



WATSON SEEDS



Forage & Root Crop Guide



CONTENTS

- 2 INTRO
- 3 KALE - Leafy forage with thick nutritious stem (maincrop)
- 4/5 SWEDE - Large nutritious bulb (maincrop)
- 6 MAINCROP TURNIP - Similar to swedes with no neck (maincrop)
- 7 STUBBLE TURNIPS - Smaller than maincrop turnip (catch crop)
- 8 FORAGE RAPE - Leafy forage with thin stem (catch crop)
- 9 RAPE/KALE HYBRID - Leafy forage with thinner stems than kale (catch crop)
- 10 FORAGE MIXTURES
- 11 CHICORY MIXTURES

INTRODUCTION

Rising feed costs have brought about renewed interest in forage crops.

Forage crops have the potential to produce very high yields over a short growing season, combined with a flexible sowing window from early summer to the beginning of August. These crops can be fed ten to fourteen weeks from sowing.

Root and forage crops can be fed to all classes of livestock, either for milk production or live weight gain and are suitable for organic and conventional farming.

These crops demand relatively modest inputs of agrochemicals and fertiliser. With their high dry-matter yields, production

costs compare favourably with those for conserved grass, maize and whole-crop cereals.

With all forage crops, stock should be introduced gradually over a 2-3 week period. Ideally there should be an area of grassland to allow stock to 'run back' onto or have access to grass silage. Access to hay or straw and water is very important. Recommended inclusion rates of forage crops should be between 35-50% of total dry matter intake.

At Watson Seeds we have selected from the plant breeders forage crop varieties which will give our customers a flexible range of crops, thus offering a suitable option for almost every farm situation.



KALE

LEAFY FORAGE WITH THICK NUTRITIOUS STEM (MAINCROP)

BENEFITS OF GROWING KALE:




Low cost option for finishing lambs

Winter hardy

Flexible utilisation - can stretch from August through to March

High crude protein content - can be fed to all types of livestock

Full season gamecover crop (GC)

Variety	Type	Suitable for	Club Root Resistant	Height
Bittern	Intermediate	Cattle/GC		92
Caledonian	Improved M/Stem	Cattle/Sheep		103
Grampian	Intermediate	Cattle/Sheep		99
Keeper	Short Grazer	Sheep		83
Maris Kestrel	Short Grazer	Cattle/Sheep		72
Merlin	M/Stem	Sheep/GC		82

 Resistant to some club root only

Please contact the office on 01368 840655 for treatment availability

SOWING INFORMATION

Sowing Period: April - early July (depending on location)

Sowing Rate: Direct drill - 2kgs/acre, Broadcast - 3kgs/acre



'This crop of Maris Kestrel kale is a great feed for out wintering cattle and a good way to start preparing old ground for new grass,' Ed McNeill, McNeill Estates, Shennanton, Newton Stewart.







SWEDES

LARGE NUTRITIOUS BULB (MAINCROP)

BENEFITS OF GROWING SWEDES:

Excellent high energy winter feed
 Finishing lambs or winter maintenance
 Winter hardy

Variety	Type	Skin/Flesh Colour	Dry Matter %	Dry Matter Yield %	Suitable for	Club Root Resistance
Airlie	Early	Purple/Yellow	10.3	104	Cattle/Sheep/ Shopping	
Brora	Early	Dark Purple/ Yellow	10.4	100	Sheep/ Shopping	
Kenmore	Early	Purple/White	10.8	124	Cattle/Sheep	
Marian	Early	Purple/Yellow	11.0	96	Cattle/Sheep/ Shopping	
Gowrie	Intermediate	Purple/Yellow	11.0	118	Cattle/Sheep	
Lomond	Intermediate	Purple/Yellow	11.3	111	Cattle/Sheep	
Ruta Ofofte	Intermediate	Purple/Cream	11.6	100	Sheep	
Ruby	Intermediate	Red-Purple/ Creamy Yellow	11.7	107	Cattle/Sheep	
Magres	Intermediate	Purple/Yellow	12.2	100	Cattle/Sheep/ Shopping	
Invitation	Late	Purple/Dark Yellow	12.6	106	Cattle/Sheep	

*has resistance to some club root strains

All varieties above can come treated with Cruiser SB (subject to continued EU approval). Cruiser provides control of a wide range of early season sucking and chewing, leaf-feeding and soil-dwelling insect pests, such as aphids, wireworms, flea beetles, and leafminers.



SWEDES

LARGE NUTRITIOUS BULB (MAINCROP)

SOWING INFORMATION

Sowing Period: April - early July
 Sowing Rate: See table below

SOWING RATES FOR GRADED SEED (Grams/acre)

ROW WIDTH	SEED SPACING			
	2" (5cm)	4" (10cm)	6" (15.25cm)	8" (20cm)
20" (50cm)	325	275	225	200
24" (60cm)	300	250	200	150
26" (65cm)	275	225	175	125
28" (70cm)	250	200	150	100

PRECISION DRILL RECOMMENDATIONS

Seed Grading	Grade	Size (mm)	Stanhay Belt Size	Spring Base	Choke	Webbs Selector Wheel
Fodder Beet Pelleted	Q-U	3.50-4.75	15 or 16	C	A	EP
Mangel Pelleted	Q-U	3.50-4.75	15 or 16	C	A	EP
Mangel Rubbed and Graded	M-T	2.75-4.50	14 or 15	B	X	E
Swede	'H'	1.75-2.0	8	A	T	B
Turnip	'G'	1.50-1.75	7	A	T	A
Kale	'J'	2.0-2.25	8.5	A	T	C





MAIN CROP TURNIP

SIMILAR TO SWEDES WITH NO NECK (MAINCROP)

BENEFITS OF GROWING MAIN CROP TURNIPS:

- Good winter hardiness (massif)
- Can be sown later than swedes
- Can be mixed with leafy forage crops to extend grazing days

Variety	Season (Utilisation)	Skin/Flesh Colour	Suitable for	Winter Hardy
Green Globe	Summer/Autumn	Green/White	Cattle/Sheep	
Massif	Winter	Green/Yellow	Cattle/Sheep	

Please contact the office on 01368 840655 for treatment availability

SOWING INFORMATION

- Sowing Period: May to July
 Sowing Rate: Direct drill - 0.2-0.3kgs/acre, broadcast - 0.5-0.75kgs/acre



STUBBLE TURNIPS

SMALLER THAN MAINCROP TURNIP (CATCH CROP)

BENEFITS OF GROWING STUBBLE TURNIPS:

- Fast growing catch crop - matures in 16 weeks
- Autumn or winter feed
- Summer buffer for dairy cows
- Finishing lambs
- Helps reduce winter feed costs

Variety	Type	Season (Utilisation)	Suitable for	Winter Hardy
Delilah	White Tankard	Autumn	Sheep	
Rondo	Bulb, Very Leafy	Winter	Cattle/Sheep	
Samson	Tankard	Autumn	Sheep	
Tyfon	Very Leafy	Summer	Sheep	
Whitestar	Round	Summer/Autumn/Winter	Cattle/Sheep	

Please contact the office on 01368 840655 for treatment availability

SOWING INFORMATION

- Sowing Period: May to June (for feeding July to September)
 July to August (for feeding October to February)
- Sowing Rate: Direct drill - 2kgs/acre, broadcast - 3kgs/acre



Peter Addie in a field of Rondo at Ross Farms, Wester Middleton, Gorebridge, Midlothian. 7



FORAGE RAPE

LEAFY FORAGE WITH THIN STEM (CATCH CROP)

BENEFITS OF GROWING FORAGE RAPE:

- Fast growing leafy catch crop
- High protein content
- Winter hardy varieties
- Fattens lambs

Variety	Season (Utilisation)	Suitable for	Disease Resistant
Hobson	Autumn	Sheep	
Interval	Winter	Sheep	
Stego	Autumn/Winter	Cattle/Sheep	

SOWING INFORMATION

- Sowing Period: May - end August
 Sowing Rate: Direct drill - 3-4kgs/acre, broadcast - 4kgs/acre

GORILLA - NEW RE-GROWING FORAGE

Breeder DSV have developed a new shorter forage rape that has the ability to regrow after an early grazing. We have a small quantity of seed available in 1 acre packs free of charge for our customers to try this year.

GORILLA is a dark purple green, re-growing forage rape. The stature of GORILLA is slightly shorter than many current varieties but with good standing ability. The dry matter content of GORILLA is higher than average which leads to high total dry matter yields. Furthermore, the high dry matter content means that stock take in more useful food per kilo and are likely to thrive better than on conventional forage rape varieties. GORILLA shows a moderately good resistance to powdery mildew. When sown early (for example in May) GORILLA can produce a first crop in August to cover a shortage of summer grass, then has good regrowth to achieve a second crop in November/December. Alternatively GORILLA can be strip grazed as required, with good regrowth potential.



RAPE/KALE HYBRID

LEAFY FORAGE WITH THINNER STEMS THAN KALE (CATCH CROP)

BENEFITS OF GROWING RAPE/KALE HYBRID:

- Rapid and vigorous growth - matures in 12-16 weeks
- Winter hardiness
- Regrowth potential
- Good late season yield potential
- High energy and crude protein source

Variety	Season (Utilisation)	Suitable for	Winter Hardy
Pulsar	Autumn/Winter	Cattle/Sheep	
Redstart	Autumn/Winter	Cattle/Sheep	
Swift	Autumn/Winter	Cattle/Sheep	



Please contact the office on 01368 840655 for treatment availability

SOWING INFORMATION

- Sowing Period: June - August
 Sowing Rate: Direct drill - 2kgs/acre
 Broadcast - 3kgs/acre

'Redstart is a fine, even crop. I have found it to be less stalky than other rape/kale hybrids so the lambs are eating better,' Fraser Campbell, Ancaster Estate, Crieff.

Fraser Campbell, pictured left, in a well established field of Redstart rape/kale hybrid which was sown in June. This photo taken in October 2014.



MIXTURES

FORAGE MIXTURES

RAPE 1

Mainly for sheep
Can be sown later than Rape 2
A leafy crop

A rape and stubble turnip mixture suitable for early drilling

kgs/acre	Variety	Type
3.5	Hobson	Forage Rape
0.5	Samson	Stubble Turnip

Recommended sowing rates: 4kgs/acre

RAPE 2

Can be grown for sheep or cattle
Best sown earlier (June) due to the inclusion of green globe turnip
Best utilised pre-Christmas

An adaptation of Rape 1 with the inclusion of main crop turnip

kgs/acre	Variety	Type
3.75	Hobson	Forage Rape
0.25	Green Globe Turnip	Main Crop Turnip

Recommended sowing rates: 4kgs/acre

RAPE 3

Mainly for sheep and can be eaten off later in the season due to the inclusion of Whitestar
The stubble turnip inclusion is double Rape 1 so the crop will not be as leafy as rape but the bulbs from the stubble turnips will extend the number of grazing days achieved from it.

A stubble turnip and rape mix with fast establishment for later use

kgs/acre	Variety	Type
1.0	Hobson	Forage Rape
0.75	Whitestar	Stubble Turnip
0.75	Samson	Stubble Turnip

Recommended sowing rates: 2.5kgs/acre

All of the above crops require approximately 100 days (3 months) to grow to their full potential.



MIXTURES

CHICORY MIXTURES

KALE 1

Contains mainly maincrop forage types rather than catch crop forages so ideally requires to be sown in May/early June for utilisation by cattle or sheep pre and post

A winter hardy mixture ideal for fattening lambs

kgs/acre	Variety	Type
0.9	Maris Kestrel	Kale
0.9	Bittern	Kale
1.5	Hobson	Forage Rape
0.2	Massif	Turnip

Recommended sowing rates: 3.5kgs/acre

HYBRID 1

Similar to Kale 1 but can be sown later
Can be sown in July for utilisation pre and post Christmas

kgs/acre	Variety	Type
0.9	Pulsar	Rape/Kale Hybrid
0.9	Swift	Rape/Kale Hybrid
1.5	Hobson	Rape
0.2	Massif	Turnip

Recommended sowing rates: 3.5kgs/acre

HYBRID 2

Similar to Rape 1, the vegetative from the hybrid should extend the grazing days over rape.

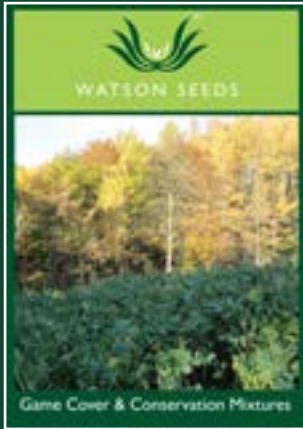
Can be sown in July for utilisation pre Christmas

kgs/acre	Variety	Type
3.5	Pulsar	Rape/Kale Hybrid
0.5	Samson	Stubble Turnip

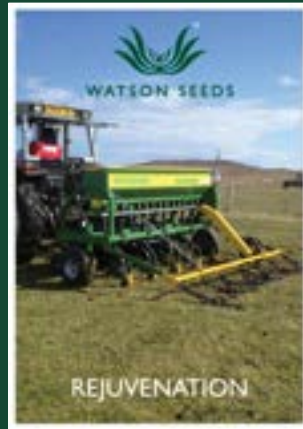
Recommended sowing rates: 4kgs/acre



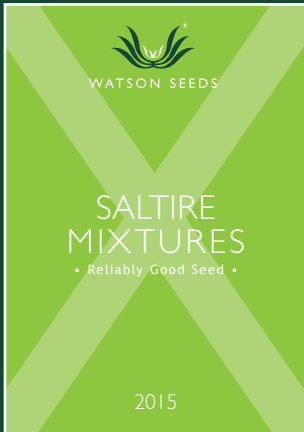
ALSO AVAILABLE



GAME COVER &
CONSERVATION
MIXTURES



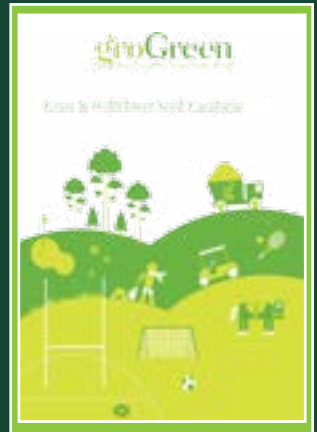
REJUVENATION



SALTIRE MIXTURES
RELIABLY GOOD SEED



CASTLE MIXTURES
PREMIUM PERFORMANCE
MIXTURES



GROGREEN
AMENITY AND
WILDFLOWER MIXTURES

Please contact the office for our dedicated booklets or alternatively, visit our website at www.watsonseeds.com.

Skateraw, Dunbar, East Lothian EH42 1QR
Local Rate Telephone No: 0845 872 8873
Tel: 01368 840655 Fax: 01368 840677
Email: enquiries@watsonseeds.com