

## “Proven on farm New Zealand wide”

- Available with **AR37** and **AR1** novel endophytes and LE
- Outstanding summer, autumn and winter growth particularly with **AR37**
- Excellent spring quality and summer leafiness
- Excellent use of summer irrigation or natural rainfall
- One of the most widely sown varieties in NZ

PLOIDY	SUGGESTED SOWING RATE (kg/ha)	HEADING DATE	ENDOPHYTE	RUST TOLERANCE
Diploid	18-20	Late (+20)	<b>AR37, AR1 &amp; LE</b>	Very high

### Background

**ONE<sup>50</sup>** is a late heading diploid perennial ryegrass of medium leaf and tiller size. **ONE<sup>50</sup>** is a high performing variety with particularly strong growth from summer through to winter. **ONE<sup>50</sup>** has proven to be a robust and persistent option and is available in **AR37, AR1** and LE endophyte options.

**ONE<sup>50</sup>** is a cross of elite New Zealand genetics and genetics of north-west Spanish origin, producing a cultivar with exceptional leaf production through summer, and high drymatter production through autumn and winter. **ONE<sup>50</sup>** has always demonstrated a stay green habit through dry summers, often obvious in trials at this time. These traits were also observed by Matthews *et al.*, (2012).

### Production Data

Agricom values individual trials that are undertaken New Zealand wide and the data they provide. For us, while the results may have statistical limitations, they deliver invaluable information on the basis of the specific locations and conditions in which they are undertaken, especially from the experiences and anecdotal feedback received.

Multiple trial summaries offer a level of confidence that a result will be repeated. It is important to be aware that the number of trials a cultivar is summarised in relates to the confidence you can have that the data summary will not change with the addition of extra trials. Cultivars summarised from a least 8-10 trials are less likely to change than ones summarised from 3-4 trials.

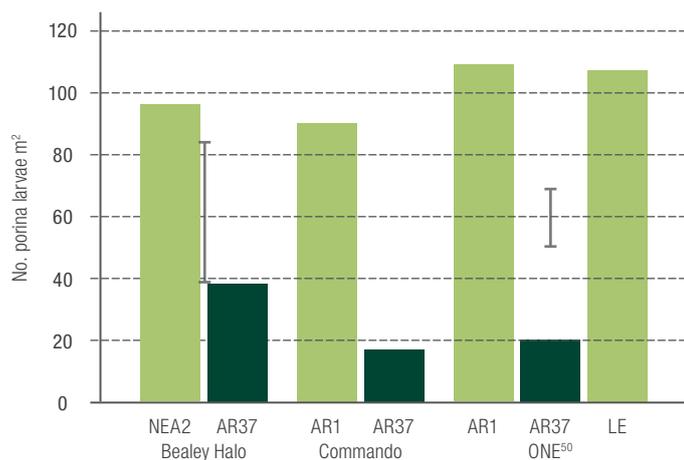
**ONE<sup>50</sup>** is one of the most trialled cultivars in the New Zealand National Forage Variety Trials (NFVT). It was initially released with **AR1** endophyte and has been in 20 three year trials with this endophyte option. More recently **ONE<sup>50</sup>** was released with the inclusion of the endophyte option **AR37**. This has been even more widely tested and to date has been in 25 trials. **ONE<sup>50</sup>** has also been tested without endophyte (WE) five times. This makes **ONE<sup>50</sup>** one of the most widely tested ryegrasses (with a variety of endophyte options) nationwide. It also makes **ONE<sup>50</sup>** an ideal pasture cultivar with which to judge the value of different endophyte options for drymatter production throughout the country. **ONE<sup>50</sup>** shows strengths in late spring, summer, autumn and winter. While **ONE<sup>50</sup> AR1** is a competitive endophyte option, **ONE<sup>50</sup> AR37** is providing advantages in drymatter production over **ONE<sup>50</sup> AR1**, with particular significance in the autumn.



### Additional Data

**ONE<sup>50</sup> AR<sup>37</sup>** has been so widely tested it has also proven itself in trials that have been influenced by insects, such as reported in Popay *et al.*, (2012).

**Figure 1. Estimated Density of Porina Larvae in Two Tetraploid and Two Diploid Perennial Ryegrass Cultivars Infected with Different Endophytes in Trials at Woodstock in Canterbury Sampled in July 2011. Error Bar = LSD (5%)**



### Key Tips

- Ideally hard graze in November (regardless of seed head presence) to maximise summer quality
- Consider including **Relish** red clover to increase clover content, as **Relish** is more competitive and productive over time
- **ONE<sup>50</sup>** benefits from late autumn nitrogen as it helps maintain its winter strong activity and assists with early spring vigour

### Suggested Mixes

#### DAIRY PASTURE EXAMPLE MIX

	RATE (kg/ha)
<b>ONE<sup>50</sup> AR<sup>37</sup>, AR<sup>1</sup></b> or LE perennial ryegrass*	20
Mainstay white clover	3
Tribute white clover	2
<b>TOTAL</b>	<b>25</b>

#### SHEEP & BEEF PASTURE EXAMPLE MIX

	RATE (kg/ha)
<b>ONE<sup>50</sup> AR<sup>1</sup></b> or LE perennial ryegrass*	18
Tribute white clover	3
Relish red clover	4
<b>Ecotain</b> environmental plantain or AgriTonic plantain	1
Choice chicory	2
<b>TOTAL</b>	<b>28</b>

\* It is not advisable to mix **AR<sup>37</sup>** and **AR<sup>1</sup>** varieties. **AR<sup>1</sup>** is not recommended for areas where black beetle, porina or root aphid are common problem pests. Grass seed should be Superstrike<sup>®</sup> treated where Argentine stem weevil, black beetle or grass grub are a risk to seedlings. For more information on **AR<sup>37</sup>** endophyte, visit ar37.co.nz.

For information on **ONE<sup>50</sup>s** performance in the Forage Value Index from DairyNZ see [www.dairynz.co.nz/fvi](http://www.dairynz.co.nz/fvi).

For the complete NFVT trials go to [nzpbra.org](http://nzpbra.org).