



# SHEEP, BEEF AND DEER PASTURE GUIDE 2009

Meeting the pasture needs  
of New Zealand's sheep,  
beef and deer farmers.

# MEETING SHEEP, BEEF AND DEER FARMERS' PASTURE NEEDS

New Zealand sheep, beef and deer farmers are continually striving to improve the productivity from, and profitability of, their farms. Our competitive advantage in the global market is the ability to grow and harvest pasture cost effectively to improve our animal production and performance.

The pasture needs for New Zealand sheep, beef and deer farmers is to produce, consume and convert high quality pasture efficiently and cost effectively. PGG Wrightson Seeds have an ongoing commitment to meeting this challenge by making available to the New Zealand farmer a range of pasture cultivars and technologies that incorporate the very latest scientific and research developments.

This book will illustrate the opportunities to improve your farm's pasture by identifying key products and technologies that will help provide a high return on investment when regrassing.



## PGG WRIGHTSON SEEDS P<sup>3</sup><sup>TM</sup>

**PROFITABILITY = PERSISTENCE X PRODUCTION X PERFORMANCE**

PGG Wrightson Seeds' plant breeders and evaluation teams have always directed their efforts towards cultivars that focus on PROFITABILITY for New Zealand farmers.

PROFITABILITY for farmers is based around PERSISTENCE in the pasture sward going the distance expected of the cultivar. PRODUCTION is the amount of dry matter produced per hectare and PERFORMANCE is the conversion of dry matter into meat, wool and velvet produced per hectare.

We call it the PGG Wrightson Seeds P<sup>3</sup><sup>TM</sup> test.

# RENEWING PASTURES AND FEED SUPPLY

## WHY RENEW EXISTING PASTURES?

Pastures don't last forever, eventually their productivity and quality declines with time. A number of factors either individually or in combination can contribute to this decline, the key thing for successful pastures is to identify when a pasture has run out and take action.

Reasons to renew pastures are:

- Pastures are not performing (poor yield)
- High weed population (poor quality)
- Outdated plant genetics (ability to grow more)
- Outdated endophyte technology (better options)

## WHAT CAN BE ACHIEVED WITH NEW PASTURES?

New pastures provide a number of benefits including:

- Growing more feed annually (kgDM/ha)
- Improving feed quality – growing more energy per hectare (MJME/ha)
- Growing more feed in the “pinch” (feed shortage) periods
- Improving the utilisation of the pasture (better grazing management)
- Improving the conversion efficiency – meat, wool and velvet produced from the feed eaten
- The ability to use new novel endophytes to:
  - increase pasture persistence and dry matter production
  - improve animal performance

## HOW MUCH DO I NEED TO RENEW?

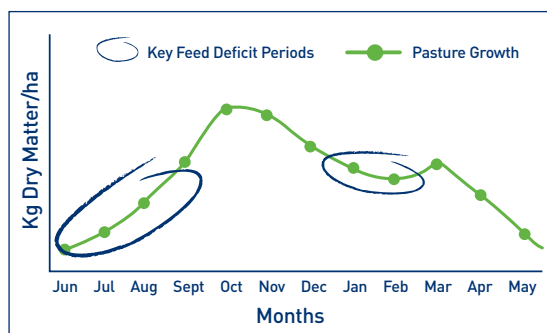
Every farm in New Zealand is different, so there is no set amount of area that should be regrassed each year. Assuming your pasture lasts for 8-10 years, a renewal programme allowing at least 10% of the farm to be regrassed each year will ensure you can capture the benefits that new pasture genetics and technologies can deliver. Pastures older than ten years could be 10–30% lower in dry matter production and will not contain the latest endophytes.

## A PASTURE RENEWAL PLAN – THE PROGRAMMED APPROACH™ TO PASTURE RENEWAL

PGG Wrightson Seeds has undertaken research on the best practice techniques for pasture renovation for some years. We recommend our PROGRAMMED APPROACH™ to pasture renewal. For more details on our easy to follow approach or to receive a copy of our Pasture Options book please call us on 0800 805 505 or visit our website [www.pggwrightsonseeds.com](http://www.pggwrightsonseeds.com).

## PASTURE GROWTH CURVE AND FEED DEFICITS

The graph below shows the annual pasture production of a New Zealand farm. The circles demonstrate when feed deficits occur on most farms. These deficits are partially met by supplements and forage crops, but new pasture cultivars can be used to fill a large amount of these feed deficit periods, leading to better performance and lower costs of production.



## PASTURES THAT DELIVER

PGG Wrightson Seeds has one of the largest portfolios of pasture options available to New Zealand farmers.

The following pages identify the PGG Wrightson Seeds pasture cultivars best able to fill these key feed deficit periods.

# HIGH PERFORMANCE EARLY SPRING GROWTH/BREEDING FARM OPTIONS



To fill the gap in late winter - early spring an early season pasture mix requires excellent year round growth with good winter-early spring performance and long term persistence. EXTREMETM, Grasslands Kamo and Maverick GII are diploid ryegrass cultivars selected for dry matter performance throughout the year especially during the critical spring period. Both EXTREMETM and Grasslands Kamo are available with the most insect resistant endophyte available, AR37, which improves their adaptability to sheep/beef farming systems. The inclusion of high quality clovers such as Grasslands Kopu II and Bounty further enhance pasture and animal performance.

## HIGH PERFORMANCE SEED MIX OPTIONS FOR EARLY SPRING GROWTH/BREEDING FARMS

### Medium to high fertility mix

EXTREMETM diploid perennial ryegrass	16 kg/ha
Maverick GII diploid short rotation ryegrass	5 kg/ha
Grasslands Kopu II white clover SUPERSTRIKE®	2 kg/ha
Grasslands Bounty white clover SUPERSTRIKE®	2 kg/ha
Grasslands Puna II chicory	2 kg/ha

### Low to medium fertility mix

Grasslands Kamo diploid perennial ryegrass	16 kg/ha
Maverick GII diploid short rotation ryegrass	5 kg/ha
Grasslands Bounty white clover SUPERSTRIKE®	2 kg/ha
Grasslands Tahora white clover SUPERSTRIKE®	2 kg/ha

Note: Mixes may vary depending on the region and local experience.

Note:

- For which endophyte option to select see page 12 (Without and AR1 endophytes are suitable for deer).
- For which seed treatment option to use see page 13.
- A pasture renewal programme like the Programmed Approach™ which removes existing pasture and/or weeds, and insect pests is recommended prior to sowing any new pasture.





## Will and Sarah Banks – Clifton Grove, Masterton

Will and Sarah Banks run a 775 hectare sheep and beef unit in the Wairarapa.

While fertile, the steeper part of the farm dries out first, so Will chose a cultivar that offers persistence – EXTREME AR37. For two years EXTREME AR37 has been grazed on 13 hectares and Will plans to add another 13 hectares in autumn following a five to six year rotation of kale/swede to Pasja to new grass.

“While most pasture varieties give me a five year rotation, I’m hoping for seven years good growth from this,” says Will. Last year he lambed hoggets on six month old EXTREME AR37 at 17 per hectare and it could have handled more if he’d pushed the stock harder. The hoggets lambed well and milked well on the EXTREME AR37, then it was set stocked with trade lambs at 15 head/hectare from January. These grew out well during the drought with no animal health issues.



- Endophyte options: AR37, AR1, Without
- Very high dry matter production
- Improved sugar (soluble carbohydrate) levels
- Lowest aftermath heading cultivar in mid-season heading class (excellent quality)
- Heading date same as Nui (0 days)



- Endophyte option: AR37
- Strong spring, summer and autumn production
- Use in lower fertility situations
- Performs well under hard grazing
- Selected for high crown rust resistance
- Heading date same as Nui (0 days)



- Endophyte option: Without
- Improved annual yields
- Improved summer quality (aftermath heading further reduced)
- Improved disease resistance and persistence
- Heading date 17 days later than Nui



- Highest producing white clover available in the large leaved class
- High stolon density, large leaved white clover
- High feed quality – improved sugar (soluble carbohydrate) levels
- Highest tolerance to Clover Root Weevil in large leaved class



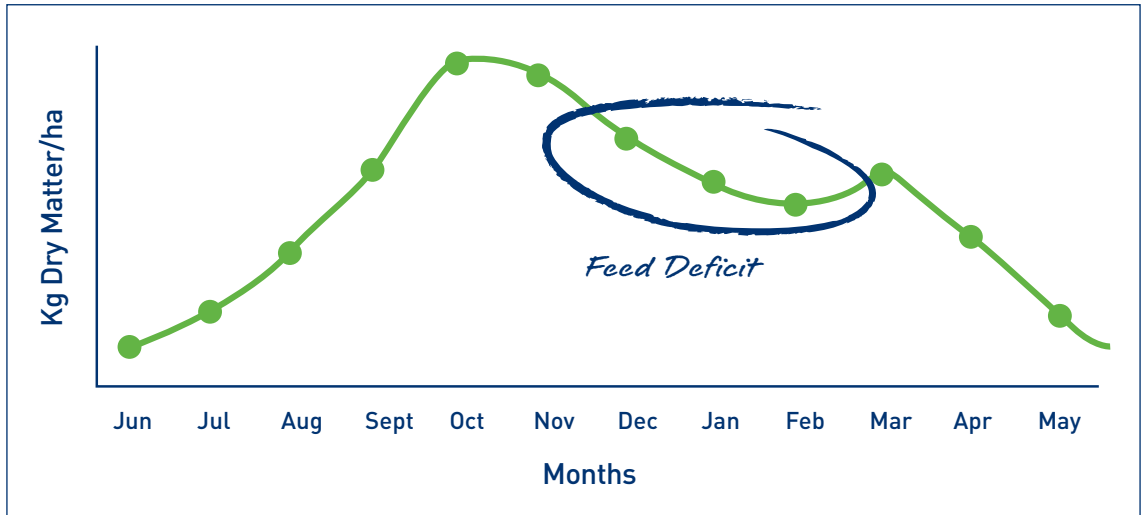
- Dense stolon structure gives excellent persistence
- More growing points improve growth recovery
- Easy care - can tolerate lower fertility, oversows well
- Ideal for set stocking regimes, can be grazed hard



- Very high yielding medium leaved white clover
- High stolon density and excellent persistence
- Bred for improved autumn activity



# HIGH PERFORMANCE FINISHING FARM OPTIONS



Finishing mixes are used in sheep, beef and deer systems to maximise the growth of animals to achieve target weights earlier. Key attributes of a finishing mix are grasses that are high quality, late flowering, easily harvested, and allow clover and herbs to compete in the sward. Tetraploid ryegrasses and tall fescues are ideally suited to such mixes and in combination with novel endophytes can be highly persistent as well as productive. Options outlined below perform best in rotational grazing systems with medium to high soil fertility. The inclusion of high quality clovers such as Grasslands Kopu II, Bounty or Tahora will enhance the pasture and animal performance.

## HIGH PERFORMANCE SEED MIX OPTIONS FOR FINISHING FARMS

### High summer quality ryegrass mix

Quartet II tetraploid perennial ryegrass	12 kg/ha
BANQUET® II tetraploid long rotation ryegrass	12 kg/ha
Grasslands Bounty white clover SUPERSTRIKE®	2 kg/ha
Grasslands Tahora white clover SUPERSTRIKE®	2 kg/ha
Grasslands Puna II chicory	2 kg/ha

### High summer quality tall fescue mix

Quantum II tall fescue SUPERSTRIKE®	24 kg/ha
Grasslands Bounty white clover SUPERSTRIKE®	2 kg/ha
Grasslands Tahora white clover SUPERSTRIKE®	2 kg/ha
Grasslands Puna II chicory	2 kg/ha

Note: Mixes may vary depending on the region and local experience.

Note:

- For which endophyte option to select see page 12 (Without, MaxP® and AR1 endophytes are suitable for deer).
- For which seed treatment option to use see page 13.
- A pasture renewal programme like the Programmed Approach™ which removes existing pasture and/or weeds, and insect pests is recommended prior to sowing any new pasture.





## Russell Addenbroke – Maxwell, Wanganui

Russell Addenbrooke farms Cranleigh, a 730 hectare finishing and cropping property at Maxwell, Wanganui, using a five year rotation to new grass. He has regrassed perennial pasture with Quartet since the cultivar was introduced and this year changed to Quartet II. Russell finishes 13,000-16,500 lambs in a season. Grazing Quartet, they take just six weeks from a start weight of 27 kg LW through to finish at 42 kg LW. He also finishes 1000-1200 yearling cattle over the year to a finished weight of 425 kg LW. Over winter these cattle average 0.97 kg LW gain per day.

Two features of Quartet II that appeal are the strong root system and the late flowering which gives lambs quality vegetative pasture through to December. "We are now on our second rotation of pasture replacement with Quartet and see only enhancements with Quartet II," says Russell. "It may even extend our replacement rotation."



- Endophyte options: Endo5, Without
- Excellent dry matter production
- Improved tiller density for even better persistence
- Bred for increased sugar and higher digestibility (ME)
- Heading date 18 days later than Nui



- Endophyte options: AR1, Without
- Excellent summer forage quality (low aftermath heading)
- High dry matter production throughout the year
- Heading date 9 days later than Nui



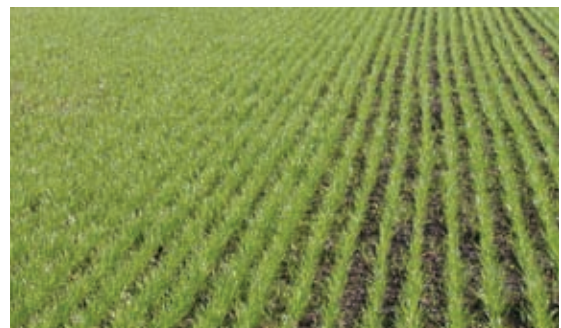
- Endophyte option: Endo5
- Exceptional tiller density for even better persistence
- Exceptional feed quality, especially in summer
- Heading date 25 days later than Nui



- Endophyte options: MaxP®, Without
- Excellent dry matter production
- Improved leaf softness
- Improved disease resistance
- Improved digestibility (ME)



- Endophyte option: AR1
- Very high dry matter production
- Late flowering and low aftermath heading
- Strong cool season growth
- Very high tiller density
- Improved sugar (soluble carbohydrate) levels
- Heading date 21 days later than Nui



# HIGH PERFORMANCE SUMMER DRY OPTIONS



In summer dry areas, any cultivar used in a mix must be able to cope with heat extremes and often in the presence of high insect pressure. A number of pasture cultivar options are available which can meet these expectations. When sowing into summer dry areas it is important the correct seed treatments and endophyte technologies are used to maximise the potential of the pasture being established. Including quality clover options such as Grasslands Tahora white clover or Leura sub clover can further enhance the quality and persistence of the sward and a quality cocksfoot variety such as Grasslands Tekapo is of real benefit in hard summer-dry areas.

## HIGH PERFORMANCE SEED MIX OPTIONS FOR SUMMER DRY AREAS

### Spring production mix

Grasslands Kamo diploid perennial ryegrass	16 kg/ha
Maverick GII diploid short rotation ryegrass	4 kg/ha
Grasslands Tekapo cocksfoot	2 kg/ha
Grasslands Tahora white clover SUPERSTRIKE®	3 kg/ha

### Over-sowing mix

Grasslands Tekapo cocksfoot PRILLCOTE®	2 kg/ha
Grasslands Tahora white clover PRILLCOTE®	4 kg/ha

### Dry lowland mix

Quantum II tall fescue SUPERSTRIKE®	20 kg/ha
Grasslands Bounty white clover SUPERSTRIKE®	2 kg/ha
Grasslands Tahora white clover SUPERSTRIKE®	2 kg/ha
Grasslands Puna II chicory	2 kg/ha

\* All seed should be PRILLCOTE® treated for aerial oversowing.  
Note: Mixes may vary depending on the region and local experience.

Note:

- For which endophyte option to select see page 12 (Without, MaxP® and AR1 endophytes are suitable for deer).
- For which seed treatment option to use see page 13.
- A pasture renewal programme like the Programmed Approach™ which removes existing pasture and/or weeds, and insect pests is recommended prior to sowing any new pasture.

## Doug Robertson – Arthurton, Gore

Doug and Jenny Robertson chose an all-round pasture mix for their sheep grazing system – one that was robust and able to mitigate the effects of porina.

The Robertson's farm 558 hectares at Arthurton, near Gore. They have sown three paddocks – 45 hectares in total – in a mix of white clover and Grasslands Kamo with AR37 endophyte, which does well under hard grazing.

Doug says some of the paddocks had 5-15 porina per spade and described them as "porina city", so the choice was made to use Kamo AR37 in light of this extreme pressure.

The Kamo AR37 pasture mix was sown in the harder, higher paddocks on gently rolling hills at a rate of 26 kg/ha. The cultivar has strong spring, summer and autumn production.

Doug uses the Kamo pasture to fatten lambs in early spring. He says the Grasslands Kamo with AR37 endophyte has performed well and he plans to sow more.



- Endophyte option: AR37
- Strong spring, summer and autumn production
- Use in lower fertility situations
- Performs well under hard grazing
- Selected for crown high rust resistance
- Heading date same as Nui (0 days)



- Endophyte options: MaxP®, Without
- Excellent dry matter production
- Improved leaf softness
- Improved disease resistance
- Improved digestibility (ME)



- Scientifically shown to improve animal performance
- Highly persistent
- Excellent drought tolerance
- Suitable for set stocking and hard grazing



- Dense stolon structure, giving excellent persistence
- More growing points to improve recovery
- Easy care - can tolerate lower fertility
- Ideal for set-stocking regimes, can be grazed hard

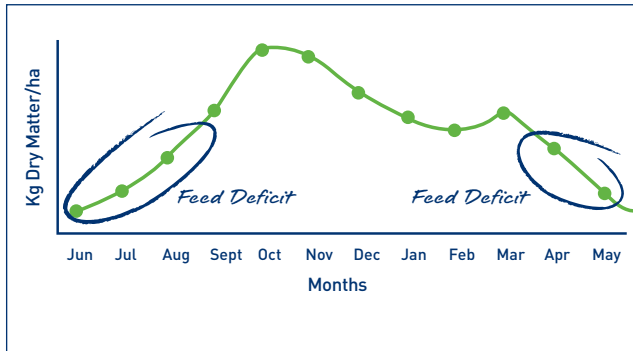


- Suitable for summer dry areas
- Excellent overall production
- Good disease resistance
- Low levels of formononetin (Oestrogen) – does not cause fertility problems in livestock



## SHORT – MEDIUM TERM PASTURE

# HIGH PERFORMANCE DEVELOPMENT AND HIGH QUALITY SILAGE OPTIONS



On many farms there is an opportunity to sow short term ryegrasses that can be used as part of a development programme, as a silage crop or a bulk of high quality feed that might be used to fill a gap in the seasonal supply curve. The following cultivars have been selected for their ability to establish well and produce high quality dry matter, from autumn through to early spring. Even short term pasture mixes benefit from the addition of quality clovers such as Grasslands Kopu II, Bounty or Tahora usually at slightly lower rates than used in perennial pasture mixes.



- Endophyte options: AR1, Without
- Excellent summer forage quality (low aftermath heading)
- High dry matter production throughout the year
- Heading date 9 days later than Nui



- Endophyte option: Without
- Improved annual yields
- Improved summer quality (aftermath heading further reduced)
- Improved disease resistance and persistence
- Heading date 17 days later than Nui



- Endophyte option: Without
- Excellent dry matter production and ideal for high quality silage
- Best summer quality of all high yielding italian ryegrasses
- Superior disease resistance and enhanced persistence
- Heading date 17 days later than Nui



- Endophyte option: Without
- High yielding tetraploid annual ryegrass
- Autumn sow for high yields of quality autumn, winter and spring feed
- Use for quick, early feed, suitable for silage and grazing
- Fast establishment, making it ideal for short-term renovation (under-sowing) of existing pasture
- Improved late season production and quality
- Heading date 9 days later than Nui

### HIGH PERFORMANCE SEED MIX OPTIONS FOR SILAGE OR DEVELOPMENT

#### High quality silage mix

DELISH™ tetraploid short rotation ryegrass	22 kg/ha
Grasslands Kopu II white clover SUPERSTRIKE®	4 kg/ha
Or	
Maverick GII diploid short rotation ryegrass	18 kg/ha
Grasslands Kopu II white clover SUPERSTRIKE®	4 kg/ha
Or	
FEAST™ II tetraploid italian ryegrass	22 kg/ha
Grasslands Kopu II white clover SUPERSTRIKE®	4 kg/ha

#### Development mix

FEAST™ II tetraploid italian ryegrass SUPERSTRIKE®	25 kg/ha
Or	
Cordura diploid italian ryegrass SUPERSTRIKE®	20 kg/ha
Grasslands Tahora white clover SUPERSTRIKE®	2 kg/ha

Note: Mixes may vary depending on the region and local experience.

#### Note:

- For which endophyte option to select see page 12 (Without and AR1 endophytes are suitable for deer).
- For which seed treatment option to use see page 13.

- A pasture renewal programme like the Programmed Approach™ which removes existing pasture and/or weeds, and insect pests is recommended prior to sowing any new pasture.

# HIGH PERFORMANCE SUMMER QUALITY SPECIALIST OPTIONS



High quality summer options are utilised as part of finishing mixes or used in their own right to promote increased stock performance during the summer/autumn period. Most of these options are tap rooted species so that they can cope with extended dry spells. These pastures require medium to high fertility and are better suited to rotational grazing systems with a period of no grazing in late summer to build up root reserves.



- High dry matter production
- A true perennial with good persistence
- Fast regrowth after grazing or cutting
- Semi-erect for better utilisation
- Fine stemmed for better quality and palatability



- Semi-dormant in winter
- Versatile - persistent under grazing and hay/silage and mixed regimes
- High annual dry matter production
- Excellent pest and disease resistance

## HIGH PERFORMANCE SEED MIX OPTIONS FOR SUMMER QUALITY SPECIALIST FEED

### Straight lucerne mix

Kaituna lucerne SUPERSTRIKE® 12 kg/ha

### Lucerne/tall fescue mix

Kaituna lucerne SUPERSTRIKE® 8 kg/ha  
Quantum II tall fescue SUPERSTRIKE® 10 kg/ha

### Specialist finishing mix

Grasslands Puna II chicory 5 kg/ha  
Grasslands Kopu II white clover SUPERSTRIKE® 2 kg/ha  
Grasslands Bounty white clover SUPERSTRIKE® 2 kg/ha  
Red clover\* SUPERSTRIKE® 2 kg/ha

Note: Mixes may vary depending on the region and local experience.

\* Colenso or Sensation red clovers are recommended.









Note:

- For which seed treatment option to use see page 13.
- A pasture renewal programme like the PGG Wrightson Seeds Programmed Approach™ which removes existing pasture and/or weeds, and insect pests is recommended prior to sowing any new pasture.

# ENDOPHYTE OPTIONS

Endophytes are fungi found in many grass species. They are important as they can enhance the yield and persistence of their grass hosts. Choosing the appropriate endophyte for your farm will ensure better performance from your new pasture.

The endophyte decision is often a compromise as the safest endophytes for the animals do not offer the best insect protection (long term persistence and productivity). The table below shows the endophyte options available in cultivars in this book and what they protect against.

	Stem Weevil	Porina	Mealy Bug	Root Aphid	Adult Black Beetle	Grass Grub
						
	R	R*	R	R	R	NP
<b>Endo5</b>	R	NP	R	MP**	R	NP
	R	NP	R	NP	MR	NP
<b>Without</b>	NP	NP	NP	NP	NP	NP
<b>MaxP®</b>	R	NP	R	R	R	NP
R = Resistant    MR = Moderate Resistance    MP = Moderate Protection    NP = No Protection						

\*Early field trial results have confirmed laboratory evidence of resistance of ryegrass with AR37 to Porina.

NOTE: In pastures with AR37 ryegrass, Porina can be present and feed on other pasture components.

\*\* Data provisional.

## RECOMMENDED USE FOR VARIOUS ENDOPHYTES



AR37 provides greater insect control than any other commercially available endophyte (see table above). Although AR37 does not produce lolitrem B it can cause ryegrass staggers. Trials have shown that on average the frequency, duration and severity of ryegrass staggers is less than for standard endophyte. However on occasions, sheep (and potentially other animals) grazing AR37 ryegrass may be severely affected for short periods. To date no ryegrass staggers have been reported on dairy cows grazing AR37 ryegrass. Due to the fact that no trial work has been undertaken on deer and horses, pastures with AR37 are not currently recommended for these classes of livestock.

### Endo5

Recommended for cattle and sheep. Endo5 endophyte (as with AR1) contains no lolitrem B, but provides good control of Black Beetle (see table above). Endo5 pastures should persist better than AR1 pastures in areas with Black Beetle. (*Endo5 contains some ergovaline in the base of the plant for insect protection*).



AR1 is recommended for all stock classes. It provides a safer pasture with excellent animal performance while providing a moderate range of insect protection (see table above). Care is needed in areas with high Black Beetle numbers (Northern North Island) as AR1 only gives moderate resistance to this pest and no control of Root Aphid.

### MaxP®

Tall fescue pastures with MaxP® endophyte offers improved persistence and pest protection over tall fescue pastures without endophyte. MaxP® endophyte has been widely used on sheep and cattle farms and has shown no negative effects on animal health and production of these species. Mediterranean tall fescues with MaxP® endophyte are not recommended for horses.

### SE

Recommended for cattle and sheep. With the introduction of novel endophytes, this standard (SE) endophyte option may still be used where tough conditions may affect persistence. Stock grazing these pastures may suffer from ryegrass staggers and reduced production during the warm part of the year.

### Without

Recommended for all stock classes. In areas with cooler summers and good rainfall or irrigation, cultivars without endophyte can be used (Westland, Southland, parts of Otago and some irrigated land in Canterbury). Such pastures are animal safe, and will give very good animal performance, but provides no insect protection.

# SEED TREATMENT OPTIONS

Seed treatment can play a key role in successful pasture establishment. Protecting emerging seedlings helps ensure plant establishment is maximised and the investment in new pasture seed is protected.

Seed treatment products can include insecticides, fungicides and biological additives in close proximity to the seed, providing cost effective and environmentally sustainable protection and enhancement for establishing plants.

With over 40 years experience in seed treatment, PGG Wrightson Seeds provide a range of leading seed treatment products for the New Zealand forage seed market.

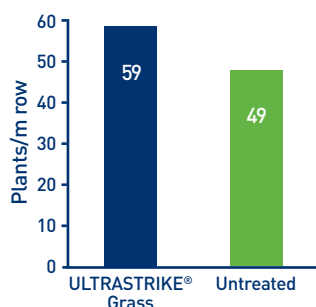
## ULTRA STRIKE® Grass Seed Treatment

ULTRA STRIKE® Grass provides the most comprehensive protection in a grass seed treatment, it contains:

- Systemic Insecticide – registered for protection against three of New Zealand’s major ryegrass pests, Grass Grub, Argentine Stem Weevil, and Black Beetle during the establishment period
- Fungicide – effective against the “damping off” diseases (*Pythium* and *Fusarium*)
- Bird Repellent – for any situation where bird theft is a problem

### Grass Grub Protection

The following trial highlights the significant increase in the number of surviving plants of ULTRA STRIKE® treated grass versus untreated grass while under Grass Grub pressure.



Trial conducted in Mid-Canterbury using a perennial ryegrass. Sown 13 May 2005 with plant numbers assessed on 19 July 2005.

### ULTRA STRIKE® Grass protects grass seedlings against these pests:



Grass Grub



Argentine Stem Weevil (ASW)



Adult Black Beetle

SUPER STRIKE® and ULTRA STRIKE® are registered trademarks of PGG Wrightson Seeds Limited.

## SUPER STRIKE® Grass Seed Treatment

SUPER STRIKE® Grass is a multi-spectrum seed treatment, it contains:

- Systemic Insecticide – registered for protection against Argentine Stem Weevil and Black Beetle
- Fungicide – effective against the “damping off” diseases (*Pythium* and *Fusarium*)
- Bird Repellent – for broadcast sowing or any situation where bird theft is a problem

SUPER STRIKE® Grass seed treatment is considered ‘best practice’ in no-tillage or undersowing programmes where the risk from insect and disease pressure can significantly limit successful seed establishment. SUPER STRIKE® Grass seed treatment should be used in all situations where Black Beetle is considered a risk to plant establishment.



Comparison between SUPER STRIKE® treated grass (left) and untreated grass (right) under Argentine Stem Weevil pressure.

## SUPER STRIKE® Clover Seed Treatment

SUPER STRIKE® Clover improves the performance of clover seedlings, it contains:

- Nematicide – to protect seedlings from soil inhabiting clover root nematodes
- Rhizobia – contains new strains of nitrogen – fixing bacteria
- Molybdenum – an essential trace element for seedling establishment and root nodulation
- Lime for localised pH correction

# PGG WRIGHTSON SEEDS PASTURE OPTIONS

CATEGORY	SEASONAL ACTIVITY					NUTRITIVE VALUE	STOCK CLASS	ENDOPHYTE OPTIONS	HEADING DATE	LOW AFTERMATH HEADING	PAGE FOR MORE INFO
	WINTER	SPRING	SUMMER	AUTUMN							
<b>Ryegrass Options</b>											
<b>Diploid Ryegrass Options</b>											
Gordura	*****	****	***	****	Very Good	All	Without	+12	No		
Maverick Gill	****	*****	****	****	Very Good	All	Without	+17	Yes	5, 10	
EXTREME™	**	*****	*****	*****	Very Good	All#	AR37, AR1, Without	0	Yes	5	
EXPO™	**	**	****	****	Very Good	All	AR1	+21	Yes	7	
Grasslands Pacific	**	****	****	**	Good	Sheep/Beef	SE, Without	+1	No		
Grasslands Kamo	**	*****	****	****	Good	Sheep/Beef	AR37	0	No	5, 9	
<b>Tetraploid Ryegrass Options</b>											
WINTER STAR™ II	****	**	*	***	Good	All	Without	+9	No	10	
FEAST™ II	****	****	***	****	Very Good	All	Without	+17	Yes	10	
DELIGHT™	****	****	****	****	Excellent	All	AR1, Without	+9	Yes	7, 10	
BANQUET® II	**	****	****	****	Excellent	All#	Endo5, Without	+18	Yes	7	
Quartet II	***	**	****	****	Excellent	All#	Endo5	+25	Yes	7	
<b>Cocksfoot and Tall Fescue Options</b>											
Grasslands Tekapo	*	****	****	***	Good	All	Without	+9	No	9	
Quantum II	**	****	****	***	Very Good	All	Maxp®, Without	-21		7, 9	
<b>Clover and Herb Options</b>											
<b>White Clover</b>											
Grasslands Kopu II	***	****	****	****	Excellent	All				5	
Grasslands Bounty	**	****	****	****	Excellent	All				5	
Grasslands Tahora	*	****	****	****	Excellent	All				9	
<b>Sub Clover</b>											
Leura	****	****	Dies off	**	Excellent	All				9	
<b>Chicory</b>											
Grasslands Puna II	*	****	****	**		All				11	
<b>Lucerne</b>											
Kaituna	**	****	****	****	Excellent	All				11	

← INCREASING WINTER ACTIVITY

INCREASING PERSISTENCE →

← INCREASING WINTER ACTIVITY

INCREASING PERSISTENCE →

Note: Seasonal activity scored out of five (\* = poor, \*\*\*\*\* = very good).  
 • Endophyte requirements should be discussed with a consultant or seed retailer (see page 12).  
 # = The SE, AR37 and Endo5 options are not suitable for deer and horses.

# STAFF CONTACT DETAILS

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## SOUTHERN NORTH ISLAND



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## CONTACT DETAILS

For more information on pasture cultivars or the information contained within this brochure, contact your local seed retailer, talk to one of our representatives above or phone 0800 805 505.

[www.pggwrightsonseeds.com](http://www.pggwrightsonseeds.com)

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**NOTES:**

**RECOMMENDATION ORDER FORM: TO BE COMPLETED IN CONSULTATION WITH YOUR LOCAL SEED RETAILER**

Paddock ID	Ha	Variety	Sowing Rate	Agronomic Recommendation prior to sowing
<b>TOTAL</b>				

Name: \_\_\_\_\_

Contact Phone No: \_\_\_\_\_

Address: \_\_\_\_\_

Fax No: \_\_\_\_\_

\_\_\_\_\_

E-mail: \_\_\_\_\_



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