

FORAGE BRASSICA™

High Quality Feed that You Can Afford!

WHY GROW A FORAGE BRASSICA CROP?

1. To Provide High Quality Forage to Meet Seasonal Feed Shortages.

There are times of the year that grass-based pastures cannot provide the quality and quantity of forage needed to maintain high levels of animal production. Feeding grain and conserved feeds during these times is often expensive and can severely reduce income. There are **Forage Brassica** products that can meet your demand for high quality forage when you need it, at a fraction of the cost. (see product overview for spring and fall sowing options).

2. To help with Pasture Renovation.

The successful establishment of new pastures often depends on preparation of the land, whether it be old pasture or new ground not previously in pasture. Pasture renovation can suffer from weed, insect, and disease pressure, and often results in production losses while the new pasture is being established. Growing a **Forage Brassica** crop prior to pasture renovation helps offset the production loss, and breaks the life cycle of many of the insect and disease pests, which improves the success of new pasture seedings.

3. To provide high quality forage to lactating and growing livestock.

Forage Brassica crops have excellent nutritional characteristics with high energy, crude protein, and digestibility. This ensures that milking cows and young growing stock are getting all the nutrients to reach their production potential.



4. To provide a high yielding forage crop after a row crop.

Forage Brassica crops can be very useful as a high yielding, fast growing forage crop after row crop harvesting. The regrowth potential of many **Forage Brassica** varieties ensures that land is productive through the fall, and winter till its time to sow row crops again.

CHOOSING THE RIGHT FORAGE BRASSICA VARIETY FOR YOU

There are a complete range of **Forage Brassica** varieties available that will meet the different needs of livestock and forage producers. Selecting the right **Forage Brassica** for you will depend on the quantity and quality of the forage you require, and when you require it. Different **Forage Brassica** varieties are bred to perform in different conditions and are suitable for different livestock systems. Please use the product overview chart and information tables to decide which **Forage Brassica** is right for you.

Appin Turnips.

- A versatile crop that can be used in all seasons for excellent quality feed.
- High yields of nutritious leaf from multi-crowned bulbs.
- Excellent regrowth potential.
- The bulb is firmly anchored to minimize damage and wastage.
- Vigorous establishment and quick maturity make Appin ideal when a late sowing is needed.

Pasja Turnip Hybrid

- Excellent for summer and drought grazing
- Early maturing (50-70 days) with high yields from successive grazings.
- Minimal ripening required.
- Leafier and therefore better quality, than many other forage brassicas.
- Suitable for all types of livestock.

Bonar Rape

- High forage quality and yield.
- Excellent fall and winter feed, particularly useful after a row crop.
- Later maturing (13-15 weeks after sowing) with excellent regrowth potential.

Kestrel Kale

- Bred for low fiber content that makes this kale more digestible.
- Low SMCO levels so less chance of anemia
- Good regrowth if lightly grazed in the late summer.
- High leaf production
- Later maturity.

Major Plus Swede.

- Great winter feed supply for one-time grazing.
- High proportion of bulb.
- Only suitable for one grazing but very high in energy content.
- High yielding, full maturity (from 160 days) swede

Winton Swede

- High forage yield for one-time grazing.
- High quality winter feeding.
- High proportion of leaves
- Later maturity (180-240 days)

	No Grazings	Crude Protein %		Total Yield	Energy	Digestibility
		Stem/Bulb	Tops	Lb DM/ac	MJ/kgDM	%
Appin	2+	-	13-22	7500	12.8	80
Pasja	3+	-	13-22	9000	13.6	85
Bonar	2	10-14	15-24	9000	12.8	80
Kestrel	1	8-12	15-20	9500	12.8	80
Major Plus	1	8-12	15-24	13000	13.9	87
Winton	1	8-12	15-24	14000	13.9	87

ESTABLISHING YOUR FORAGE BRASSICA

1. Seeding and Mixes

Forage Brassicas are best sown into a well prepared, fine and firm seed bed. They can also be broadcast (higher rates are recommended for broadcasting) or seeded into a herbicide-killed sod with a no-till drill. The table below inocate the appropriate seeding rate for each **Forage Brassica** Variety. The **Forage Brassica** varieties that have good regrowth potential can be sown with cool or warm season annual grasses depending on the season of intended use.

	Sowing Rate lb/Ac	Days to Grazing
Appin	2-4	60-100
Pasja	3-5	50-70
Bonar	3-5	90-110
Kestrel	3-5	150-220
Major Plus	1-2	150-230
Winton	1-2	160-240

2. Fertilization.

All **Forage Brassica** crops require good fertility, soil drainage and a pH between 5.3 and 6.8 for optimum production. Phosphorus levels should be above 60lbs/acre to ensure optimum growth and help increase the crude protein levels in the brassica crop. Nitrogen (70lbs/acre) can be applied at sowing and subsequently, 60-80 days after seeding to increase yield. Higher rates of nitrogen may be needed if the brassica is being sown after a cereal or corn crop. You should avoid fertilizing with products that contain sulfate or sulfa as this may increase SMCO levels and the risk of anemia problems (see grazing management)

USING YOUR FORAGE BRASSICA CROP

1. Grazing management.

How you graze your **Forage Brassica** will depend largely on the type of brassica used. As most of the brassicas mentioned have significant regrowth potential, strip grazing is best to maximize the production and quality. A back-fence should be used to prevent access to the grazed areas so they can recover. This will ensure high utilization and allow for the regrowth potential to be realized.

Swedes are for single grazing and can be strip grazed withy no need for a back fence, or set stocked during the winter. Most of the forage is contained in the bulb so allow animals time to eat the bulb before removing from the crop.

2. Forage Brassicas in the diet

Due to the very high digestibility and energy content, it is recommended that the amount of brassica in the diet should not exceed 75%. The diet should be supplemented with hay, silage, or access given to grass pasture. Utilizing brassicas in an annual grass mix is also an option.

3. Other Forage Brassica Issues.

When feeding **Forage Brassicas** to milking cows, it is recommended that cows do not graze the brassica crop within a 3 hour period prior to milking to ensure that no flavoring of the milk occurs.

There are certain animal health considerations than need to be kept in mind when grazing brassica crops. Bonar rape should never be grazed until it has reached maturity as photo-sensitivity can occur in animals. A purple color at the leaf tips indicates that the Bonar is mature and safe to graze. Pasja can be grazed early as it does not require the ripening that Bonar rape does.

During drought, brassica regrowth should be allowed to mature, and no nitrogen applied to reduce the risk of nitrate poisoning.

Some brassica crops, most commonly kale, can sometimes contain a sulfa-based compound called sis-methly cistein sulphoxide (SMCO) that can cause anemia, and a depression of appetite in grazing animals. If a reddish color is noted in the urine, then animals should be removed from the crop. Kestrel Kale is bred for low SMCO levels.

Hypothyroidism can also be a problem with brassica crops but is easily treated with an iodine supplement.