

TALL WHEAT GRASS

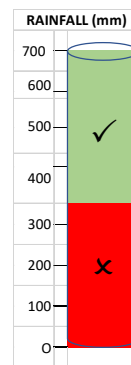
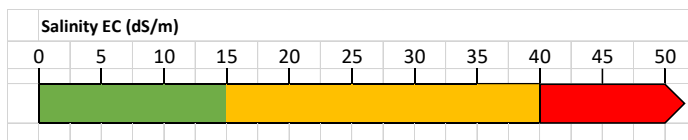
DRYLAND SALINITY NOW SERIES PRODUCED BY THE COORONG TATIARA LOCAL ACTION PLAN

Background

Tall Wheat Grass (*Thinopyrum ponticum*) is a drought tolerant, summer active, tussock forming perennial that persists in soils that are waterlogged in winter and dry out during summer¹⁰. It is best suited for areas that are going to be grazed to ensure that it doesn't become unmanageable and spread unintentionally⁹.

Site Suitability

- 350-700mm annual rainfall¹¹
- Acidic-alkaline soils
- Salinity levels up to 16 dS/m¹³ for maximum production, but will tolerate up to 40 dS/m¹⁰
- Winter waterlogging tolerant (not suitable for areas that are inundated into spring)



Establishment

Sow Tall Wheat Grass in late autumn (lower rainfall areas) after the opening break. In higher rainfall areas (>475mm) Tall Wheat Grass can be sown from late autumn through to late-winter (particularly if a late start to the season). Shallow seed placement (1 cm) is ideal with a light rolling afterwards⁶.

Seeding rates

- Single species - sow @ 10-20kg/ha¹¹ (use higher rates at higher soil salinity levels)
- Pasture mix – sow @ 5-12 kg/ha,^{6,11}

Weed control at establishment: Pre-seeding knockdown required to control sea water barley grass. Spraytopping the season before can be beneficial, however it may increase the salt concentration at the surface over the summer period if it is left too bare so use caution⁸.

PROJECT DETAILS

Responding to Dryland Salinity NOW
Recommendations for a new audience

Funding Body

This project is supported by the National Landcare Program – Smart Farms Program, an Australian Government Initiative



Figure 1. Tall Wheat Grass, Mount Charles 2021

Nutrition / Fertiliser Requirements

- Phosphorous:
 - o Establishment: Generally saline areas have been eroded or have a poor fertiliser history. In these situations apply either: Single super @ 100-150kg/ha pre-seeding or a nitrogen based fertiliser (eg MAP @ 100kg/ha) at seeding (may assist with autumn establishment)¹⁰.
 - o Annual applications of single super may assist in maintaining a highly productive pasture as long as grazing management is adequate.
- Nitrogen: Tall Wheat Grass will respond to Nitrogen, and to maintain a highly productive pasture, a spring application of up to 40-100kg/ha urea⁶ may be beneficial providing phosphorous nutrition is adequate.

Grazing Management

Tall Wheat grass needs to be firmly anchored to the ground prior to grazing. Conducting a 'pull test' to see if it pulls out is the best way to determine if it is ready to graze.

Lower rainfall areas or areas that are heavily scalded may benefit from waiting 12-18 months prior to grazing to allow seed set over the first summer plant density to improve. Those areas with good groundcover can be grazed earlier to stop the Tall Wheat Grass from becoming too rank.

Grazing management by season:

- Winter – avoid grazing when waterlogged/inundated (leads to pugging and potentially damage to the base of the plant)
- Late Spring – crash graze the the pasture down to 10cm. This removes excess growth, helps control weeds, encourages growth, Improves palatability over the summer period.¹⁰
- Summer / Autumn: continue to lightly graze keeping the plant height at approximately 10cm. This maintains soil cover reducing evaporation, while maintaining leafiness (and prevents plants going rank).

Fodder Quality

Fodder quality is going to depend on management of the Tall Wheat Grass pasture. Work conducted in 2002-2003 by DPI Vic at Hamilton shows the variability of the feed value in Dundas Tall Wheat Grass over the season (Fig 2a) and also the impact of grazing management on the feed quality in Spring (Fig 2b). From this it can be seen that keeping the Tall Wheat Grass shorter than 20cm is crucial in ensuring feed quality is maintained.

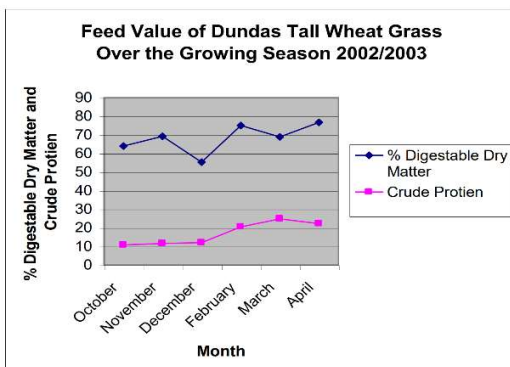


Fig 2a. Feed value of Dundas over the growing season¹⁴

	CP (Protein) %	% Digestibility	Est_ME (Energy MJ/kg)
Tall Wheat Grass (<20cm)	18.9	75.3	11
Tall Wheat Grass (>20cm)	15.2	66.4	9.6
Tall Wheat Grass (>1m)	7.6	52.4	7.4

Fig 2b. Feed Quality of Dundas, Spring 2002¹⁴