



# OPTIMAL SOWING RATES AND TIMING FOR RYEGRASSES

**Trials have shown that optimising ryegrass sowing rates and sowing timing can greatly improve home-grown feed.**

## PASTURE PARTNERS MAXIMISING HOME-GROWN FEED

### OPTIMAL SOWING RATES

Optimising your seeding rate can help you grow more home-grown feed. Trial work conducted at the Heritage Seeds research farm at Howlong NSW found that an extra 2.7MT of dry matter can be produced by raising the sowing rate of an annual ryegrass from 20 kg per ha to 30 kg per ha\*.

For the marginal extra seed cost, this represents excellent value, especially in drought years when forage is expensive. Results in this trial also demonstrated that most of this extra feed was grown before spring, thus even more valuable during winter feed shortages. Other research has also found increased forage yields in tetraploid annual ryegrass all the way up to a sowing rate of 40 kg/ha.

*\*Trial conducted by Heritage Seeds at Howlong NSW in 2014 using Vortex annual ryegrass.*

### Heritage Seeds recommended sowing rates (kg/ha) for annual ryegrass:

		Medium Rainfall (<600mm)	High Rainfall (>600 mm)	High Rainfall Broadcast into mulched kikuyu*
Tetraploid	Maximising winter feed	25–30 kg	30–40 kg	40–60 kg
	Spring forage only	20–25 kg	25–30 kg	
Diploid	Maximising winter feed	20–25 kg	30–35 kg	40–60 kg
	Spring forage only	18–22 kg	25–30 kg	

*\*Situations where seed is broadcast into mulched kikuyu will require much greater sowing rates (typically double) compared with conventional sowing situations.*

## SHOULD I INCREASE SOWING RATES FOR ALL MY PADDOCKS?

Increasing the sowing rate may not be appropriate in all situations, and you should consider the suitability of paddocks on a case-by-case basis. In situations where no early grazing is required, lower sowing rates can be as effective as higher sowing rates for spring production as plants have adequate time to tiller.

## SOWING TIME INFLUENCES WINTER FEED AVAILABILITY

In combination with sowing rate, the time of sowing also has a major influence on dry matter production and the availability of feed

available through winter and early spring period. An agronomic trial conducted at our Howlong research farm using Vortex annual ryegrass demonstrated approximately 1,000 kg DM/ha yield reduction for every 2 week delay in sowing date.

To maximise early yield and provide feed through the critical winter months, sow as early as possible from mid-March (ryegrass) onwards. This will require good planning and preparation, such as summer weed control and early ordering of seed. In many situations, instead of waiting for an autumn break, dry sowing is undertaken so that early sowing times can be achieved. In this situation keep sowing depth a little below optimal to avoid a false break. This may be 20mm (instead of 10mm) for ryegrass and 50mm for oats.



**2016 Vortex Time of Sowing Data**  
March-August DM Yield, Hailong NSW

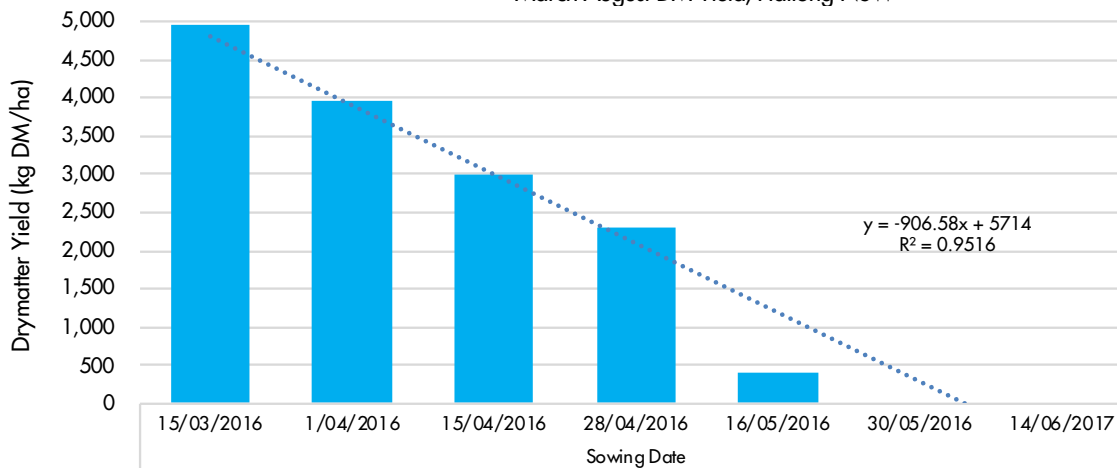


Figure 1: Forage production of Vortex annual ryegrass, from March until August sown over a range of sowing dates. The first sowing date was 15th of March and occurred approx. every two weeks. Sowing rate was 32 kg/ha.

## SHOULD I ADOPT DRY SOWING TO GET MY PASTURES IN EARLIER?

Dry sowing is more effective on annual species, due to their increased vigour combined with the risk/reward ratio. There is a risk of establishment failure, but this is often outweighed by the benefit of early production if it pays off. A perennial species would unlikely to be dry sown given the need to a knockdown herbicide application prior to sowing and the longer-term outlook for the pasture.

Factors to consider include:

### Check paddock fertility

The fertility of your soils is vital to the productivity of your paddock. Increasing the sowing rate of a nutrient depleted paddock is unlikely to deliver optimal yields, so ensure that any paddocks are in peak condition before increasing sowing rates. Regular soil testing will provide the right information for making an educated decision.

### Boost soil nutrition

To maintain soil productivity, plan to replace soil nutrients with fertiliser as part of your regular pasture management program.

### Moisture availability

For optimal results, paddocks should have adequate moisture for pasture establishment.

You should consider your specific feed requirements going into winter to determine whether increasing sowing rates is beneficial. Consult with your agronomist for further advice for your specific needs.

References: Harmer, M. (2015). Optimising Italian ryegrass sowing rates. In Proceedings of the 17th ASA Conference, 20-24 September 2015, Hobart, Australia.

## WE'RE HERE TO HELP

Our team of experienced Territory Managers are ready to provide you with specialist advice.

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**INSIST ON THE YELLOW BAG**

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