ARE CHEAP ANNUAL RYEGRASSES COSTING YOU MORE?

VICKERY BROS.

THE FERTILISER PROFESSIONALS

"Granules of Knowledge" April 2023

Tony Dickson

In April 2022, Vickery Bros and McDonald Rural Services put in an annual ryegrass trial to evaluate the biomass and economic differences between the cheaper standard varieties and the "premium" commercially available lines.

Annual ryegrass seed sales have increased 37% since 2019 (McDonald Rural Services). South west producers are relying on annual varieties to increase hay/silage supplies, using it in a rotation to "clean up" paddocks from weed species before returning them to perennial pasture systems and to gain the benefit of extra production over the winter months. Producers often continue to utilise the same variety of annual ryegrass in the program, however, with genetic advancements seen in recent years, sowing the same variety could mean you're forgoing a significant amount of biomass.

What if I'm spraying out early for a summercrop?

The thought that we should grow the cheap varieties if they will be sprayed out in spring to make way for a summercrop is extremely common. However, results from the annual ryegrass trial in Coleraine suggest that the average top 3 performing ryegrasses still grew 1261.4kg DM/ha over Tetila (01/06/2022 to 01/10/2022). Dairy Australia released the economic value of Ryegrass (\$/kg) each year for each season, when accounting for the economic value, the top 3 performing ryegrasses average almost \$300/ha more than Tetila, after the additional seeding costs have been taken into account (\$49.50).

Summer crop option (sprayed out 1/10/2022)	Extra biomass grown (kg_DM/ha)	\$/ha benefit	\$/ha extra seed cost	\$/ha benefit after additional seed cost
Tetila vs top 3 average	1261.4	\$ 346.22	\$ 49.50	\$ 296.72

Spring production is pretty similar, so I'll grow Tetila to make hay and silage?

This statement is also extremely common and again, not quite right. The biomass data collected from this trial was monitored for winter (June/July), early spring (August/September), late spring (October/November) and summer (December/January). When adding the early and late spring production together for the top 3 performing ryegrasses, they average a production of 145% more than Tetila. This means for every 1000kg DM/ha Tetila grows, the top 3 performing varieties are growing 1450kg DM/ha. With Tetila growth rates of 50kg DM/ha we are growing an extra 450kg DM/ha every 20 days by selecting one of these better performing varieties.

Silage option 1 (Cut 18/10/2022)	Extra biomass grown (kgDM/ha)	\$/ha benefit	\$/ha extra seed cost	\$/ha benefit after additional seed cost
Tetila vs top 3 average	2014.6	\$ 594.44	\$ 49.50	\$ 544.94
Silage option 2 (Cut 14/11/2022)	Extra biomass grown (kgDM/ha)	\$/ha benefit	\$/ha extra seed cost	\$/ha benefit after additional seed cost
Tetila vs top 3 average	3342.267	\$ 1,292.20	\$ 49.50	\$ 1,242.70
Hay option (Cut 1/12/2022)	Extra biomass grown (kgDM/ha)	\$/ha benefit	\$/ha extra seed cost	\$/ha benefit after additional seed cost
Tetila vs top 3 average	3753.4	\$ 1,415.54	\$ 49.50	\$ 1,366.04

The table above shows the additional biomass grown from 1st June that we saw from the top 3 performing Annual Ryegrasses in the trial against Tetila. Images below taken in Early December shows the difference in regrowth potential between Tetila (left) & better performing varieties (right).





WHAT'S HAPPENING AT THE MILTON TRIAL SITE THIS AUTUMN

Elly Dickson

Vickery Bros and McDonald Rural will be running the Milton trial site again this year which will feature 10 trials, 5 of which will be sown down this autumn. We will evaluate the performance of several different varieties of perennial, Italian, hybrid and annual ryegrasses to determine varieties that are best suited to the area. Many of the varieties will be experimental lines becoming available in the next few years. These will be compared to the commercially available lines to determine their fit in the region.

We will again be testing the limits of different chemical combinations, hoping to stay on top of common weeds seen in the area while not forgoing too much yield over winter when we need it most. This year we will be evaluating the performance of these applications on both established and newly sown species of herbs and legumes. This trial allows us to determine rates, combinations and timing of herbicide application, thus aiding us in decision making.

Historically, the Milton trial site has had a very good clover base; making the establishment for clover trials quite difficult. However, as clovers play such an important part in the pasture system and with new varieties hitting the market regularly, we will again be putting in a variety trial to evaluate the performance of sub clovers best suited to the region.

With the price of urea under half of what it was this time last year, applications of nitrogen leading into the winter months will be a powerful tool to reduce the winter feed gap and will ensure paddocks are ready and set up for lambing. We will be exploring the optimum application time of urea. We have seen great responses in the past to nitrogen in April. However, with the bit of moisture about in the past few weeks and an extended season last year (which has utilised a lot of nitrogen), we would expect a similar, if not better, response to early applications of nitrogen.

Each year we will host a winter field day to go over what we are evaluating and our results to date. Invites will go out for this closer to the date. However, if you are interested in learning more about something in particular, get in touch with your local Vickery Bros or McDonald Rural agronomist who will organise a personalised one-on-one tour at the site to answer any questions you might have.

Proposed plan for this Autumn

