

# Perennial ryegrass

## Introduction

Throughout NZ, perennial ryegrass is the grass of choice for permanent pastures. It establishes rapidly, yields well, tolerates a range of management practices and has a high nutritive value. It is also compatible with white clover offering an excellent all-round pasture for all grazing systems.

<p>Most persistent</p> <p>↑</p> <p>↓</p> <p>Least persistent</p>	Perennial ryegrass
	Long rotation ryegrass
	Hybrid ryegrass
	Italian ryegrass
	Annual ryegrass

Most perennial ryegrasses are available with different endophytes, which are fungi that can assist plant survival (see page 59 for more details).

Ryegrass is naturally a diploid plant, meaning it has two sets of chromosomes. Some varieties are tetraploids, artificially developed by plant breeders to have four sets of chromosomes. Tetraploids are more palatable, and can offer improved animal performance (see page 160 for more details).

## Diploid varieties

### Alto

High performance, persistent, late heading (+14 days) ryegrass suitable for all farming systems. *Alto* is a fine leaved, robust variety with excellent persistence, along with high year-round yield and very good feed value, good resistance to rust and plant pulling. Available with *Plus AR1* or *Without* endophyte. (Refer also to the *Alto* sheet on page 7).

### Arrow

Delivers high winter-early spring growth, while performing well in all seasons. *Arrow* combines early growth with a medium-late heading date (+7 days). It has a medium-erect growth habit allowing good clover compatibility, and has very good persistence. Available with *Plus AR1* or *Without* endophyte. (Refer also to the *Arrow* sheet on page 8).

### Bronsyn

The variety that set the standard. The number one choice of NZ dairy farmers and widely used in sheep and beef systems over the last 12 years. *Bronsyn* has excellent persistence, summer and autumn growth and resistance to plant pulling. Available with *Plus AR1* or *Without* endophyte. (Refer also to the *Bronsyn* sheet on page 10).

### AberDart

A UK-bred late heading (+15 days) variety. Good summer growth, but below average winter growth. Available with *AR1* or *Without* endophyte.

### AberMagic

UK-bred late heading (+15 days) perennial ryegrass. Better year round growth with a higher tolerance of rust. Available with *AR1* or *Without* endophyte.

### Ceres One50

Late heading variety (+20 days) with good autumn and winter production. Available with *AR1* or *Without* endophyte.

## Perennial ryegrass varieties

### Diploid varieties (continued)

<b>Ceres Kingston</b>	Upright growth habit with standard heading date (-3 days) and rapid recovery from hard grazing. Available with <i>Standard</i> or <i>Without</i> endophyte.
<b>Grasslands Commando</b>	Standard heading date (+1 day) variety with lower yields in winter and autumn. Suited to dairy, beef and high input sheep farms. Available with <i>AR37</i> , <i>AR1</i> or <i>Without</i> endophyte.
<b>Expo</b>	Densely tillered, late flowering (+21 days) perennial ryegrass with good cool season growth that is suitable for all classes of livestock. Available with <i>AR1</i> endophyte.
<b>Extreme</b>	Variety with standard heading date (+3 days) and good yield. Can suffer plant pulling on problem soils. Available with <i>AR37</i> , <i>AR1</i> or <i>Without</i> endophyte.
<b>Grasslands Hillary</b>	Re-selection from <i>Ruanui</i> with standard heading date (+4 days). Bred for persistence under sheep grazing. Available with <i>AR1</i> endophyte.
<b>Grasslands Kamo</b>	Variety with standard heading date (+2 days) for situations with medium to low soil fertility. Available with <i>AR37</i> endophyte.
<b>Indiana</b>	European variety with less winter and spring growth than standard varieties. Available <i>Without</i> endophyte.
<b>Grasslands Nui</b>	Common variety first certified in 1975. Now superseded in yield, palatability and rust resistance by many other varieties. Available with <i>Standard</i> or <i>Without</i> endophyte.
<b>Grasslands Pacific</b>	Variety suited to soils with medium to lower fertility. Superseded in yield by many other varieties.
<b>Grasslands Ruanui</b>	Oldest variety, first certified in 1936. Out-yielded by every other variety. Susceptible to rust. Does not contain endophyte.
<b>Grasslands Samson</b>	Medium leaved variety with good disease resistance. In National Forage Variety grazing trials has been out-yielded by <i>Bronsyn</i> and <i>Arrow</i> . Available with <i>AR37</i> , <i>AR1</i> or <i>Without</i> endophyte.

# Perennial ryegrass varieties

**Tetraploid varieties** (For more information on tetraploids see page 160.)

## *Bealey*

*Bealey* is a new generation perennial ryegrass that boosts animal production by combining several key elements: high winter and summer growth; high ME; the palatability of a tetraploid; very late heading (+25 days); good persistence and clover compatibility. Has excellent resistance to rust and plant pulling. Available with *Plus NEA2* or *Without* endophyte. (Refer also to the *Bealey* sheet on page 9).

## *Halo*

New tetraploid that has a late (+25 days) heading date. Only available in *AR37* endophyte.

## *Impresario*

European variety with less winter and early spring growth than standard varieties. Available *Without* endophyte.

## *Quartet II*

Very late heading date (+28 days). Available with *Endo5* endophyte. Increased tiller density compared with *Quartet*.

Tetraploid varieties are best sown at 30% higher sowing rates because they have larger seeds.

## Heading dates of perennial ryegrass varieties\*

Variety	Days	Variety	Days
<i>Kingston</i>	-3	<i>Arrow</i>	+7
<i>Bronsyn</i>	0	<i>Alto</i>	+14
<i>Nui</i>	0	<i>AberDart</i>	+15
<i>Commando</i>	+1	<i>AberMagic</i>	+19
<i>Pacific</i>	+1	<i>One50</i>	+20
<i>Ruanui</i>	+1	<i>Expo</i>	+21
<i>Kamo</i>	+2	<i>Bealey (T)</i>	+25
<i>Extreme</i>	+3	<i>Halo (T)</i>	+25
<i>Samson</i>	+3	<i>Quartet II (T)</i>	+25
<i>Hillary</i>	+4		

\* Day 0 is typically around 22 October, but this can vary from year to year. See page 91 for more.