

Winter-spring sowing options to maximise feed

LEGEND max°C **SOW** min°C Variety max-min soil temps—ideal shown in deep color **GRAZE** Grazing period

FORAGE BRASSICAS

The soil temperature range for sowing forage brassicas is between 20°C and 12°C. Fast growth rates and germination decreases as soil temperatures drop below 12°C. Appin sown alone will finish after 2-3 grazings and require a resowing in spring. Consider spring sowing with Monstress or Granador forage triticale. Good soil fertility is essential.

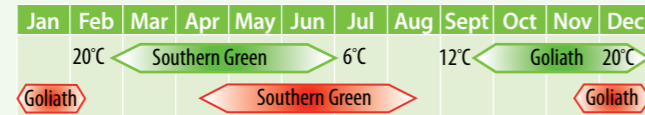
Indicative month and soil temperatures for sowing varieties



Appin sowing rate 2-4 kg/ha Granador sowing rate 50-80 kg/ha

FORAGE RYECORN

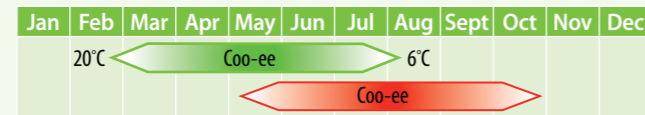
Forage ryecorn can be grazed three week earlier than Oats, especially when sown late into cold conditions. Forage ryecorn is also well suited for sowing early into warm soils. Ryecorn sown alone may finish after 2-3 grazings and require a resowing in spring. Consider resowing in spring with Goliath forage rape.



SG sowing rate 50-75 kg/ha Goliath sowing rate 2-4 kg /ha

FORAGE OATS

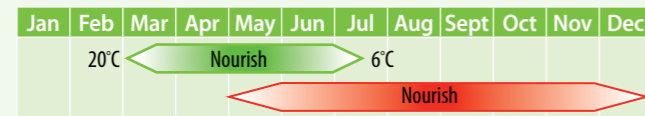
The benefit of oats is their versatility. They can provide good winter feed and early spring fodder. New Coo-ee forage oat is a fast winter growing oat with good early spring yield.



Coo-ee sowing rate 50-80 kg/ha

ANNUAL OR ITALIAN RYEGRASS

Sown in early autumn, ryegrass will provide better quality and extended growth than oats. For a late autumn sowing however, oats provide much quicker winter feed. Nourish®, Feast®II and Winter Star®II ryegrasses are quick growing, each offering a full growing season of feed.



Ryegrass sowing rate 25-40 kg/ha

FORAGE BRASSICA AND ITALIAN RYEGRASS

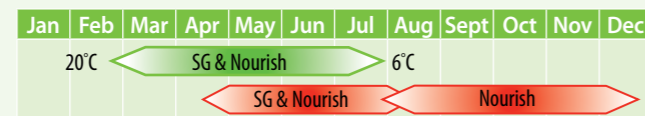
Under favorable conditions, a good choice when the break is early and spring resowing is not a preferred option. Appin leafy turnip will provide the bulk of the feed for an early grazing. The ryegrass will tiller out filling in the space left as the Appin is grazed out. The result is fast winter feed, followed by a early-spring ryegrass crop.



Brassica sowing rate @ 1-2 kg/ha Ryegrass @ 25-50 kg/ha

RYECORN AND ITALIAN RYEGRASS

Under favorable conditions, a good choice when the break is late and spring resowing is not a preferred option. Southern Green will grow well in cold winter conditions for an early grazing. The ryegrass will tiller out to fill in any space left by a declining ryecorn stand, ryegrass providing the bulk of spring feed.



SG sowing rate 50 kg/ha Ryegrass @ 20-40 kg/ha

Soil temperature for selected regions

Table1. Monthly soil temperature averages °C at 9am 10 cm depth

Station Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
Vic - East Gippsland (SALE)	20°C	20°C	18°C	15°C	11°C	9°C	8°C	9°C	11°C	14°C	17°C	18°C	14°C
Vic - Western Vic (HAMILTON)	19°C	20°C	17°C	13°C	11°C	8°C	7°C	8°C	10°C	12°C	14°C	17°C	13°C
Vic - Northern Vic (KYABRAM)	23°C	23°C	20°C	16°C	11°C	9°C	7°C	8°C	11°C	15°C	18°C	22°C	15°C
Vic - South west (COLAC) WEEAPROINAH	16°C	16°C	15°C	12°C	10°C	8°C	7°C	7°C	8°C	10°C	13°C	15°C	11°C
NSW Northern Tablelands (GLEN INNES)	21°C	21°C	19°C	15°C	11°C	7°C	5°C	6°C	10°C	14°C	17°C	20°C	14°C
NSW Central Highlands (ORANGE)	21°C	20°C	18°C	14°C	9°C	6°C	5°C	6°C	9°C	13°C	16°C	19°C	13°C
NSW Hunter Valley (SCONE)	24°C	24°C	22°C	18°C	14°C	11°C	10°C	11°C	14°C	17°C	20°C	23°C	17°C
NSW SW Slopes (WAGGA WAGGA)	24°C	24°C	21°C	16°C	12°C	9°C	8°C	9°C	11°C	15°C	19°C	22°C	16°C
Tas (CRESSY)	18°C	18°C	15°C	11°C	8°C	6°C	5°C	6°C	8°C	11°C	14°C	17°C	12°C

Source: Bureau of Meterology and Wrightson Seeds (Averages from last 25 to 50 yrs).

National Sales Agronomy Team

- Murray Richardson** 0418 568 401
- Allan Mudford** 0418 213 898
- Jonathon Tink** 0418 329 243
- David Phelps** 0408 313 240
- Queensland and Northern Rivers** mrichardson@wrightsonseeds.com.au
- Northern NSW** amudford@wrightsonseeds.com.au
- Central NSW** jtink@wrightsonseeds.com.au
- Southern NSW** dphelps@wrightsonseeds.com.au

John McKenzie
0418 296 113

Tim Wilson
0418 513 156

Darrel Rowe
0427 150 278

David Squibb
0425 790 222

Kevin Williams
0419 312 156

Northern Vic
jcmckenzie@wrightsonseeds.com.au

Gippsland
twilson@wrightsonseeds.com.au

SA & Western Vic
drowe@wrightsonseeds.com.au

Tasmania
dsquibb@wrightsonseeds.com.au

Western Australia
kwilliams@wrightsonseeds.com.au

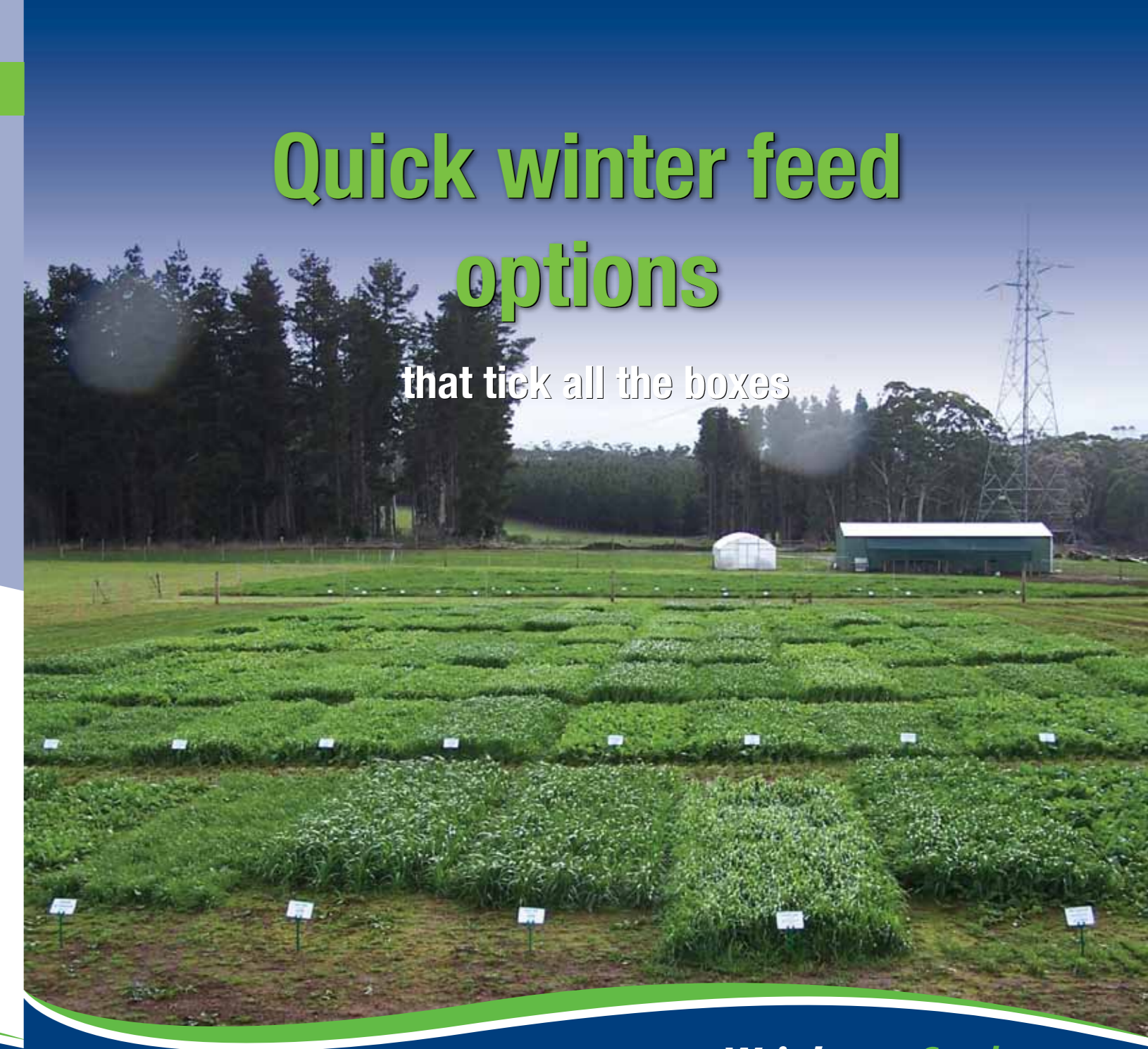
Wrightson Seeds Customer Service:
FREECALL 1800 619 910 FREEFAX 1800 619 940
7-9 Distribution Drive Truganina Vic 3029
PO Box 333 Laverton Vic 3028

www.wrightsonseeds.com.au

Disclaimer: While every care is taken to ensure accuracy of information contained herein, PGG Wrightson Seeds or its agents accepts no responsibility what so ever for acting out of consequence of this document.
Winter Star and Nourish are registered trademarks of PGG Wrightson Seeds Ltd.
© PGG Wrightson Seeds 2010

Quick winter feed options

that tick all the boxes



Winter feed – our research findings

Southern Green forage ryecorn

Wintaroo forage oats

Wrightson Seeds, in response to the needs of farmers for quick winter feed, has undertaken exciting research to identify best sowing options for quick winter feed.

Options for an early break can be vastly different to those used for a late break.

Key findings include that there are different sowing options depending on:

1. the time of season soil moisture becomes available
2. the soil temperature gradient at time of germination and for the subsequent period of early growth
3. regional location, as soil temperatures vary widely between regions
4. the variety sown, as the rate of growth (kgDM/day) varies greatly between varieties. with declining soil temperatures
5. each varieties minimum soil temperature threshold for good winter growth.

Research overview:

1. Forage brassicas have very fast growth rates in warm soils however, growth rates are slower than grasses as soil temperatures drop.
2. Following an early break, Appin leafy turnip produced more drymatter than everything else.
3. Forage ryecorn (Southern Green) can be sown early as well as late. It is less dependant on timing as its growth rate (kgDM/day) is less affected as temperatures drop.
4. When the break is very late, forage ryecorn (Southern Green) may produce nearly **3 times** the drymatter (DM/ha) of forage oats (Wintaroo) at first grazing. See above and below photos.



Forage Brassicas

Appin leafy turnip

Appin & Nourish ryegrass



Leafy turnip with very high growth rates in warm soils. Sow early

Key points for winter growth:

- fastest growth rate option following an early break
- sowing brassicas (Appin) early will give the quickest winter feed however, after 2–3 grazings Appin will bolt and be ready for resowing with triticale or sorghum
- sowing brassicas with annual or italian ryegrass, or oats enable quick winter feed that can be followed by a spring ryegrass or oat crop if conditions are favorable



Appin leafy turnip

Forage Ryecorn

Southern Green

both sown late

Wintaroo Oats



Southern Green forage ryecorn can be ready for grazing 3 weeks before oats

Key points for winter growth:

- best option for quick winter feed particularly if sowing is late.
- after 3 to 4 grazings, forage ryecorn is likely to have thinned out and require a resowing with brassica for spring feed
- under favorable conditions, can be sown with Nourish® italian ryegrass to extend spring growth



Southern Green forage ryecorn (left) is leafier than common ryecorn (right)

Forage Oats

Coo-ee forage Oats



High yielding forage oat

Key points for winter growth:

- ryecorn complements sowing oats i.e. a ryecorn paddock for winter feed, an oat paddock for spring feed
- consider one paddock of forage ryecorn for every 3 to 4 oat paddocks. Forage ryecorn for fast first feed, oats for spring feed
- although slower to first grazing than forage ryecorn, Coo-ee provides extended grazing and silage and hay options



Coo-ee forage oats is purpose bred for quick winter grazing and spring feed

Italian ryegrass

Nourish italian ryegrass



New italian ryegrass. High winter-spring growth rates

Key points for winter growth:

- Nourish® or Feast®II italian ryegrasses are the best choices where good winter growth, spring yield and extended quality is needed.
- establishes easily from oversowing or mulch sowings
- persists, enabling quick regrowth from summer and autumn showers



Nourish® italian ryegrass can be used in mixes with forage brassicas and forage ryecorn