy® Summer Active Cocksfoot Goldstrike®	10%
Drylander Diploid Perennial Ryegrass	25%
L71 Lucerne Goldstrike XLR8™	10%
Hatrik® Sub Clover Goldstrike®	5%
Impact® Diploid Long Rotation Ryegrass	30%
Matua Prairie Grass	15%

## Southern Horse LR SOWsmart® Blend



<b>Min Rainfall (mm)</b>	400
<b>Soil Type</b>	Light
<b>Seeding Rate</b>	12-18 kg/ha
<b>Usage</b>	Southern equine pastures
Enduromax® Balansa Clover Goldstrike®	25%
Dalsa® Sub Clover Goldstrike®	5%
Drylander Diploid Perennial Ryegrass	30%
Hatrik® Sub Clover Goldstrike®	10%
Origin Mediterranean Fescue	20%
Holdfast Erect Winter Active Phalaris	10%



## Northern Horse HS SOWsmart® Blend

<b>Min Rainfall (mm)</b>	650
<b>Soil Type</b>	Heavy
<b>Seeding Rate</b>	10-15 kg/ha
<b>Usage</b>	Northern equine pastures
Bambatsi Panic Goldstrike XLR8™	20%
Enduromax® Balansa Clover Goldstrike®	10%
GTL60® Lucerne Goldstrike XLR8™	20%
Katambora Rhodes Grass Goldstrike XLR8™	25%
Matua Prairie Grass	25%



## Northern Horse LS SOWsmart® Blend

<b>Min Rainfall (mm)</b>	650
<b>Soil Type</b>	Light
<b>Seeding Rate</b>	10-15 kg/ha
<b>Usage</b>	Northern equine pastures
Enduromax® Balansa Clover Goldstrike®	10%
Gatton Panic Goldstrike XLR8™	35%
L71 Lucerne Goldstrike XLR8™	20%
Premier Digitara Goldstrike XLR8™	35%



## Grazier SOWsmart® Blend

<b>Min Rainfall (mm)</b>	400
<b>Soil Type</b>	Light & Heavy
<b>Seeding Rate</b>	18-25 kg/ha
<b>Usage</b>	Pasture production
Enduromax® Balansa Clover Goldstrike®	25%
Dalsa® Sub Clover Goldstrike®	5%
Drylander Diploid Perennial Ryegrass	30%
Hatrik® Sub Clover Goldstrike®	10%
Origin Mediterranean Fescue	20%
Holdfast Erect Winter Active Phalaris	10%

## Persistor SOWsmart® Blend



<b>Min Rainfall (mm)</b>	450
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	18-25 kg/ha
<b>Usage</b>	Pasture production
Australis® Prostrate Summer Active Phalaris	15%
Cavalier Spineless Burr Medic Goldstrike®	10%
Border Balansa Clover Goldstrike®	10%
Convoy® Summer Active Cocksfoot	15%
Dalsa® Sub Clover Goldstrike®	20%
Hatrik® Sub Clover Goldstrike®	10%
Origin Mediterranean Fescue	20%

## Winter Max SOWsmart® Blend



<b>Min Rainfall (mm)</b>	450
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	23-35 kg/ha
<b>Usage</b>	Pasture production
Sorrento Diploid Italian Ryegrass	40%
Maheno Tetraploid Italian Ryegrass	30%
Turbo Persian Clover Goldstrike®	20%
Baler Balansa Clover Goldstrike®	10%

## Winter Express SOWsmart® Blend



<b>Min Rainfall (mm)</b>	450
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	23-35 kg/ha
<b>Usage</b>	Pasture grazing/Hay and silage
Loader Tetraploid Annual Ryegrass	70%
Turbo Persian Clover Goldstrike®	20%
Baler Balansa Clover Goldstrike®	10%



## Winter Feed SOWsmart® Blend

<b>Min Rainfall (mm)</b>	350
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	23-35 kg/ha
<b>Usage</b>	Pasture grazing/Hay and silage
Koga Tetraploid Annual Ryegrass	70%
Turbo Persian Clover Goldstrike®	30%



## HDL SOWsmart® Blend

<b>Min Rainfall (mm)</b>	350
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	20-25 kg/ha
<b>Usage</b>	Pasture production
Cavalier Spineless Burr Medic Goldstrike®	30%
Border Balansa Clover Goldstrike®	20%
Zulumax® Arrowleaf Clover Goldstrike®	25%
SARDI Persian Clover Goldstrike®	25%



## Bloat Fighter SOWsmart® Blend

<b>Min Rainfall (mm)</b>	350
<b>Soil Type</b>	Light & Heavy
<b>Seeding Rate</b>	4-6 kg/ha
<b>Usage</b>	Pasture production
Compass Chicory®	30%
L71 Lucerne Goldstrike XLR8™	70%



## Medic Haygraze LR SOWsmart® Blend



<b>Min Rainfall (mm)</b>	350
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	3-10 kg/ha
<b>Usage</b>	Pasture production
Cavalier Spineless Burr Medic Goldstrike®	40%
Bindaroo Button Medic Goldstrike®	15%
Silver Snail Medic Goldstrike®	20%
SARDI Persian Clover Goldstrike®	15%
Enduromax® Balansa Clover Goldstrike®	10%

## Medic Oversow SOWsmart® Blend



<b>Min Rainfall (mm)</b>	350
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	3-10 kg/ha
<b>Usage</b>	Pasture production
Cavalier Spineless Burr Medic Goldstrike®	25%
Bindaroo Button Medic Goldstrike®	25%
Silver Snail Medic Goldstrike®	25%
Penfield Spineless Barrel Medic Goldstrike®	25%

## Spring Silage SOWsmart® Blend



<b>Min Rainfall (mm)</b>	350
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	120-180 kg/ha
<b>Usage</b>	Fodder conservation
S&W Overland™ Forage Oats	50%
Forage Peas	50%



## All Grass Row LR SOWsmart® Blend

<b>Min Rainfall (mm)</b>	400
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	35-40 kg/ha
<b>Usage</b>	Cover crop/Interrow
Convoy® Summer Active Cocksfoot	20%
Dryland Diploid Perennial Ryegrass	40%
Wimmera Annual Ryegrass	40%



## Irrigated Row SOWsmart® Blend

<b>Min Rainfall (mm)</b>	700
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	40-50 kg/ha
<b>Usage</b>	Cover crop/Interrow
Convoy® Summer Active Cocksfoot	20%
Impact® Diploid Long Rotation Ryegrass	60%
Casper White Clover Goldstrike®	10%
Riesling White Clover Goldstrike®	10%



## Green Manure Row SOWsmart® Blend

<b>Min Rainfall (mm)</b>	400
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	140-160 kg/ha
<b>Usage</b>	Cover crop/Interrow
Forage Peas	20%
Faba Beans	20%
S&W Overland™ Forage Oats	50%
Timok Vetch	10%

## Regen Row SOWsmart® Blend



<b>Min Rainfall (mm)</b>	650
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	35-40 kg/ha
<b>Usage</b>	Cover crop/Interrow
Bindaroo Button Medic Goldstrike®	10%
Cavalier Spineless Burr Medic Goldstrike®	10%
Enduromax® Balansa Clover Goldstrike®	10%
Wimmera Annual Ryegrass	70%

## WINS Row SOWsmart® Blend



<b>Min Rainfall (mm)</b>	650
<b>Soil Type</b>	Light & Heavy
<b>Seeding Rate</b>	80-160 kg/ha
<b>Usage</b>	Cover crop/Interrow
Kraken Forage Barley	80%
Smart Radish Fungicide Treated	3%
Timok Vetch	17%

## Dryland Medic Row Blend SOWsmart® Blend



<b>Min Rainfall (mm)</b>	550
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	35-40 kg/ha
<b>Usage</b>	Cover crop/Interrow
Convoy® Summer Active Cocksfoot	20%
Drylander Diploid Perennial Ryegrass	40%
Cavalier Spineless Burr Medic Goldstrike®	20%
Silver Snail Medic Goldstrike®	20%



## Dryland Sub Clover Row Blend SOWsmart® Blend

<b>Min Rainfall (mm)</b>	550
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	35-40 kg/ha
<b>Usage</b>	Cover crop/Interrow
Hatrik® Sub Clover Goldstrike®	10%
Enduromax® Balansa Clover Goldstrike®	10%
Convoy® Summer Active Cocksfoot	20%
Dalsa® Sub Clover Goldstrike®	10%
Drylander Diploid Perennial Ryegrass	50%




## Pollinator SOWsmart® Blend

<b>Min Rainfall (mm)</b>	650
<b>Soil Type</b>	Light & Heavy
<b>Seeding Rate</b>	40-60 kg/ha
<b>Usage</b>	Cover crop/Interrow
Bee-Ready Brassica™	13%
Presto® Vetch	50%
Smart Radish Fungicide Treated	13%
Samurai White Mustard™	12%
Enduromax® Balansa Clover Goldstrike®	6%
SARDI Persian Clover Goldstrike®	6%



## Multi Species Soil Builder SOWsmart® Blend

<b>Min Rainfall (mm)</b>	450
<b>Soil Type</b>	Suitable to most
<b>Seeding Rate</b>	50-65 kg/ha
<b>Usage</b>	Cover crop/Interrow
Compass Chicory	2%
Presto® Vetch	20%
Ranger Plantain XLR8™	2%
Smart Radish Fungicide Treated	4%
Subzero Hybrid Forage Brassica	4%
Loader Tetraploid Annual Ryegrass	10%
SARDI Persian Clover Goldstrike®	4%
White Quinoa	4%
S&W Overland™ Forage Oats	50%



| Custom Blend includes Sorrento,  
Loader, Turbo and Cavalier

# Seed size chart

Species	Seeds per kg
<b>Lucerne</b>	
All	440,000
<b>Clover &amp; Pasture Legumes</b>	
Medic Strand	400,000
Medic Button	250,000
Medic Barrel	260,000
Medic Snail	130,000
Medic Spineless Burr	300,000
Sub Clover	120,000
White Clover	1,600,000
Red Clover Diploid	500,000
Red Clover Tetraploid	295,000
Balansa	1,450,000
Persian Soft	1,200,000
Persian Hard	1,400,000
Arrowleaf	880,000
Crimson	308,000
Rose	331,000
Berseem	326,000
Strawberry	766,000
Gland	1,430,000
Bladder	500,000
Serradella Yellow	196,000
Biserrulla	1,000,000
<b>Pasture Grasses</b>	
Ryegrass Tetraploid	250,000
Ryegrass Diploid	460,000
Tall Fescue	420,000
Phalaris	650,000
Cocksfoot	1,300,000
Prairie Grass	136,000

Disclaimer: Seed size table above is an average only, actual seed size can differ on a seasonal basis, this is a guide only.

# Seed size chart

Species	Seeds per kg
<b>Forage Herbs &amp; Brassica</b>	
Plantain	500,000
Chicory	830,000
Forage Brassica	300,000
Smart Radish	55,000
<b>Winter Legumes and Cereals</b>	
Vetch	22,000
Wheat	28,000
Triticale	30,000
Oats	28,000
Field pea	6,600
Barley	30,800
<b>Forage Sorghums &amp; Millet</b>	
Millet	180,400
Sudan Grass	50,000
Sweet Sorghum	30,000
Sorghum X Sudan	30,000
<b>Tropical Grasses &amp; Legumes</b>	
Bambatsi	1,075,300
Premier	2,325,600
Gatton	1,470,600
Narok	877,200
Gayndah	350,900
Biloela	534,800
Callide	3,030,300
Katambora	4,166,700
Kikuyu	410,000
Paspalum	704,000
Puccinellia	5,000,000
Stylo	264,000
Centro	33,000
Cow Pea - Ebony	8,000
Cow Pea - Red Caloona	15,000
Lablab	6,000

# Seed Treatment Options

At S&W Seed Company Australia we are always looking to new technology – constantly striving to improve our offering – bringing the latest technology, with even better performance to our leading forage products.

## Goldstrike®

S&W Seed Company Goldstrike® includes rhizobia inoculation, micronutrient package and Apron® XL fungicide (where available on label). Goldstrike® is comprised of the highest quality seed and coating technology and is the best establishment package for pasture legumes.

## Goldstrike LongLife®

Goldstrike LongLife® offers extended rhizobia storage life on a range of species. Goldstrike LongLife® can provide up to six months storage life on medic and sub clover, and up to 12 months storage life on lucerne.

## XLR8™

XLR8™ treatment is a film coat application of Poncho® Plus insecticide.

## Treatment Reference Guide

	Micro Nutrient	Rhizobia Inoculation	Apron®XL Fungicide*
Goldstrike®	✓	✓	✓
Goldstrike LongLife®	✓	✓	✓
Goldstrike LongLife® XLR8™	✓	✓	✓
Goldstrike XLR8®	✓	✓	✓
XLR8™			
Gaicho®			

\*Where available on label \*\* Six months storage life on medics and sub clovers, and up to 12 months storage life on lucernes.



Poncho® Plus is a significant advancement in the seed treatment market. It is an innovative insecticidal seed treatment that has registration across a range of pasture species and forage crops.

Poncho® Plus combines two robust compounds, imidacloprid and clothianidin, which increase the insect control spectrum above other seed treatment options. Poncho® Plus provides protection during establishment against a range of pests including Redlegged Earth Mite, Cutworm and Lucerne Flea. Poncho® Plus also offers added establishment vigour in the early growth stage of the plant.

The benefits from our XLR8™ seed treatment not only comes in the form of insect protection, but also shows long term benefit in assisting early seedling plant growth. This is demonstrated with greater root system development in seedlings, leading to higher overall pasture establishment and long-term pasture production.

Our XLR8™ seed treatment comes standard on all brassicas, herbs, and our premium proprietary lucerne varieties. Our XLR8™ seed treatment can be applied upon request to all seed products where registration is applicable.

LongLife tested**	Poncho® Plus Insecticide	Gaicho® Insecticide	Film coat only
✓			
✓	✓		
	✓		
	✓		✓
		✓	✓

# Treatment Reference Guide

Poncho® Plus Comparison Chart		SEED TREATMENT		
		Poncho® Plus Broadleaf Pasture	Poncho® Plus Grass Pasture	Gaucho®
Registered Claims Benefits	Redlegged Earth Mite	✓	✓	✓
	Lucerne Flea	✓	✓	
	Blue Oat Mite	✓	✓	✓
	Cutworm	✓	✓	
	Yellowheaded Cockchafer		✓	
	African Black Beetle		✓	
Benefits	May offer Stress Shield™ benefits	✓	✓	✓
	Up to four weeks systemic protection for emerging seedlings	✓	✓	✓
	Protection against some soil pests	✓	✓	
	Low impact on beneficial species	✓	✓	✓
	Targeted chemical placement	✓	✓	✓

### BARE SEED AND FOLIAR SPRAY

Chlorpyrifos	Ground Spray Dimethoate	SP Foliar
--------------	----------------------------	-----------

✓	✓	✓
---	---	---

✓	✓	
---	---	--

✓	✓	✓
---	---	---

✓		
---	--	--

✓		
---	--	--

# For technical advice please contact your local S&W Territory Manager

## Michael Christensen

Territory Manager - Wide Bay Burnett, South  
East, Central, Far North Qld & NT  
michaelchristensen@swseedco.com  
0430 821 029

## Shane Kable

Technical Services Territory Manager  
Upper Hunter & North West NSW & WA  
shanekable@swseedco.com  
0427 551 395

## Dan Sweeney

Territory Manager - North Coast NSW &  
Hunter Valley  
dansweeney@swseedco.com  
0429 146 817

## Gavin Milne

Technical Services Territory Manager  
New England NSW  
gavinmilne@swseedco.com  
0447 966 704

## Hugh Graham

Territory Manager - Southern NSW  
hughgraham@swseedco.com  
0427 255 292

## Dean Lombardozi

Southern Regional Manager  
deanlomb@swseedco.com  
0497 499 087

## Millie Moore

Territory Manager - SA & North West Vic  
milliemoore@swseedco.com  
0438 574 907

## Jack Edwards

Northern Regional Manager  
jackedwards@swseedco.com  
0419 995 418



**Plant with confidence**  
with S&W Establishment Guarantee®

**S&W**  
SEED COMPANY

S&W Seed Company Australia  
14-16 Hakkinen Road  
Wingfield SA 5013  
T +61 (0) 8 8445 1111  
info@swseedco.com.au  
swseedco.com.au