



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 13 hectares of EXTREME AR37 has been grazed on 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 per hectare from January. These grew out well during the drought with no animal health issues.



- Very high dry matter production
- Improved persistence (AR37)
- Strong cool season growth
- Lowest aftermath heading cultivar available in mid-season heading class
- Improved sugar (soluble carbohydrate) levels

EXTREME™ is a medium-broad leaved, persistent and densely tillered perennial ryegrass bred for high dry matter production, cool season activity and very low aftermath heading.

EXTREME™ is available with a range of endophyte options including AR37, AR1 and without endophyte. Careful consideration should be given to which endophyte type is best suited to your farming practice.

For more information on the endophyte types, refer to the Understanding Endophyte Section pages 10-11 and for information specific to EXTREME™ and AR37 endophyte refer to the following page.

Heading Date

Early	Mid-Season	Late	Very Late
	EXTREME™: same as Nui		

Dry Matter Production

The following dry matter trial compares EXTREME™ AR1 and EXTREME™ AR37 relative to Bronsyn AR1.

	Winter	Spring	Summer	Autumn	Total
EXTREME™ AR37	112	103	103	121	107
EXTREME™ AR1	115	104	97	89	103
Bronsyn AR1	100	100	100	100	100

Data is a combination of 3 year’s dry matter production from Northland and the Waikato and 2 year’s production from Lincoln.

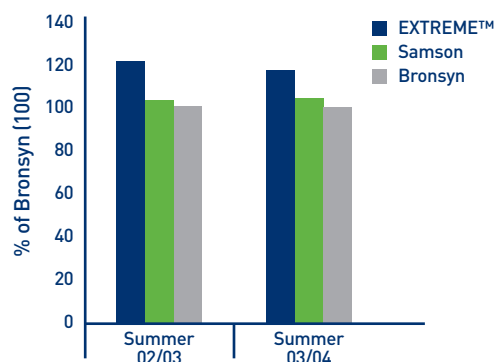
Stock Suitability/Endophyte Options

Without Endophyte				

Pasture Quality

Pasture quality analysis conducted at Kimihia Research Centre, Canterbury over summer 2002/03 and 2003/04 demonstrates the high nutritional quality of EXTREME™ perennial ryegrass relative to Bronsyn and Samson.

Water soluble carbohydrate levels of EXTREME™ and Samson relative to Bronsyn



Fibre levels of EXTREME™ and Samson relative to Bronsyn

	Summer 02/03	Summer 03/04
EXTREME™	91	92
Samson	97	96
Bronsyn	100	100

EXTREME™ showed higher energy levels, measured by water soluble carbohydrates, and lower fibre levels, which will likely result in improved digestibility, animal intake and animal performance.

Pasture samples were taken from the Kimihia Research Centre, and were measured using Near Infrared Spectroscopy (NIRS).

Summer 2002/03 = Average of 2 cuts taken on 29 November 2002 and 19 February 2003.

Summer 2003/04 = Average of 3 cuts taken on 15 December 2003, 21 January 2004 and 25 February 2004.



Robbie Sherriff – Te Awamutu

Robbie Sherriff is into his first season on a 230 hectare dairy conversion near Te Awamutu, next to his family's sheep and beef farm.

In recent months 135 hectares have been resown with new cultivars, including 45 hectares of EXTREME AR37 on the hillier country, which needs a more persistent cultivar.

Robbie says the denser growth habit of EXTREME AR37 holds up better to trampling by the cows.

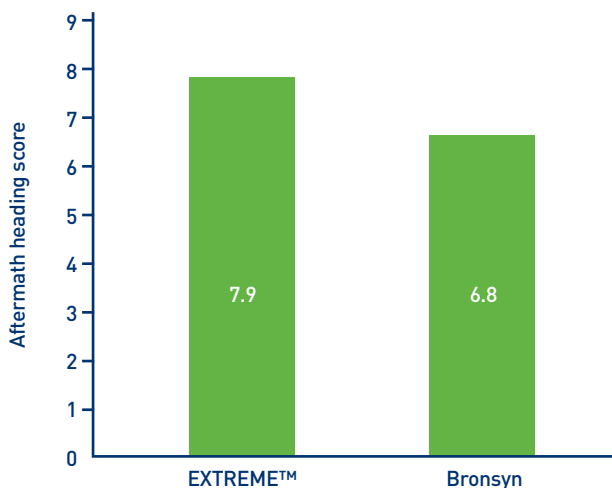
"It's going great compared to the old tucker on this farm," says Robbie. "It has more bulk and will only improve now that the clover [Kopu II] is coming through."

The farm is generally summer safe, says Robbie, but EXTREME AR37 was sown last year under "huge drought pressure and the strike rate was very good; then it survived a hard summer".

Robbie knows how much grass used to grow on the farm and is confident milk production "wouldn't be anywhere near as good on the old pastures".

Summer Quality

To determine the summer pasture quality of EXTREME™, the aftermath seed head production of two trials was visually scored. The average of these trials showed EXTREME™ had much less aftermath seed head production than Bronsyn. Aftermath heading is scored on a scale of 1-9 where 1 = many seed heads and 9 = no seed heads.



Data is an average of visual scores of 2 Lincoln trials scored in February 2006 (1), January 2007 (1) and February 2007 (2).



EXTREME™ perennial ryegrass is available with the AgResearch endophyte AR37. For more information on AR37 see the Understanding Endophytes Section pages 10-11. (AR37 is also available in Grasslands Kamo perennial ryegrass from PGG Wrightson Seeds, see page 18).

AR37 offers to EXTREME™ the benefits of superior insect protection compared with any other commercially available endophyte. Through inoculation with AR37, EXTREME™ pastures will have resistance against Argentine Stem Weevil, Black Beetle, Pasture Mealy Bug, Root Aphid and Porina.*#

The increased resistance provided by AR37 ensures better pasture persistence and maximum pasture production from EXTREME™ in areas where there is higher insect pressure. This increased persistence and production of EXTREME™ AR37 is expected to result in higher animal productivity.

Dry Matter Production of EXTREME™ AR37

The following table shows that EXTREME™ with AR37 had better dry matter production relative to EXTREME™ with AR1 after year two of the trial. This is seen as the benefit of the AR37 endophyte.

	Year 1	Year 2	Year 3
EXTREME™ AR37	100	103	107
EXTREME™ AR1	100	100	100

Year 1 is the average of 3 trials, year 2 is the average of 3 trials, year 3 is the average of 2 trials.

Sowing and Establishment

EXTREME™ can be sown at 15-25 kg/ha with SUPERSTRIKE® clover. It combines well with other components of a pasture mix (eg. short rotation ryegrass, cocksfoot and Grasslands Puna II chicory).

Grazing Management

EXTREME™ will produce and persist better under rotational grazing. Avoid hard set stocking during periods of stress (eg. droughts, low fertility and insect attack).

*For more information on AR37, see page 11.

#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 the other pasture mix components.