

EXCELTAS

Coloured Brome

Why use Exceltas coloured brome as part of your perennial pasture systems?

- **Animal health** - No toxic endophyte, No ryegrass staggers, May reduce dags (refer to page 2 for more details)
- **Yield** - High yields comparable to perennial ryegrass
- **Deferred grazing** - Exceltas remains palatable even when seeding
- **Longevity** - Long-lived perennial brome
- **Grows all year round** - Exceltas has the ability to grow anytime of the year when moisture is not limiting



Produced and marketed by:

tasglobalseeds

EXCELTAS Coloured Brome

A high yielding long-lived perennial brome with excellent late spring/early summer growth. Exceltas is a legume friendly grass which remains palatable even when seeding.

Breeding Background

Exceltas coloured brome originates from the warm temperate areas of the Andes Mountains of Argentina and Chile. As part of the Tasmanian Pasture Plant Development Program a small number of seeds were obtained from the USDA in 1992. These were incorporated into a broad scale evaluation process across Tasmania. The selection process was applied to a promising range of plants resulting in the Exceltas cultivar.

Seasonal Production

Exceltas is summer active, producing a large bulk of high protein, high energy forage all year round with a high level of digestibility and nutritive value. Its big feature is its ability to respond to summer rain and it grows at warmer temperatures than perennial ryegrass. It is suitable for irrigated systems.

Grazing Management

Exceltas is best suited to a high input rotational grazing system. Exceltas remains palatable even when seeding and pastures can be shut up in the spring for later grazing in summer.

Soil and Climate Requirements

Adapted for sowing into all well drained soil types of moderate to high fertility, in temperate areas receiving 650+mm average annual rainfall.

Sowing

Rate: 25 kg/ha alone, 20 kg/ha + cocksfoot, herbs & clovers

Depth: Preferably around 10mm. No deeper than 20mm

Time: Suited to both autumn and spring sowing

Compatibility with other species

Exceltas is best suited for sowing as the dominant grass in a mix with legumes that have high seedling vigour. It may out compete some slower establishing species.

Tolerances

Drought - Plants in trials have shown they can tolerate moderate levels of moisture stress

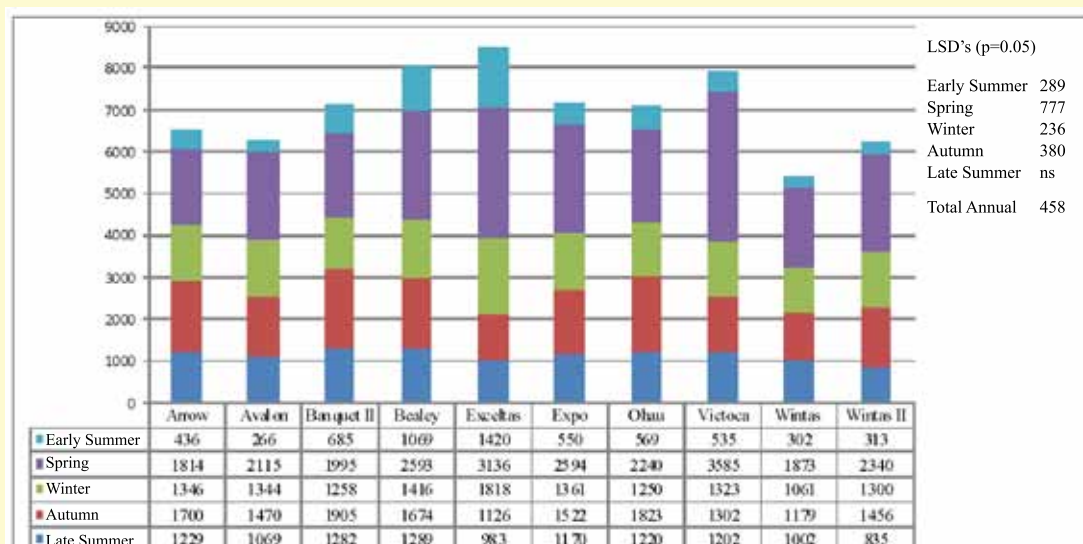
Cold - Moderate. Suffers some leaf damage if frosts are greater than -3°C

Water logging - Moderate

Salt - Low

In 2010 the Tasmanian Institute of Agriculture (TIA) began a multi species/cultivar trial on the Cressy Research Station (AAR 680mm) and after 2 years Exceltas has out yielded all other cultivars (see Figure 1). This trial is expected to run for another 2 years.

Figure 1



Animal Health “No toxic endophyte, no ryegrass staggers, may reduce dags”

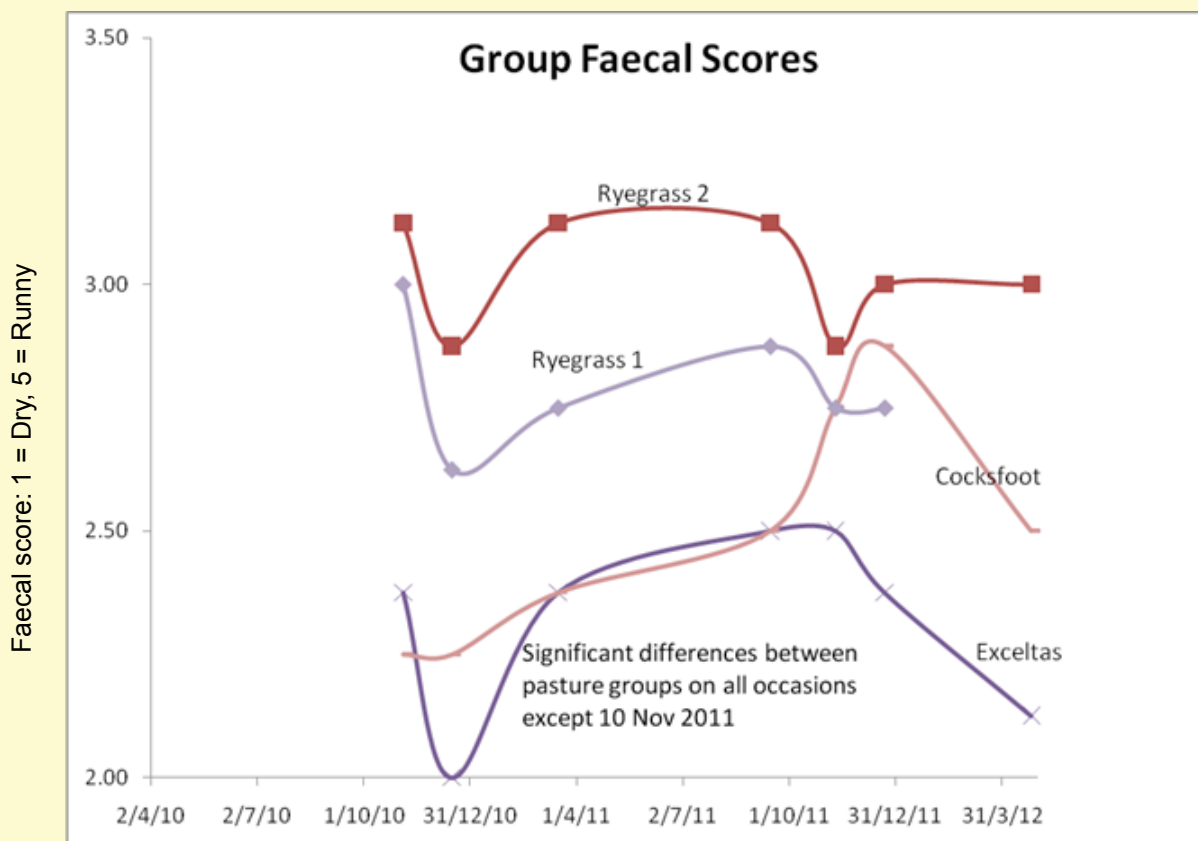
Exceltas has no known animal health issues and is readily eaten by all classes of livestock. It does not contain standard endophyte that is known to cause animal health issues such as ryegrass staggers.

In early March 2010 Tasmanian Institute of Agriculture (TIA) initiated a trial, on the Cressy Research Station, to evaluate a range of grasses in relation to lamb production. The aim of the research is to quantify the performance of new pasture species and cultivars developed within TIA relative to species and cultivars typically used by Tasmanian producers such as Porto cocksfoot, tall fescue, phalaris and perennial ryegrass. The details of the aims and methodology of the trial can be found at: <http://www.tia.tas.edu.au/extensive/sheepconnect/pastures/burlington-grazing-trial>

Of particular interest is the fact that very early in the trial it was noticed that the lambs grazing Exceltas always had a firm faecal pellet and did not develop lots of dags. The measurement of this characteristic was then included in the regular monitoring of the lambs.

Figure 2.

The average of the four faecal scores of the four grass options over the four weeks on each plot



Ryegrass 2 = tetraploid, Ryegrass 1 = diploid, Cocksfoot = Porto

Faecal Score

Faecal consistency scores are a measure of how dry (score 1) or runny (score 5) the faeces are. This was measured by examining faeces left by the group of sheep after being held for about 20 minutes before weighing on each occasion when they were moved between paddocks. So this score was taken four times, each time being after one week on each plot. However, individual sheep differences are not measured, since it is a score for the whole group. The dag score can vary depending on the length of wool at the time, so this may be a more consistent measure of 'tendency to form dags'.

Dag Score

Dag scores were measured before the sheep went onto the first plot and on the day they came off the last plot. It was not measured at intermediate times when moving from one plot to another. The final dag scores give similar results to faecal consistency but are statistically less significant because it does not take into account differences between individual sheep.

Discussion of Faecal Score Data

High dag scores and poor faecal consistency are most often assumed to be due to internal parasites although other causes are possible. The sheep were run as a single large mob before going onto the plots so they should have been evenly infected before the start of each trial. However, differences between plots are possible, since other sheep graze on these plots between trial periods and the number of sheep used depends on pasture growth. Therefore the effects observed could be due to differences in the number of parasites on the pasture before each trial begins. Although four plots are used these are not valid replicates for the purposes of considering internal parasites, because these could be transferred from plot to plot as the sheep move each week.

At the end of the April 2012 cycle the sheep on Ryegrass 2 (tetraploid) had an average faecal egg count of 600. All others had results around 100-200. Therefore the high faecal scores for Ryegrass 2 may be due to the high parasites in this group. It is not clear yet whether the pasture has a higher level of larvae or whether that pasture allows the parasites to reproduce more easily in the sheep. The consistently low results by Exceltas cannot be explained by differences in parasites, since this group was the same as all the others in faecal egg count.

It is planned that more rigorous monitoring of faecal consistency and dagging is undertaken to quantify if the trend is a pasture/nutrition issue. In other words, further work is needed to confirm the validity of the trend, and if it is valid, the mechanisms or causes quantified.

Importance

Flystrike is a major problem for sheep in the Australian wool industry, and it is estimated that around 3 million sheep die annually as a result. Many more are affected by non-fatal strikes. This results in the need to crutch sheep, treat with insecticides, or in many cases for lambs to undergo a mulesing operation. Besides all of these actions being costly and on-going, mulesing is likely to be phased out in the near future. Since 2004 industry and government funding has been significantly increased to find alternate methods to reduce flystrike incidence (other than via mulesing). Several methods are being trialled including the application of clips which stretch the skin and ultimately atrophy and thus remove the excess wrinkled skin, chemical compounds injected beneath the skin of the buttocks to have the excess wrinkles slough off, and projects to select and breed sheep with bare (wool-less) breach areas. To date no 'silver bullet' is likely to be forthcoming.

Having a pasture grass that not only has excellent agronomic attributes but also has the ability to reduce 'wet' faeces must offer a serious management tool to the sheep industry. It is not claimed however that Exceltas will totally solve the problem as there are many areas where it will not grow e.g. areas with less than 600mm average annual rainfall, and those water logged soils more suited to tall fescue. Nevertheless there are significant areas suited to growing Exceltas, more or less in an arc from Mt Gambier in South Australia to Armidale in NSW.



Exceltas coloured brome from Tasglobal Seeds is proudly distributed by:



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