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Forage



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British grain for British food and drink.



With uncertain markets and changing weather patterns, the safest way to ensure that there is a continuous, low-cost supply of feed for your livestock is to introduce a wide range of forage crops.

Recent drought periods have illustrated the potential for increased feed costs where no crop alternatives to grass are available on farm.

There are many crop options to consider and whichever option you choose will help reduce feeding costs, extend the grazing season and provide an excellent break crop.





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CROP OPTIONS

Species	Sowing	Utilisation	Precision Sowing Rate acre / ha	Direct Dill Sowing Rate acre / ha	Broadcast Sowing Rate acre / ha	Avg. DM Yield t/ha	Avg. Fresh Yield t/ha	Dry Matter %	Crude Protein %	D Value (Digestibility)	Metabolisable Energy MJ/kg DM
Arable Silage	Mar-Apr	Aug	-	85kg / 210kg	-	4 - 6	20 - 30	30 - 40	11 - 18	62 - 68	10.5
Bounce Back Brassica	May-Aug	Jul - Oct	-	1-5kg / 4 - 5kg	2kg / 5kg	6 - 9	50 - 80	11 - 12	12 - 13	-	10
Fodder Beet	Mar-Apr	Oct-Mar	50,000/ 120,000	-	-	13 - 15	80 - 90	12 - 19	12 - 13	78	12.5 - 13.5
Forage Peas	Mar-Jun	11-14 weeks after sowing	-	50kg / 125kg	60kg / 150kg	4 - 6	20 - 30	20 - 25	16 - 20	62 - 64	10.5
Forage Rape	May-Aug	Sep-Feb	-	2.5kg / 6kg	4kg / 10kg	3.5 - 4	35	12 - 13	19 - 20	65	10 - 11
Forage Rye	Sep-Oct	Jan-Mar	-	75kg / 185kg	-	5 - 6	20 - 30	25	11 - 12	67	10
Kale	Apr-Jul	Sep-Mar	0.75kg / 2kg	1-2kg / 3-5kg	3kg / 8kg	8 - 10	60 - 70	14 - 16	16 - 17	70 - 75	10 - 11
Lucerne	Apr-Aug	Productive for 3-4 years	-	8-12kg / 20-30kg	10-12kg / 25-30kg	10 - 12	35 - 40	25 - 30	17 - 22	62 - 64	10 - 10.5
Stubble Turnip	Apr-Aug	Jun-Dec	-	2kg / 5kg	3kg / 8kg	4.5 - 5	40 - 50	8 - 9	17 - 18	68 - 70	11
Swede	Apr-Jun	Sep-Apr	0.15-0.35kg / 0.35- 0.85kg	1kg / 3kg	2kg / 5kg	7 - 10	70 - 80	9 - 13	10 - 11	82	12.8 - 13.1







STUBBLE TURNIPS

Why Grow Stubble Turnips?

- High palatable yields
- Ideal replacement for cereals
- High energy feed
- Clamp and store overwinter
- Improved milk yields
- Palatable and nutritious
- Graze in situ for out-wintering systems
- Fast growing catch crop
- Economical to grow
- Treated or untreated available

Sowing Information

Sowing Period

April to August

Direct Drill

4-5kg/ha (2kg/acre)

Broadcast

7-8kg/ha (3kg/acre)



Marco

A high yielding, tetraploid variety with a 50:50 leaf to root ratio.

Early to mature, this tetraploid variety is highly palatable and retains its quality well.

Requires moist, alkaline soils.

Resistant to club root, bolting and Alternaria. Sow July & August.



Rondo

A green skinned variety, suitable for sheep or cattle.

It has a very leafy growth habit with excellent disease resistance and can be utilised from September to early February.

Rondo has excellent root anchorage which helps reduce wastage in the field.



Samson

Can produce huge tankard shaped purple bulbs which are very palatable to both sheep and cattle.

In trials, Samson has shown to be preferentially grazed, which can lead to higher intake and liveweight gains.



Tyfon

A hybrid turnip crossed with Chinese cabbage.

It will produce a smaller bulb but has a mass of palatable leaves that can be used for summer or autumn grazing.

Tyfon is very fast growing (10-12 weeks) and has some regrowth potential, providing sufficient leaf coverage is maintained.



Frisia

A mid-season stubble turnip with purple skin. High proportion of the bulb above ground allowing for good in situ grazing. Excellent dry matter yield.

Exceptional winter hardiness providing grazing throughout autumn and winter periods.

Above average resistance to both club root and mildew.

FORAGE RAPE

Why Grow Forage Rape?

- Fast growing, leafy catch crop
- High protein content
- Longer lasting than stubble turnips
- Winter hardy hybrids available
- Finishing lambs
- Flexible sowing periods
- Sheep, dairy or beef production
- Treated or untreated

Sowing Information

Sowing Period

May to end August

Direct Drill

6kg/ha (2.5kg/acre)

Broadcast

10kg/ha (4kg/acre)









Rampart

Hobson

Unicorn (Hybrid)

Emerald

Emerald is a proven, well known variety producing rapidly establishing, medium to tall leafy plants, maturing 10-12 weeks after sowing. It is fast growing with average dry matter yields and good general disease resistance. Importantly, it has very good feeding quality, being high in protein and easily digestible, remaining palatable well into the winter. An added benefit is its widely branched root systems for improvement of soil structure.

Interval

When it comes to filling the gap in your winter feed programme, Interval Kale/Rape Hybrid can really boost your profits. Interval's exceptional yield potential, as well as disease resistance and palatability is ideal for finishing lambs or grazing dairy cows. Interval is very fast to establish with some crops ready to utilise within 10-12 weeks of sowing.

Rampart

A very versatile variety suited to dairy, beef and sheep feeding regimes. Sowing period is spring, early summer and after cereals. Rampant provides a good graze in situ forage for autumn and winter periods. Good regrowth makes this a promising variety.

Hobson

Hobson is the variety for finishing lambs. It has excellent resistance to powdery mildew; a disease which can make some crops unpalatable leading to a high waste factor. Hobson is very palatable and digestible. Fully proven on livestock farms throughout the UK and winter-hardy.

Unicorn (Hybrid)

A Kale/Rape cross, bred to produce a quality feed in a short period of time. Suited to dairy, beef and lamb production and can be utilised in summer, autumn and winter. Ready to graze in as little as 12 weeks from May sowing and can be sown from May to the end of August. Unicorn can offer regrowth after the first initial grazing as long as grazing management and weather conditions permit.



CATCH CROP MIXTURES

Catch crop mixtures are becoming increasingly popular as a way of providing quality feed for outwintering heifers and youngstock, finishing lambs and maintaining ewes.



Catch crop mixtures provides a balanced diet that can be grazed in situ. These mixes involve the blending of species such as stubble turnips, forage rapes, kales and Westerwolds.

The high protein content of both forage rape and kale complement the high energy stubble turnips bulbs and provide an excellent, well-balanced autumn or winter feed. Sowing a combination of

stubble turnips and forage rape has two benefits: it improves the protein content of the crop and the forage rape also improves winter hardiness, extending the utilisation period.

Pro-Fit

- Very fast establishment for autumn use.
- Will produce a quality crop with good disease resistance.

1.0 kg Forage Rape

2.00kg Acre

Pro-Vider

- An excellent blend designed to produce autumn or winter keep with minimal effort.
- The inclusion of forage rape helps to protect the turnips if crops are to be utilised late in the season.
- 1.0 kg Forage Rape
- 1.25kg Stubble Turnip
- 0.25kg Kale
- 2.50kg Acre

Pro-Duce

- Good winter hardiness makes this mixture ideal for later use.
- Westerwolds Ryegrass ensures the crop has improved density to help keep animals cleaner in wetter winter months.
- 1.20kg Forage Rape
- 0.8kg Stubble Turnip
- 5.0kg Westerwold Ryegrass
- 7.00kg Acre

^{0.8}kg Stubble Turnip

^{0.2}kg Kale

FODDER BEET

Why Grow Fodder Beet?

- High palatable yields
- Ideal replacement for cereal
- High energy feed
- Clamp and store overwinter
- Improved milk yields
- Palatable and nutritious
- Can be grazed in situ for outwintering systems
- Treated and untreated available.

Sowing Information

Sowing Period

March to end April

Direct Drill 120,000 seeds/ha (50,000 seeds/acre)



Geronimo

Large top variety that is suited to both grazing and lifting. Excellent bolting resistance as well as mildew, ramularia and rhizomania resistance. Very consistent good performance in the UK trials.



Blaze

Blaze has the potential to produce excellent dry matter yields with very clean, bright red roots.

Blaze is a medium dry matter variety which enables the roots to be fed whole or chopped. Low dirt contamination ensures high intakes with no scouring.



Brick

New, high yielding variety, ideal for growers looking to produce a high quality feed with a high DM content %.

Brick is a true fodder beet and therefore exhibits cleaner roots, but will still deliver very high dry matter yields for maximum feed potential. Rhizomania tolerant.



Fosyma

A new variety that has performed well in UK trials.

Fosyma can deliver high dry matter yields, usually seen with varieties that grow deep in the ground. Fosyma grows approx 60% in the ground and will produce clean red/rose skinned roots. The variety has good tolerance to bolting and is Rhizomania tolerant.



Robbos

High dry mater yields from a medium DM content means Robbos is ideally suited for first time fodder beet growers and its clean yellow roots are easily harvested and can be fed whole crop or chopped. A consistent performer in the UK.



BOUNCE BACK BRASSICA

Why Grow Bounce Back Brassica?

- Multiple grazings from a single crop
- Fast growing, just 8-10 weeks
- Summer or autumn grazing
- Flexible sowing options
- Lamb, Beef or Dairy production
- Tolerance to dry soil conditions
- Treated.

Sowing Information

Sowing Period

Early May to mid-August

Direct Drill

4-5kg/ha (1.5-2kg/acre)

Broadcast

5kg/ha (2kg/acre)

Skyfall

A new "bounce back" brassica, bred to provide a palatable leafy feed which can be fed either in the summer, when the grass growth might be limited, or sown later, to enable the crop to be grazed in the autumn or winter months. The large strap leaves are soft and very easily eaten by dairy, beef or sheep livestock. Its leaves have the appearance of a stubble turnip leaf, whilst the root is more like forage rape, deeper and elongated and able to penetrate the soil. With its root system, Skyfall can regrow and has improved tolerance to dry situations and soils. Grazing should be back fenced to allow for rapid recovery.



ARABLE SILAGE

Why Grow Arable Silage?

- Offers a cost effective, high quality, alternative to grass or maize silage
- Versatile and can be grown anywhere in the UK
- Produces consistently high yields of dry mater
- Useful source of home produced protein
- Can be undersown with a grass ley to further maximise land use
- Excellent winter feed for dairy, beef and sheep.

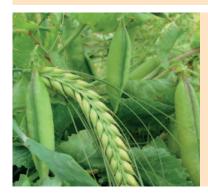
Sowing Information

For best results 175-210kg/ha 70-85kg/acre

Undersown with grass 125-150kg/ha 50-60kg/acre

Sowing Period

March - April



Arable Silage Mix 1

Excellent protein rich wholecrop with the added benefit of residual nitrogen fixing by the peas for the following crop. Ready in 12 to 14 weeks.

If undersowing drill cereals in normal way then broadcast grass on top and light Cambridge roll.

Mix 1

60% Spring Peas 40% Spring Barley



Arable Silage Mix 2

A barley rich mixture proving a very popular alternative or additional feed to grass or maize silage.

Mix 2

60% Spring Peas40% Spring Barley



Arable Silage Mix 3

A traditional wholecrop mixture with Oats included which has a slightly higher oil content.

Ready to cut in 14-16 weeks.

Mix 3

40% Spring Barley 35% Spring Oats 25% Spring Peas



Arable Silage Mix 4

Vetch adds a good source of protein and fixes nitrogen in the soil.

It also adds bulk to the mix and offers some weed competition.

Mix 4

60% Spring Peas 30% Spring Barley 10% Spring Vetch



SWEDES

Why Grow Swedes?

- Excellent high energy winter feed
- Low production costs
- Finishing lambs or winter maintenance
- High dry matter yields
- Cost effective
- Natural and Grade H available.

Sowing Information

Sowing Period

April - June

Direct Drill

3kg/ha (1kg/acre)

Broadcast

5kg/ha (2kg/acre)



Gowrie

Bred in Scotland and can be utilised pre or post-Christmas. It can produce high dry matter yields and exhibits good tolerance to both clubroot and powdery mildew.



Invitation

A very uniform, clubroot tolerant variety, ideal for utilisation after Christmas.

It also has excellent tolerance to powdery mildew and will produce large leaves for extra grazing potential.

Invitation is winter hardy and is suitable for sheep and cattle.



Lomond

Has high, fresh and dry matter yields which make this variety ideal for finishing lambs post-Christmas.

Lomond has both powdery mildew and clubroot tolerance and trials show it suffers less from rots and splits in its root.



Magres

The variety to grow for culinary and the fresh markets.

Its fine purple skin and yellow flesh makes it ideally suited for supermarket specifications.

Magres has good storage capabilities, giving greater harvest flexibility.



Marian

A medium dry matter variety with good resistance to clubroot and mildew. It is a dual-purpose variety suitable for fodder and culinary use with yellow coloured flesh and purple skin. Very high yielding and winter hardy.



KALE

Why Grow Kale?

- Low cost option for finishing lambs
- Buffer feed for cows during dry summers
- Flexible utilisation period
- Excellent crude protein
- High yields and economical to grow
- Out-wintering systems
- Treated and Untreated available.

Sowing Information

Sowing Period

April - early July

Direct Drill

3-5kg/ha (1-2kg/acre)

Broadcast

8kg/ha (3kg/acre)











Thousand Head

Pinfold Bombardier

Caledonian

Keeper

Thousand Head

A popular, tried and tested variety with good standing ability and winter hardiness. Thousand Head is slender stemmed variety bearing leafy foliage. Excellent winter hardiness providing forage for feeding after Christmas. Can supply approximately 90 tonnes/ha of green forage matter.

Maris Kestrel

Established as the leading UK variety suited to all livestock. Extremely digestible and long utilisation period makes this a very popular farmer choice.

Proteor

A winter hardy variety with the potential to deliver high dry matter yields making it a very desirable choice for dairy, beef or lamb and an excellent variety for game cover.

It is an intermediate stemmed variety with high leaf to stem ratio. Excellent disease and aphid tolerance.

Pinfold

An excellent variety with thin stems and can be utilised by sheep, beef or dairy. Pinfold is winter hardy, but because of its rapid growth it can be used as a late summer/early autumn buffer feed.

Bombardier

A new variety with the potential to deliver high dry matter yields ideal for dairy, beef or lamb production. Bombardier will maximise the yield potential per hectare, but this variety has been bred to ensure that the feed produced will be of a higher quality. Also clubroot tolerant.

Caledonian

The highest yielding kale in trials. It is clubroot tolerant, which now enables growers to continually sow kale on clubroot infected sites. Caledonian's huge yields make it ideal for utilisation by dairy and beef cattle.

Keeper

Very winter hardy and exhibits good lodging resistance. It is a medium/short type, ideal for finishing lambs and providing high quality winter keep. It has low SMCO levels (anti-nutritional chemical).



LUCERNE

Why Grow Lucerne?

- High protein forage
- Drought tolerant
- Four cuts per year possible
- 3 5 year potential
- Clamp, big bale or hay
- Nitrogen benefit for subsequent crop
- Pre-Inoculated.

Sowing Information

Sowing Period

April - mid August

Direct Drill

20-30kg/ha (8-12kg/acre)

Broadcast

25-30kg/ha (10-12kg/acre)







Ezzelina

Sibemol

Gea

Ezzelina

A long term perennial clover which fixes large amounts of nitrogen from the air to enrich the soil. Widely used for green manure. It has a large tap root which is ideally suited to light, chalky soils and dry climates. Inoculated with rhizobium bacteria.

Sibemol

A high protein content variety with significantly high dry matter yields.

With good field standing ability, it is useful when cutting is delayed. Resistant to nematode and verticillium. Dormancy Group 4.

Milky-Max

Typically produces four to five silage cuts per season and can persist for up to six years under effective management. The variety is semi-dormant, with a 4.4 dormancy rating, which makes it well suited to the UK climate.

Gea

Good cold tolerance and very high production potential.

Recovers quickly after cutting and has a high drought tolerance.

Performs well throughout the whole growing season.

Timbale

Excellent nutritional value, Timbale is thin stemmed with good leaf retention making it much better than many other varieties when bailing. Good disease resistance and a high yielding, high protein crop.



FORAGE PEAS

Why Grow Forage Peas?

- Very high protein content (16-20%)
- Easy to harvest using forage machinery
- Suitable for undersowing with new grass leys
- Impressive field performance great for organic situations
- Some nitrogen fixation to enhance soil and next crop
- Excellent break crop.

Sowing Information

Sowing Period

March - early June

Direct Drill

125kg/ha (50kg/acre)

Broadcast:

150kg/ha (60kg/acre)

Magnus

Magnus is a semi-leafless forage pea variety, which ensures the crop is self-supporting, reducing the damaging effect of lodging, often seen in traditional full-leaved varieties.

Magnus is very fast growing and can be harvested between 11-14 weeks after sowing.

Because of its growth habit (semi-leafless and open to the light), Magnus crops are ideally suited to undersowing with a new grass ley. Magnus is a true catch crop with tremendous flexibility and is UK proven.



FORAGE RYE

Why Grow Forage Rye?

- High protein forage
- Drought tolerant
- Four cuts per year possible
- 3 5 year potential
- Clamp, big bale or hay
- Nitrogen benefit for subsequent crop.

Sowing Information

Sowing Period **September - October**Direct Drill

185kg/ha (75kg/acre)

Straight sown

125kg/ha (50kg/acre)



Powergreen

This fast growing rye is a high yielding variety which can grow at lower temperatures, making it ideal for late sowing or early harvest. It has excellent winter hardiness, high output and high nitrogen uptake. Sow in the autumn for incorporating and use in the spring.



Humbolt

Humbolt forage rye is a UK bred forage variety producing excellent early spring growth. Humbolt's excellent tillering capacity and early vegetative growth ensures maximum intakes and palatability. Humbolt has excellent winter hardiness and can recover quickly after grazing or cutting. Humbolt is UK proven and can thrive on a wide range of soil types.

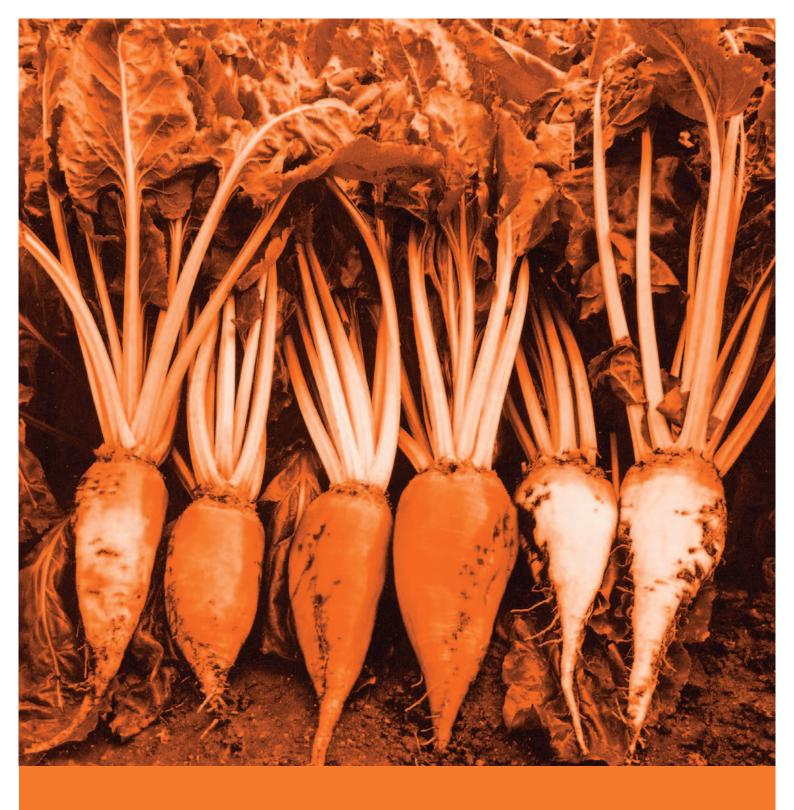
One of the fastest growing rye varieties available, it even grows at low



Protector

temperatures when other varieties stop growing. Helps provide protection against soil erosion due to coverage and rapid plant development in autumn. Constantly high uptake of nitrogen during the autumn period. Fertiliser can be applied in early spring but should be kept at a moderate level. Dry matter yield of Protector is higher than that of other similar varieties (and is similar to hybrid rye) at time of cutting in early May. Also a useful cover crop option before drilling maize.

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