



BRASSICA GUIDE

Brassica (is a genus of plants in the mustard family). The genus is native in the wild. Forage Brassicas, rape, kale, turnips, and swedes, are high yielding, high quality, fast growing crops used to bridge feed gaps within a feed budget at various times of the year . The best quality of the forage is always before it goes to flower; this is generally in spring after a winter. Above ground parts normally have 20-25% crude protein. The roots of turnips and kale usually have 10-14% crude protein and the M.E of a brassica crop is generally about 13-13.5.

TURNIPS

Turnips grow fast and can be grazed 60-90 days after planting. They reach near maximum production levels in 80 to 90 days. Turnips can be sown any time from when soil temperature reaches early spring until 70-80 days prior to a killing frost.

SWEDES

Swedes, like turnips, produce large edible roots. Swedes yield more than turnips but require 150 to 180 days to reach maturity. Swedes usually produce a short stem but can have stems up to 60 cm long when grown with tall kale which shade the swede. Swedes would generally be recommended for late spring early summer sowing. Care needs to be taken into account when selecting the right variety for your situation. Please feel free to ring and ask for a recommendation.

RAPE AND FORAGE BRASSICAS

Rape and forage brassicas are some of the best crops for fattening lambs and flushing ewes but is being used more and more in the dairy industry for summer multi grazing crop. Rape (kale*turnip cross) is a multi-stemmed crop with fibrous roots. Forage brassicas often referred to as leafy turnip (turnip x Chinese cabbage) has a more leafy conformation with not as long stems as rape. Produce great yields when allowed to grow 60 days before first grazing and 30 days before the second harvest. Can be grown with other crops like Italian rye grass and turnips (HYF Blend) to help enhance the stock performance.



KALE

Kale varieties vary greatly in establishment characteristics, stem development, and time required to reach maturity. Most giant /medium stem varieties reach maturity in 150 to 180 days. When planted at a higher density of seed the kale stem becomes finer and more palatable to stock. The medium stem varieties have the highest leaf to stem ratio with the ratio of the giants being lower.

PLANTING

Brassicas require good soil drainage and a soil pH should be in the range of 5.3-6.8. Make sure a good quantity of lime and trace elements and base fertiliser is applied to the area preferably for up to a year before the crop is planted. Planning is key.

The key to any system is not to plant the seed too deep, no more than 10mm. Press the seed so it has good seed to soil contact. This is a very cost effective process. Seed should be Gold Strike treated to help better establishment and help ensure a more productive yield and less pest pressure. Watch sulphur levels in the soil to minimise health problems caused when grazing brassicas. Nitrates should be minimised as the crops get closer to grazing due to a build-up of nitrates in some situations.

GRAZING

Brassica crops can cause animal health disorders if not grazed properly. To help minimise any health effects the two following practices can help,

1. Introduce grazing animals to Brassica crops slowly (over 3 to 4 days) this transition will help gut enzymes adjust (can take up to 10 days). Avoid sudden changes from the grass to brassica diets (HYF blend helps this). Don't turn hungry animals that are not adapted to brassicas into a Brassica crop, feed hay or silage to help gut full.
2. Brassica crops should not constitute more than 75 % of the animal's diet. Due to the low fibre content in brassicas it is best to help balance the gut with the inclusion of hay or silage or allow grazing animals to access grass paddocks while grazing brassicas.

Grazing can begin when the forage is about 30 cm (70 to 90 days after planting). Turnips (bulb type), swedes, kale are usually one grazing and the crop is finished. Forage brassica and rapes are multi graze options (back fence when grazing cattle). The crop should be grazed for a short time period and the livestock removed to allow the Brassica to regrow. Rape may be grazed to 20-30 cm stubble and 1 to 4 grazing periods may occur, depending on planting date and the season. A good rule of thumb is when you think you have 1 or 2 days left in a paddock move the stock, this helps the regrowth and can help minimise the grazing damage.

The forage quality of Brassica is so high that it should be considered similar to concentrate feeds and not included as. Livestock should not be hungry when they are put on pasture the first time so they do not gorge themselves. Lower quality hay should be made available to provide some fibre in the animals' diet.

Try and avoid growing brassicas in the same paddock for more than two consecutive years as diseases will build up to reduce stand and yield.



BRASSICA – KALE

A high yielding winter crop sown in the spring and grazed during the following winter requires some summer moisture and likes good fertility or to be feed well. Has a ME value of 10.5 – 12 but can yield up to 18 tonne/ DM /Ha . More tolerant to dry rot and club root and it has a deep root system. Often used after swedes in a cropping program. Usually sown at 3-5 kgs/Ha on its own or 2-3 kgs in a mix. Kale doesn't have a regrowth ability like rape and forage brassicas'. Giant kales can be sown at a higher plant density to help make the stems more palatable . Giant kales are best for cattle with the medium being best for sheep and deer.

MEDIUM STEM

PORTLAND KALE

- Medium stem variety.
- 150 - 200 days to grazing.
- Sow at 5kg per hectare.

KESTRAL

- Digestible short thick stems
- Medium stem.
- low SMCO levels
- 150-220 days.

SOVEREIGN

- Good leaf to stem ratio.
- Late flowering variety that maintains leafy crops into early September.
- high yield potential
- 130 -170 days

MEDIUM TO LARGE STEM

RAWERA KALE

- Giant Kale.
- 150 - 200 days to grazing.
- Sow at 6kg per hectare.

GRUNNER

- Giant.
- Excellent tolerance to frost.
- Good aphid tolerance.
- 150-220 days

REGAL

- Intermediate height kale.
- High leaf to stem ratio.
- Winter hardy.
- 150-220 days

CALEDONIAN

- High yield potential
- soft stems
- Good winter hardiness
- 150-220 days



RAPE – FORAGE BRASSICA

Rape can be sown alone or in mixes of 0.5-2kg/Ha it is generally ready to graze between 60-90 days from sowing with good soil fertility and moisture yields of over 8T/D/M/Ha can be achieved, over grazing will lessen the regrowth for future grazing's. Due to high metabolised % of energy means that stock can consume a lot of energy (and gain weight quicker).

RAPE

KINGSFORD RAPE

- Excellent strain with large leaf percentage for superior feed value.
- Minimum of 45-60 days from sowing to grazing.
- Can be fed off 3-5 times.
- great regrowth potential with multiple grazing's
- Sow at 4kg per hectare.

SUB ZERO

- forage rape
- Good frost tolerance
- high yielding variety
- Good regrowth with multiple grazing's
- 55- 70 days maturity
- high crude protein

INTERVAL

- Tall late maturing variety
- good tolerance to drought and frost
- 90-110 day's maturity

GOLIATH

- 90-110 days.
- Good aphid tolerance.
- Regrowth potential.
- Late maturing.

WINIFRED RAPE

- Minimum of 70 days from sowing to grazing.
- Can be grazed off 3 times.
- Sow at 4 kg per hectare.

TITAN

- 70-90 days.
- Intermediate height forage rape.
- Good regrowth potential.
- High aphid and virus tolerance.

FORAGE BRASSICA

VIBRANT FORAGE BRASSICA

- Can be grazed 3-4 times
- Great regrowth
- wonderful option for finishing lambs
- sowing rate 4 kgs/ha

HUNTER FORAGE BRASSICA

- Excels Pasja, later flowering than any other variety.
- Can be grazed off 3 times.
- With good survival
- Sow at 4kg per hectare.

BOUNCER

- forage brassica
- club root tolerant
- recovers fast from grazing
- 42-50 days first grazing

PASJA

- 42-70 days.
- Multiple grazing.
- Good yielding and persistent plant.





SWEDES

These are better in frosty climates than turnips yet they do take longer to establish but provide a much relished source of winter feed for all classes of stock. Try them yourself with mashed potato! Swedes have a typical yield of 12-17 tonnes DM ha have a higher feed quality than kales but good ME of 11.5-14. They are also better in frosty climates than turnips. Swedes can be planted with kale with good success. Recommended sowing, rate 0.5-0.9kg in ridges 60cm, and 0.8-1.5 kg in drill rows 20cm.

DOMINION

- 180-200 days.
- Great winter crop.
- Yellow flesh variety.
- Traditional variety.

MAJOR PLUS

- 150-230 days. + 1-2kgs recommended sowing rate.
- Good yielder.
- Great to sow with Kale.
- Yellow flesh.
- Higher bulb to leaf ratio.

DOON MAJOR

- The nations favourite.
- 180-200 days.
- Traditional variety.
- Best flavour swede.
- Consistent performers.
- Purple skin.
- Best mashing variety served with brown roast meat gravy and onions.
- Bulb stands well clear of the ground.

HIGHLANDER

- 170-250 days.
- White flesh variety.
- Higher ratio of leaf than other varieties.
- Good overall yield.
- Pink skinned.

INVITATION

- Late maturing.
- Yellow fleshed.
- High bulb and leaf yield.
- Excellent winter feed for cattle sheep and deer.
- Dry rot and clubroot tolerant.
- 170-250 days.



TURNIPS

Turnips are a great summer crop and more farmers are planting it as a winter crop to provide a high ME feed for freshly calved cows in the spring. When planning to have turnips grazed over a long period of time it is best to plant 2 varieties with different maturity times this is essential for maintaining feed quality. Winter varieties generally have better frost tolerance. Yields range from 8 – 12 DM/Ha with a typical ME of 12 +. In milking cows it should not constitute more than a third of their diet. Turnips add a great tool as give the paddock a break in the rotation to enable thatch breakdown and contouring. Turnips and rape work well as a combination in a blend. Usually sown at 2 kgs/Ha.

SUMMER TURNIP

RIVAL TURNIP

- Summer fodder turnip.
- Proven to be 80% resistant to white butterfly (Taranaki Farmer).
- Sow at 2kg per hectare.
- 60-100 days.
- Great multi crop option with Kingsford or active Italian.
- Tankard bulb good proportion out of the ground.

DYNAMO

- 60-90 days
- Early maturity summer turnip
- higher bulb proportion to Barkant
- Higher bulb means leaf damage from pest and disease doesn't reduce crop yield as much as other varieties

BARKANT

- Summer turnip
- High yielding, high quality forage.
- High proportion of leaf, resulting in high levels of protein.
- 60-90 days

CHALLENGER

- summer fodder turnip
- great multi crop option with kingsford or Italian multi blend
- Tankard bulb with a good proportion out of the ground
- farmers favourite
- 60-90 days
- Sow rate 2 kgs /ha



Turnips continued

SUMMER / WINTER TURNIPS

YORK GLOBE TURNIP

- Winter variety.
- Can be used as a summer turnip.
- Quick maturity.
- 60-80 days.
- Sow at 2kg per hectare.
- White flesh purple skin.
- Good eating variety.
- Good bulb keeping quality.

APPIN

- Winter turnip
- High leaf yields from multi-crowned bulbs.
- Excellent regrowth potential.
- Firmly anchored for minimum wastage.
- Good for late sowing.
- Clubroot tolerant.
- 60-90 days

NEW YORK

- Winter turnip
- medium to late maturity
- white flesh and skin
- good disease tolerance
- 125-140 days

GREEN GLOBE TURNIP

- Winter - High producer turnip.
- Can be used as a summer turnip.
- High producer.
- Excellent feed option as keeping quality.
- 80-120 days.
- Firm white flesh and green skinned.
- Sow at 2kg per hectare.

The background of the page is a photograph of a turnip field. In the foreground, there are several tall, green turnip plants with purple flowers. The background is a vast field of similar plants stretching to the horizon under a bright sky. The bottom portion of the page is overlaid with a solid green gradient.

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