

# SPRING RYE

## SOUTHERN GREEN

### OVERVIEW

SOUTHERN GREEN is a quick and short duration rye. It has excellent cold tolerance with an upright growth pattern, unlike Stooling Rye. It is a spring type variety with late planting - March/April/May. This allows for quick grazing, it is also highly palatable.

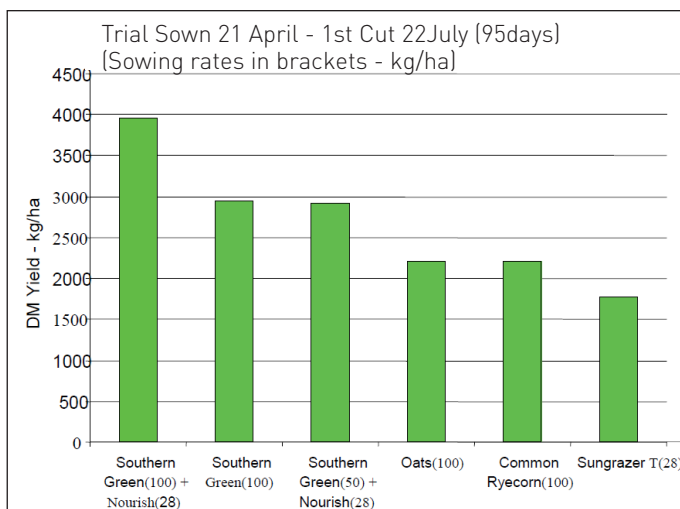
It is recommended that you drill at 35kg/ha and broadcast at 75kg/ha. It can even be used over Kikuyu when broadcast. It is important to avoid planting too early or it may go to seed before winter.

**KEY POINTS:** Southern Green forage rye is for quick winter feed. Some brassicas may be quicker with a March break but Southern Green grows quickly even if the break is late.

It can produce twice the dry matter of oats, 45 days after sowing (see photos 1 & 2)

By late July (90-100 days after sowing) oat growth rates have increased but rye is still 30% ahead in DM yield (see graph 1)

Graph 1: Data from Ballarat Australia Winter Feed Trial (2008) showing total growth in 95 days from planting.



- Quick duration rye
- Excellent cold tolerance
- Upright grower - not like Stooling Rye
- Late planting - March/April/May - quick grazing
- Ready to graze in 30 - 55 days
- Excellent yield when blended with annual ryegrass
- Can be sown with Italian ryegrass to extend spring growth



Photo 1: Ballarat Winter Feed Trial (sown 21st April 08). Southern Green forage rye on left, Winter Oats on right. (Photo taken 45 days after planting). Southern Green is ready for a graze where Winter Oats would be damaged by grazing at this early development stage.



Photo 2: Ballarat Winter Feed Trial (sown 21st April 08). - Fresh cuts taken from 1m rows of Southern Green (left) and Winter Oats (right) at same time as photo 1 - 45 days after planting.

Table 1: Yield (tons DM/ha) per harvest of forage peas (Flex and Morgan) and short duration cereal cultivars during 2017 (block 1 ).

Cultivar	Cut 1 (31/07/2017)			Cut 2(1 3/10/2017)			Total Yield 2017		
	tons/ha	Rank		tons/ha	Rank		tons/ha	Rank	
Flex	0.81	16	i	0.00	13	d	0.81	16	h
Flex + KKSH301	4.58	8	defg	0.08	8	d	4.66	10	def
Flex + Maluti	4.26	10	efg	0.38	5	c	4.64	11	def
Flex + Sorom	0.47	17	i	0.00	14	d	0.47	17	h
Flex + Southern Green	6.86	1	a	0.04	11	d	6.90	1	a
Flex + Wintergrazer	2.54	14	h	0.85	2	ab	3.39	14	fg
KKSH301	5.01	7	cdef	0.03	12	d	5.04	7	cde
Maluti	4.37	9	defg	0.40	4	c	4.77	8	de
Morgan	4.24	11	efg	0.00	15	d	4.24	13	ef
Morgan + KKSH301	5.41	5	bcde	0.05	10	d	5.46	6	bcde
Morgan + Maluti	5.15	6	bcdef	0.33	6	c	5.48	5	bcde
Morgan + Sorom	2.45	15	h	0.00	16	d	2.45	15	g
Morgan + Southern Green	6.34	2	ab	0.07	9	d	6.41	2	ab
Morgan + Wintergrazer	3.93	12	fg	0.79	3	b	4.72	9	def
Saia oats + Max Vetch	5.62	4	abcd	0.00	17	d	5.62	4	abcd
Sorom	0.05	18	i	0.00	18	d	0.05	18	h
Southern Green	6.19	3	abc	0.08	7	d	6.27	3	abc
Wintergrazer	3.44	13	gh	0.95	1	a	4.40	12	def
CV%	19.8			42.4			19.0		
LSD (0.05)	1.307			0.158			1.328		
Mean	3.99			0.22			4.21		

Conclusions from Table 1:

The trial was harvested (cut) twice, the first cut contained both forage peas and cereal crops and, as evident in the yields, the second cut had no forage peas, as they died after the first cut. In Cut 1 the rye Southern Green was the highest yielding cultivar, where specifically Flex + Southern Green (6.86 tons DM/ha), Morgan + Southern Green (6.34 tons DM/ha), Southern Green alone (6.19 tons DM/ha and Saia and Max Vetch (5.62 tons DM/ha) had significantly higher yields than the rest of the cultivars and mixtures.

The total yield of both harvests had a similar trend to the first cut, where Southern Green in mixtures and alone had the highest three yields (6.9; 6.41 and 6.27 tons DM/ha respectively), which is quite good for cereal yields in a season. In a good year oats can produce 5.5 tons DM/ha.