



# SF Greenland

## *Technical update*

### 2019

---

## SF Greenland forage rape.

### Australian livestock producers first choice.

---

- > **Consistently Australia's highest yielding forage rape**
- > **Very palatable**
- > **Outstanding re-growth potential**
- > **Best winter option with excellent frost tolerance**
- > **Can grow through into summer if grazing pressure maintained**

When times are tough, Australian livestock producers focus on low-risk planting options. And when it comes to forage rape, SF Greenland from Seed Force is the first choice of both agronomists and producers across Australia.

Seed Force trials dating back to 2006 have highlighted the winter yield benefits of forage rape and in particular SF Greenland, compared to all other forage options.

And SF Greenland is cheaper to sow per hectare than ryegrass or cereals, and has higher feed value. When fed as part of a balanced diet this can deliver significantly higher weight gains in sheep and cattle.

It can also be sown in mixes with cereals to provide roughage and ryegrass to deliver greater spring yields.

With 2018 being a dry year across much of eastern Australia, there was a 42% increase in sales of SF Greenland through the cooler months – 20% increase in autumn and 130% increase in winter.

This increase was from livestock producers looking for quick, cheap high-quality feed, and mixed farmers looking to maintain a brassica in their rotation where the canola planting window had passed.

So for those areas that receive a late break in 2019 and need quick feed forage brassicas or blends including them are a low cost, low risk option.

**SF Pacer** leafy turnip will provide the fastest winter feed, but will go to seed in spring.

As it gets later in autumn SF Greenland is the best option as it will provide high winter yields and if grazing is maintained will not bolt in spring, like many NZ bred forage rapes.

And for those who have been able to get rain early enough to plant their winter feed, SF Greenland will be an ideal option for an early spring planting for summer feed. If sown into moisture SF Greenland's tap root can follow the moisture down the profile and it will be able to deliver summer feed much better than other brassica options.



# SF Greenland delivers in local on-farm trial.

SF Greenland continues to deliver on farm with a local farmer putting it up against a couple of newcomers into the market.

Aran Gleeson planted a paddock of 8 ha on his 120ha Koroit farm to SF Greenland rape plus Mainstar and Pillar, two recent forage rape releases into the Australian market. The trial was supervised monitored and measured by Paul Smith of Bade Ness Rural in Warrnambool.

All varieties were sown on 24/8/2016 at 4kg/ha with 120kg/ha DAP. The paddock was top-dressed six weeks later with 100kg/ha Urea, and a further four weeks later with another 150kg/ha.

Grazing commenced on the third of December 2016 when 60 beef cows and calves were introduced. The paddock was grazed until the 12th of March 2017 and then regrowth grazed by steers until the paddock was sown down with ryegrass on the 12th of April.

The yield and quality results showed the considerable profit advantages of SF Greenland rape, which has been a consistent story since its release in Australia in 2006.

SF Greenland produced 20% more feed than Mainstar and 29% more feed than Pillar. It was also higher in Metabolizable Energy (ME) and had a lower NDF%.

Cattle on Greenland can eat more, higher energy feed per day, plus with higher yield it can either carry more stock or feed stock longer. It is these three compounding profit drivers that have led to SF Greenland being the forage rape of choice on more Australian farms than any other variety.

The results from this on farm commercial trial can be estimated using the Animal Performance Calculator based on 300kg steers all utilizing 70% of feed on offer. All Aran's costs have been included in the analysis.

## Beef Animal Performance Calculator

	Unit	Pillar	Mainstar	SF Greenland
Yield	kgDM/ha	9,590	10,223	12,367
Utilisation rate	%	0.7	0.7	0.7
Utilised feed	kgDM/ha	6,713	7,156	8,657
NDF%	%	36.4	33.6	32.5
ME	MJ per kg DM	11.3	11.7	12.2
Feed Intake	kgDM/hd/day	9.9	10.7	11.1
Ave daily gain	kg/hd/day	1.506	1.808	2.025
Liveweight gain	kg lwg/ha	1022	1208	1583
Price	\$/hd lwg	\$2.50	\$2.50	\$2.50
Gross Income	\$/ha	\$2,555	\$3,020	\$3,958
Costs				
seed	\$/ha	\$54	\$50	\$48
establishment	\$/ha	\$185	\$185	\$185
maintenance/growing	\$/ha	\$181	\$205	\$221
Total costs	\$/ha	\$420	\$440	\$454
Gross Margins	\$/ha	<b>\$2,135</b>	<b>\$2,580</b>	<b>\$3,504</b>
Extra Profit		20%	\$445	\$924
		64%		\$1,369

Thus SF Greenland should produce an additional \$924/ha profit over Mainstar and \$1,369/ha profit over Pillar at similar seed costs. We have added an extra cost of additional fibre for Greenland given its extra high quality.



# Grow more with Greenland!

BYADUK		
Variety	Yield	%
Greenland	10.0	116
Winfred	8.6	100
Titan	7.3	85
Ace	8.1	94

PENSHURST		
Variety	Yield	%
Greenland	4.8	128
Titan	4.7	126
Pillar	4.6	123
Winfred	3.7	100

DENMAN		
Variety	Yield	%
Greenland	14.9	117
Winfred	12.7	100

GUNDAGAI		
Variety	Yield	%
Greenland	10.0	115
Winfred	8.7	100
Ace	8.4	96

CARAMUT		
Variety	Yield	%
Greenland	4.0	128
Winfred	3.1	100

WINSLOW		
Variety	Yield	%
Greenland	9.5	136
Winfred	7.0	100

WARRNAMBOOL		
Variety	Yield	%
Greenland	6.6	143
Winfred	6.2	100
Titan	6.4	140
Ace	5.8	123

SMITHTON

SMITHTON		
Variety	Yield	%
Greenland	9.2	147
Winfred	6.2	100
Titan	6.3	101
Interval	8.3	133

WHITEMORE  
CRESSY

CRESSY		
Variety	Yield	%
Greenland	6.6	112
Winfred	5.9	100
Goliath	6.2	105

WHITEMORE		
Variety	Yield	%
Greenland	4.8	154
Winfred	3.1	100

Yield = tDM/ha  
% = % control Winfred





# Value of yield

The significance of an increase in yield is supported by a paper written by Garrett, Westwood and Nichol. This report highlights that productivity is not only driven by utilisation of plant material but also forage yield.

## Optimising Animal Production from Forage Brassicas

BC Garrett; CT Westwood; WW Nichol Wrightson Research, P.O. Box 939 Christchurch, 2002.

*"Findings from the study demonstrate the importance of cultivar selection where improved per animal productivity is required. Where superior per animal performance and earlier achievement of target liveweights are required, farmers should consider (varieties) which offer better utilisation of a crop. Where production per hectare is an important criteria, the high yielding cultivar offers benefits through higher carrying capacity per hectare as a result of greater DM production."*

For meat producers considering a forage rape the outcome of current commercial varieties sown in up to 14 Australian trials clearly highlight the financial benefits of **SF Greenland**, which supports the findings of the paper.

# Winter hardiness

Research from Joordens in Europe in 2011 has also examined the winter hardiness of forage brassicas, showing a strong correlation between DM% and winter hardiness. So the good news is that **SF Greenland** can provide the best yield option, with latest flowering and with better winter hardiness than NZ bred forage rapes.

This will be important for those planting forage rape into colder upper slopes and tablelands environments, or where replacing canola into inland regions that experience heavy frosts.

SF Greenland was the best performing rape when sown in trials at Gundagai in both May and July 2006 where the site received 104 frosts that winter.

Variety	Breeding	Winter hardiness*	DM%
Mosa	Europe	8.0	11.5
Leafmore	Europe	6.7	11.2
SF Greenland	Europe	7.0	10.7
Goliath	NZ	1.7	9.8
Spitfire	NZ	1.7	9.6

\*Winter hardiness rating 1-9 where 9 is best.



SF Greenland showing winter hardiness and recovery under extreme frost conditions.

## Territory Contacts

### QUEENSLAND

Todd Jones 0436 601 215  
toddjones@seedforce.com

### NORTH WEST NSW

Todd Jones 0436 601 215  
toddjones@seedforce.com

### NORTH-EAST & HUNTER NSW

Tanya Hayes 0408 086 106  
tanyahayes@seedforce.com

### SOUTHERN & CENTRAL NSW

Andrew Harborne 0499 700 345  
andrewharborne@seedforce.com

### NORTH EAST VICTORIA & GIPPSLAND

Dean Madsen 0459 858 845  
deanmadsen@seedforce.com

### NORTHERN IRRIGATION VICTORIA & TASMANIA

David Gould 0428 751 503  
davidgould@seedforce.com

### WESTERN VICTORIA & SOUTH EAST

### SOUTH AUSTRALIA

Georgie Rees 0459 858 844  
georgierees@seedforce.com

### WESTERN AUSTRALIA & NORTH, WESTERN & CENTRAL SOUTH AUSTRALIA

Nevenka McLennan 0491 211 104  
nevenkamclennan@seedforce.com

### TECHNICAL MANAGER

David Leah 0447 565 457  
davidleah@seedforce.com

[www.seedforce.com.au](http://www.seedforce.com.au)

13 Future Court, Shepparton, VIC 3630, Australia  
T: 03 5832 3800 F: 03 5821 8999

