

# Agrinote



Pastures for Profit.®



*Advance MaxP* has proven within New Zealand and Australia to be a cultivar able to give excellent animal performance. It has high production in both summer and autumn, is a very palatable forage and has a good legume balance. Fescue, once established, has tolerance to grass grub and Argentine stem weevil, and the *MaxP* novel endophyte now gives resistance to black beetle, pasture mealy bug and root aphid.

*Advance MaxP* tall fescue was bred by AgResearch Grasslands for animal palatability, for excellent establishment and for high dry matter production. In hot environments, when adequate moisture is available, *Advance MaxP* can continue to grow where ryegrass has stopped. Once established, *Advance MaxP* performs best in medium to high fertility environments. *MaxP* is a tall fescue novel endophyte also discovered by AgResearch Grasslands, which increases resistance to insects, as well as the persistence and production (20 to 90%) of the pasture.

## Characteristics

Perenniality	Leaf Size	Rust Tolerance	Flowering Date
Perennial	Medium	High	Late

Ploidy	Endophyte Status	Suggested Sowing Rate (kg/ha)	1000 Seed Weight
Hexaploid	Max P	20-24	2.6 grams



## Production Performance

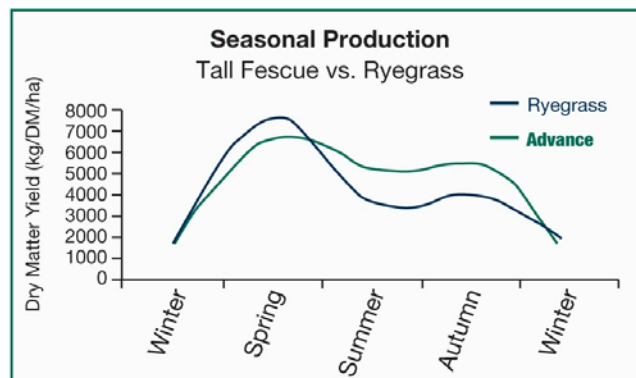
*Advance MaxP* tall fescue has been sown at a wide range of sites and has performed very well in terms of establishment and dry matter production. The advantage that *Advance MaxP* has over most other fescue cultivars, is a very palatable leaf.

**Table 1. NFVT® Seasonal and Total Yield (kg DM/ha) of Tall Fescue Cultivars, mean of two years, Kimihia Research Centre, 1993-1996. National (New Zealand (664mm annual rainfall).**

Entry	Winter	Spring	Summer	Autumn	Total
<i>Advance</i> tall fescue	<b>994a</b>	<b>3777a</b>	<b>3290a</b>	<b>2651a</b>	<b>10712a</b>
AU Triumph	947a	3626ab	3313a	2566ab	10451ab
Quantum	1027a	3338cd	3102b	2556ab	10023bc
Vulcan	602c	3528ac	2828c	2030d	8988e
F Test	***	***	***	***	***
LSD (5%)	126	164	164	144	468
CV (%)	9.5	3.7	3.7	4.1	3.2
<b>Trial Mean</b>	<b>899</b>	<b>2997</b>	<b>2997</b>	<b>2385</b>	<b>9727</b>

Totals followed by the same letter are not significantly different.

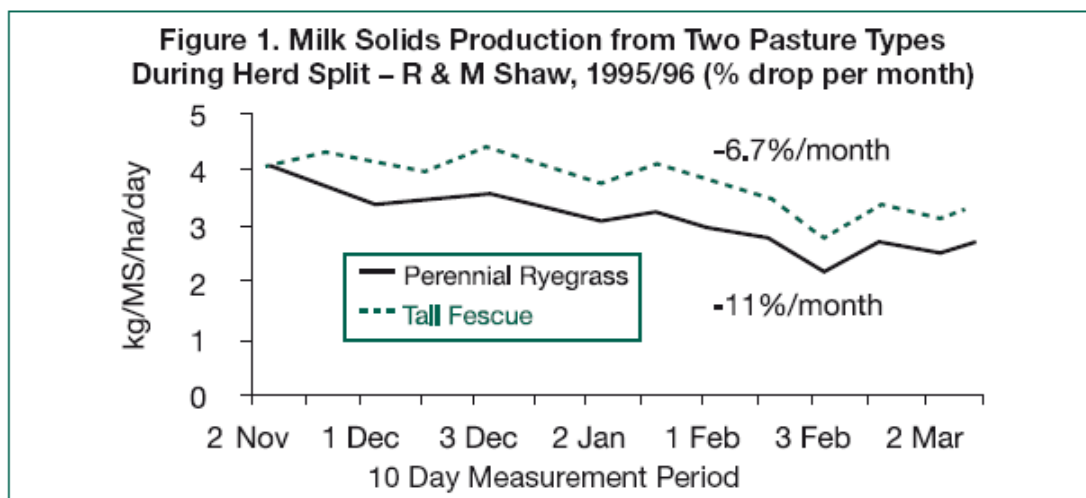
\* In Canterbury, tall fescue produced 24% more annual growth than perennial ryegrass under irrigation and 57% more over summer (Rollo et al. 1998).





## Dairy Production

*Advance* tall fescue was shown to increase milk production per hectare by up to 30% from August to May, compared with perennial ryegrass (Milne 2001). In Waikato *Advance* and Grasslands Roa (the predecessor to *Advance*) had a slower rate of seasonal milk production decline than ryegrass (6.7% vs 11%), and produced up to 16% more milk – see Fig 1 below (Milne et al. 1997).



In the Waikato, milk production declines at an average rate of 14% per month after the true peak. The trial above showed this was reduced to 6.7% on tall fescue compared with 11% on perennial ryegrass.

A farmllet trial in Taranaki over four years reported that milk production was significantly higher from tall fescue than perennial ryegrass (McCallum et al, 1992), and in Waikato, *Advance* tall fescue-based pasture produced more milk per cow than perennial ryegrass (0.86 vs 0.74 kg/cow/day), (Thom et al, 1998).

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**MaxP**

**Uses** (for detailed information, read also the *Tall Fescue Guide*).

## Dairy Farms

Tall fescue has not been considered suitable for dairying as older cultivars had low palatability and winter production. *Advance MaxP*, however has been widely proven to provide substantial lifts in milk production in many regions.

The end result from using *Advance MaxP* is more milk solids produced per hectare. This is a result of higher annual and summer pasture growth, and better feed quality over summer.

Using *Advance MaxP* is not difficult, farmers just need to use good pasture establishment methods and graze paddocks more frequently. A suggested seed mix is:

## Dairy

<i>Advance MaxP</i> tall fescue	25 kg/ha
<i>Choice</i> chicory	1 kg/ha
<i>Tribute</i> white clover	3 kg/ha
<i>Sensation</i> red clover	4 kg/ha
<b>Total</b>	<b>33 kg/ha</b>

## Sheep or Beef Finishing

*Advance MaxP* tall fescue supplies more green leaf and clover than perennial ryegrass over summer, resulting in higher performance from finishing stock. A suggested seed mix is:

<i>Advance MaxP</i> tall fescue	24 kg/ha
<i>Tribute</i> white clover	4 kg/ha
<i>Sensation</i> red clover	4 kg/ha
<i>Choice</i> chicory	2 kg/ha
Optional extra: <i>Charlton</i> timothy	1-2 kg/ha
<b>Total</b>	<b>35-36 kg/ha</b>