



Naracoorte Seeds Annual & Italian Ryegrass Trial 2016

This year we have sown annual and Italian ryegrass cultivars side by side for the purpose of being able to compare them in the paddock. Key features we're looking for in each cultivar are vigour, winter and spring production, recovery from grazing and heading dates.

24 varieties of ryegrass were sown on 7m x 150m plots on 3rd June. There are 7 diploid varieties and 17 tetraploids. Diploids were sown at 22kg/ha, while the tetraploids were sown at 30kg/ha. The idea was to end up with the same amount of seeds per square metre for all cultivars, as tetraploid ryegrass has approximately 500,000 seeds per kg compared to 350,000 for diploid.

We used a pasture probe (when it wasn't too wet to use) to measure Dry Matter in kg/ha, which was a useful tool in tracking the production of each cultivar. The plots were grazed once, with 45 young steers grazing the 5ha paddock for 9 days starting on 13th September. The paddock was evenly grazed down to approximately 1,200kg/ha DM, which left the bottom leaf intact for optimal plant recovery.

Top Varieties for Vigour & Winter Production:

Tetraploids

- Diamond T
- Betta Tetila
- Prine
- Winterstar 2 Replacement
- Adrenalin
- Hogan

Diploids

- All of the diploids struggled early. They were slower to germinate and really didn't get up and away until we saw some warmer days. This may have something to do with late sowing date and cold wet winter, but I cannot be sure.

Top Varieties Pre-Grazing

Tetraploids

- Adrenalin
- Prine
- Diamond T
- Astound
- Winterstar 2 Replacement
- Atomic

Diploids

- Arnie
- Diploid Annual
- Tabu plus
- Diploid Italian

Toward the end of winter, with a few days of sunshine the diploids got going. Arnie and Diploid Annual stood out for production up until the time of grazing. Of the tetraploids Atomic and Astound had started to grow really well in the weeks leading up to putting stock in.

Top Varieties 3 Weeks Post Grazing

Tetraploids

- Prine
- Mach 1
- Winterstar 2 Replacement
- Winterstar 2
- Betta Tetila

Diploids

- Barberia
- Diploid Annual
- Tabu Plus
- Diploid Italian
- Arnie

One of the more important features that we were looking for was how each cultivar recovered from grazing. All of the above cultivars performed really well post grazing, however the standout result was Barberia, which didn't show a lot of early vigour, but post grazing it thrived and was ready to graze again within 16 days. Mach 1 was another one with similar attributes.

SUMMARY:

For the diploid cultivars, Arnie was the pick of the lot for mine. While it was relatively slow to begin with, which most of the diploids were, once the weather warmed up it really got going. This is not a huge surprise as Arnie is a late heading cultivar that is known to perform well through spring when moisture is adequate. Knight had slightly better winter growth than other diploids however it didn't produce the tonnage of other cultivars once the weather warmed up. Diploid Annual, Tabu Plus and Diploid Italian plots were all very competitive all the way along and were definitely great performers throughout. The only other one to note was the Barberia. It seemed to struggle early in this trial, which Barberia isn't generally known for, but once grazed it was the fastest of all cultivars to recover from grazing.

The tetraploid cultivars visibly handled the late sowing better than the diploids. They were able to germinate and get going far quicker, which resulted in better performance early on. There have been three standout performers that have produced the most dry matter to date being Prine, Betta Tetila and Atomic. There was a notable difference in the production from the late seasoned cultivars as they have really only got going in the past 4 weeks. Atomic, Winterstar 2 and Mach 1 have been the big movers late in the season and we may not have seen the best of these three yet, however they were in the bottom tier through winter.