

TROJAN NEA2

PERENNIAL RYEGRASS



ALL SEASON ALL-STAR

★★★★★

UPPER NORTH ISLAND

Performance Values² (1-5 rating)

| FVI Star Rating (\$/ha) | Cultivar | Dry matter (DM) | | | | |
|-------------------------|--------------------|-----------------|--------------|-------------|--------|--------|
| | | Winter | Early spring | Late spring | Summer | Autumn |
| \$487 to \$621 | Base AR37 | 4 | 4 | 4 | 5 | 5 |
| | Excess AR37 | 5 | 4 | 4 | 5 | 5 |
| | One50 AR37 | 5 | 3 | 3 | 5 | 5 |
| | Prospect AR37 | 5 | 4 | 4 | 5 | 4 |
| | Trojan NEA2 | 5 | 5 | 5 | 5 | 4 |

Harnessing Trojan perennial ryegrass's all-star performance in the Forage Value Index.

Getting the best from the best

Trojan perennial ryegrass with *NEA2* endophyte provides superb DM yield, palatability and persistence.

It's also the best growing perennial through winter, early spring and up to Christmas - the make or break period for most New Zealand dairy systems.

In this booklet you'll find tips to capture *Trojan's* unique benefits, and turn an all-star performer into more kg MS/cow/day this season.

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“Since Trojan’s release 8 years ago, over 25 other perennial ryegrass varieties have come or gone, while Trojan NEA2 remains. New isn’t always better, but better is always better.”

1 PEAK HIGHER, GLIDE LONGER

Make more money before Christmas

This is a key maxim of dairy farming, and *Trojan* ryegrass with *NEA2* endophyte fits the brief perfectly. Extra DM yield through winter, early spring and into summer, coupled with leafy high quality feed, drives peak milk production and helps extend the lactation glide as long as possible.

4 seasons, more stars

Below is just the top '5 star' cultivars in the perennial ryegrass DairyNZ Forage Value Index (the full Index is on page 8). As you can see, *Trojan NEA2* has more stars for seasonal performance from winter through summer than any other ryegrass in the FVI.

Forage Value Index (FVI) 5 star cultivars for the Upper North Island

| FVI (Star rating) | FVI Star Rating (\$/ha) | Cultivar | Performance Values (1-5 rating) | | | | |
|-------------------|-------------------------|----------------------|---------------------------------|--------------|-------------|--------|--------|
| | | | Dry Matter (DM) | | | | |
| | | | Winter | Early Spring | Late Spring | Summer | Autumn |
| ★★★★★ | \$487 to \$621 | <i>Base AR37</i> | 4 | 4 | 4 | 5 | 5 |
| | | <i>Excess AR37</i> | 5 | 4 | 4 | 5 | 5 |
| | | <i>One50 AR37</i> | 5 | 3 | 3 | 5 | 5 |
| | | <i>Prospect AR37</i> | 5 | 4 | 4 | 5 | 4 |
| | | <i>Trojan NEA2</i> | 5 | 5 | 5 | 5 | 4 |

Trojan's the only ryegrass with maximum winter to summer ratings in the FVI.

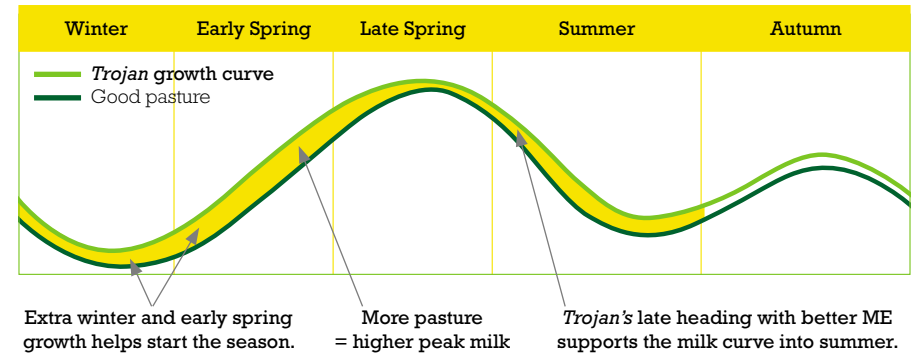
NOTE: Cultivars are divided into 6 star ratings, then listed alphabetically within these.

Higher peak milk

More leafy green pasture from winter through summer means more kg MS/cow/day at the peak of the season, with less supplement.

Trojan grows more when you need it

Key to high milk peak



2 MILK TROJAN NEA2 FOR ALL IT'S WORTH

No different, only faster

Managing *Trojan* is no different from managing other perennial ryegrasses; it can just happen faster, because *Trojan* grows more DM.

Our top tip: Graze *Trojan* paddocks 3-4 days earlier than other paddocks.

Getting the best from the best

Turning an all-star cultivar into more kg MS/cow/day requires good pasture management at critical times of the year. It is easier to lose control of fast growing pastures than those which produce less DM. When this happens, you also lose both palatability and utilisation.

For maximum yield, persistence and utilisation of your *Trojan NEA2* this season, follow these three golden rules:

1. Graze at the 2.5-3 leaf stage.
2. Graze to a consistent even, clean residual.
3. Repeat steps 1 & 2.



Good post grazing with no dead matter in the base (in good weather).

E.g. 1500-1600 kg DM/ha

Get these in balance and management falls into place

Graze at the right time with no dead matter in the base.



Seasonal tips

Spring: Look after your daughter tillers

Trojan NEA2 is the only ryegrass with an FVI 5 star rating for DM growth during winter, early spring and late spring, and while this is great for growing leafy green feed, it means you have to keep an eye on these pastures! If they get away on you both ME and persistence will suffer.

At this time of year ryegrass plants are busy producing new 'daughter' tillers, as old tillers set seed and die. These daughter tillers thicken your pasture and set it up to survive summer, provided you give them 2 things:

Light: When pastures get too long, not enough light can reach new daughter tillers at the base of the plant, so they die.

Food: Applying N heading into summer helps daughter tillers survive and thrive.

Late spring: Residuals are the key to better milk yield

Grazing (or mowing) to consistent, even residuals is critical for all pastures in late spring, and *Trojan* is no exception. Grass left behind after one grazing will be past its use-by date at the next grazing, and the results will show in the vat, because cows won't want to eat it.

Prevent any potential quality issues before they happen by managing extra growth proactively. Identify surpluses early, book your silage contractor and/or spray out other less productive paddocks for summer cropping.

And remember, *Trojan NEA2* is late heading with reduced aftermath seeding, which also helps maintain pasture quality during late spring.

Summer: Protect your pastures

The energy reserves that keep ryegrass alive are stored in the crown of the plant (the first 3-4 cm above ground), so avoid grazing below this level. In summer this is particularly important as plants are also often under heat and moisture stress, and possibly insect attack.

In extended dry periods on/off grazing is usually the only way to keep residuals above 3-4cm.

3 THE KINDEST CUT: MAKE GREAT SILAGE

Too often grass silage is left to get too long before it is cut. Silage quality suffers as a result, and so do your pastures. Less is definitely more in this case.

Overgrown pasture might look like a bumper silage crop before it's cut. But afterwards it is a different story. Regrowth slows and persistence is weakened, because daughter tillers and clover get shaded out under high covers. The result is a pale, thin population of ryegrass plants.

For higher ME silage, plus improved regrowth and persistence:

- Cut your silage as soon after the three leaf stage as possible. Yield increases by leaving it to grow longer, but at the cost of quality, regrowth and pasture health.
- Cut with sharp blades down to a good clean residual (1500-1600 kg DM/ha). Roll the paddock before if necessary to avoid 'scalping' in uneven areas.



These are both the same ryegrass on the same farm in the same autumn, following a dry summer. The left paddock was grazed well through spring. The right paddock was cut for a heavy silage crop and weakened just prior to summer. Which paddock would you rather have on your farm?

4 NEA2 – THE BETTER ENDOPHYTE



Part of the reason for *Trojan's* success is its naturally occurring *NEA2* endophyte, which we believe has the best combination of animal health and insect control.

Excellent animal performance

In independent animal performance trials *NEA2* has repeatedly and consistently shown the highest level of animal performance.

Staggers free

Trojan with *NEA2* does not cause ryegrass staggers in dairy cows.

Broad insect control

Trojan naturally has strong tillering ability and persistence. This is enhanced by *NEA2* providing good control of adult black beetle and Argentine stem weevil, very good control of pasture mealy bug (provisional rating), and moderate control of root aphid.

Sowing mix

Below is a base mix for *Trojan* perennial ryegrass. Other species can be added to suit the situation (e.g. *Tuscan* red clover or plantain).

| Dairy | | kg/ha |
|---|----------------------------------|-------|
| Top performing palatable dairy pasture. | <i>Trojan</i> perennial ryegrass | 18-22 |
| | <i>Kotare</i> white clover | 2 |
| | <i>Weka</i> white clover | 2 |
| Total | | 22-26 |

In addition *Trojan* can also be sown mixed with tetraploid perennial ryegrass *Viscount*, (where extra palatability is required), or with *Rohan* spreading perennial ryegrass for a dense, very robust pasture.

5 DAIRYNZ FORAGE VALUE INDEX

FOR THE UPPER NORTH ISLAND

Upper Nth. Island



Cultivars are sorted by star rating and then alphabetically. Note:

Perennial ryegrass FVI is currently a combination of seasonal dry matter performance values and economic values.

Metabolisable energy performance values are not yet included in the FVI calculation and are shown below as additional information until sufficient trial data becomes available.

NOTE: Cultivars are divided into star ratings, then listed alphabetically within these.

PERENNIAL RYEGRASS FORAGE VALUE LIST

DairyNZ
Forage Value Index



Cultivars with SE are not recommended as they can cause ryegrass staggers in summer and may reduce milk solid production at this time.

Cultivars with AR1 endophyte are not recommended in the UNI as they provide limited protection against black beetle.

Evaluation date: 10/11/2016

| FVI ¹ (Star rating) | FVI Star Rating (\$/ha) | Cultivar | Performance Values ² (1-5 rating) | | | | | Other cultivar information | | | | | |
|--------------------------------|-------------------------|----------------|--|--------------|-------------|--------|--------|----------------------------|---------------------|--------------------------|--------------------------|-------------------|--|
| | | | Dry matter (DM) | | | | | Endo ³ | Ploidy ⁴ | HD ⁵ | Marketer | Conf ⁶ | Interim metabolisable energy concentration (MJME/kg DM) ⁷ |
| | | | Winter | Early spring | Late spring | Summer | Autumn | | | | | | |
| ★★★★★ | \$487 to \$621 | Base AR37 | 4 | 4 | 4 | 5 | 5 | AR37 | T | VL | PGG Wrightson Seeds | 7 | 12.4 |
| | | Excess AR37 | 5 | 4 | 4 | 5 | 5 | AR37 | D | M | PGG Wrightson Seeds | 3 | 12.2 |
| | | One50 AR37 | 5 | 3 | 3 | 5 | 5 | AR37 | D | L | Agricom | 10+ | 12.2 |
| | | Prospect AR37 | 5 | 4 | 4 | 5 | 4 | AR37 | D | L | Agricom | 10+ | 12.2 |
| | | Trojan NEA2 | 5 | 5 | 5 | 5 | 4 | NEA2 | D | L | Agriseeds | 10+ | 12.3 |
| ★★★★★ | \$354 to \$487 | Alto AR37 | 5 | 4 | 4 | 4 | 4 | AR37 | D | L | Agriseeds | 10+ | 12.3 |
| | | Ansa AR1 | 4 | 4 | 5 | 4 | 3 | AR1 | D | L | DLF Seeds | 3 | 12.3 |
| | | Arrow AR1 | 2 | 5 | 3 | 4 | 3 | AR1 | D | M | Agriseeds | 8 | NT |
| | | Matrix SE | 3 | 5 | 3 | 4 | 4 | SE | D | VL | Cropmark | 7 | 12.4 |
| | | Request AR37 | 5 | 4 | 5 | 4 | 4 | AR37 | D | M | Agricom | 9 | 12.2 |
| Ultra AR1 | 4 | 4 | 3 | 4 | 4 | AR1 | D | L | Cropmark | 10+ | 12.2 | | |
| ★★★ | \$220 to \$354 | Alto AR1 | 3 | 3 | 3 | 4 | 3 | AR1 | D | L | Agriseeds | 10+ | 12.3 |
| | | Bealey NEA2 | 4 | 3 | 2 | 4 | 4 | NEA2 | T | VL | Agriseeds | 10+ | 12.6 |
| | | Excess AR1 | 2 | 4 | 3 | 4 | 2 | AR1 | D | M | PGG Wrightson Seeds | 2 | 12.2 |
| | | Expo AR1 | 3 | 4 | 3 | 3 | 3 | AR1 | D | L | PGG Wrightson Seeds | 7 | 12.2 |
| | | Expo AR37 | 5 | 3 | 3 | 3 | 3 | AR37 | D | L | PGG Wrightson Seeds | 4 | 12.2 |
| | | Halo AR37 | 4 | 3 | 1 | 4 | 4 | AR37 | T | VL | Agricom | 10+ | 12.4 |
| | | One50 AR1 | 3 | 3 | 2 | 4 | 4 | AR1 | D | L | Agricom | 10+ | 12.2 |
| | | Rely AR37 | 3 | 3 | 4 | 2 | 5 | AR37 | D | M | PGG Wrightson Seeds | 3 | 12.1 |
| ★★ | \$86 to \$220 | AberMagic AR1 | 2 | 1 | 3 | 4 | 3 | AR1 | D | L | Genetic Technologies Ltd | 4 | 12.5 |
| | | Base AR1 | 3 | 3 | 2 | 3 | 2 | AR1 | T | VL | PGG Wrightson Seeds | 2 | 12.4 |
| | | Ohau AR37 | 4 | 3 | 4 | 1 | 1 | AR37 | T | L | Agricom | 4 | NT |
| | | Samson AR37 | 4 | 3 | 2 | 1 | 2 | AR37 | D | M | Agricom | 5 | NT |
| | | Samson SE | 2 | 3 | 3 | 2 | 2 | SE | D | M | Agricom | 10+ | NT |
| ★ | \$-48 to \$86 | Bronte AR1 | 2 | 2 | 1 | 2 | 1 | AR1 | D | L | DLF Seeds | 3 | 12.1 |
| | | Nui SE | 1 | 3 | 2 | 1 | 1 | SE | D | M | Common | 10+ | NT |
| | | Pacific SE | 1 | 3 | 4 | 1 | 1 | SE | D | M | PGG Wrightson Seeds | 4 | NT |
| | | Rohan NEA2 | 3 | 1 | 1 | 2 | 3 | NEA2 | D | M | Agriseeds | 4 | NT |
| | | SF Stellar AR1 | 2 | 2 | 3 | 1 | 1 | AR1 | D | M | Seed Force | 7 | 12.4 |
| \$-583 to \$-575 | AberGreen WE | 1 | 1 | 1 | 1 | 1 | WE | D | L | Genetic Technologies Ltd | 2 | 12.6 | |
| | AberMagic WE | 1 | 1 | 1 | 1 | 1 | WE | D | L | Genetic Technologies Ltd | 4 | 12.5 | |

¹ 5 = top rank, 1 = bottom rank, ² Winter = Winter dry matter production (May-June), Early Spring = Early spring dry matter production (July-Aug), Late Spring = Late spring dry matter production (Sept-Oct), Summer = Summer dry matter production (Nov-Jan), Autumn = Autumn dry matter production (Feb-Apr), ³ Endophyte, WE is without endophyte, ⁴ Ploidy (D=Diploid, T=Tetraploid), ⁵ Heading date (M=Mid, L=Late, VL=Very late), ⁶ Confidence (number of trials), ⁷ UNI ME concentration data based on 1 year of trial data from the Waikato. NT=No trial data available. For more information visit dairynz.co.nz/fvi

Cultivars included in the FVI lists without a star rating have enough trials to be eligible for the FVI, however they were excluded from the FVI Star Ratings due to poor performance in those trials.

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