Brassica overview:

The use of brassica crops has been on the increase for several years now.

Farmers are becoming aware of the importance of high quality feed (high in energy and protein) for their stock.

Brassica should be considered in any situation where pasture quantity or quality is limiting the potential of livestock.

When to use Brassicas

Brassica is commonly used in the following scenarios:
- During Summer, Autumn or Winter when you could have periods of feed shortage
- To supplement periods of low pasture quality
- To finish stock
- When a summer safe feed is required
- Prior to pasture renewal

What sort of brassica should I sow?

It all depends on when are thinking you may require your brassica crop to be grazed:

- **Summer Options**: Forage brassica, Rape Summer/Autumn Turnip. These can be ready for the months of December, January, February
- **Autumn Options**: Forage brassica, Rape, Summer/Autumn Turnip. These can be ready for the months of March, April, May
- **Winter Options**: Kale, Swede, Rape, Winter Turnip, Fodder Beet. These can be ready for the months of June, July, August.

Brassica Establishment:

Brassica crops can be established using traditional cultivation methods, direct drilling or broadcasting, however all establishment methods share the common need for success. The following information will help in ensuring this. Brassica prefers a firm, fine, warm, moist seedbed and is best sown after pasture, but may follow a crop.

Pre Establishment:

Ideally you should identify potential paddocks 8-10 weeks prior to sow down; these should be poorer performing pastures. A soil test of the selected paddock should be done and fertiliser applied to achieve a Olson P of 20-25, Potash levels of 5+, Sulphate S of 3-8, Mg of 8-10 and PH of 5.8 - 6.0. Undesirable perennial weeds (e.g. Couch, Californian thistle and yarrow etc) should also be controlled prior to sowing down.
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Cultivar Selection:

When selecting the most suitable cultivar base your select on the following points. What stock type is being feed, when your feed requirement, the excepted crops maturity date is and how many regrowth cycles, if any, will be required.

Conventional Drilling:

If you are using the traditional cultivation method you should aim for a moist, firm and fine seed bed. Fertiliser application and pre emerge type weed control programs should carried out as part of your cultivation program, both require cultivation to successfully incorporate them into the seed bed prior to drilling. Drill seed no deeper the 1 cm using an accurately set drill at a slow pace.

Broadcasting:

A common method of establishment in areas of reliable rainfall. The seedbed should once again be moist, firm and fine. As with the above process both fertiliser application and pre emerge weed control can be applied prior to spreading. Seed should be spread using accurate equipment. We recommend you use a higher sowing rate of seed and once spread the seed should be lightly harrowed and rolled.

Direct Drilling:

The major key for success using this method is to ensure the chemical control of weeds is successful. The best method is by using the two spray program. The first chemical application should be applied as soon as possible after the paddock has been selected and is of no more commercial use.

The first application should use a high rate of Glyphosphate type chemical i.e. 4-5 litres per hectare.

The second application of the same chemical should occur 5-7 days prior to drilling at a lower rate per hectare (e.g. 1-2 litres per hectare).

Another major consideration in a direct drilling program is the need to apply enough nitrogen for the establishing brassicas. Most of the available nitrogen will be "locked up" in the soil helping to break down the paddock residues after spraying.

Once again sow seed into a moist seed bed at no deeper than 1 cm using an accurate drill. Post emergence weed control should be applied at the correct time after emergence.

Weed & Pest control during establishment:

Care must be taken during the establishment phase to keep both weeds and pests from undoing all your expensive preparation work.
**Weed control:**
Weed control should be done as part of your program as they have a significant effect on your crop. For best results use either a pre or post emergence spray program for traditional establishment methods or for broadcast and direct drilled crops use post emergence control methods.

There are several chemicals registered for this job and we recommend a consultation with your local agricultural chemical expert to discuss these options. If you're unsure where to go to source this information please feel free to contact us.

**Pest control:**
Just as important as the weed control is a pest control program. There are two main ways of doing this. The first method is to purchase your seed with a recommended seed treatment (e.g. Gaucho or coated seed). Seed is then simply sown / broadcast and seedling protection achieved.

The second and more complicated method is to use either a granular insecticide at drilling or a post emergence broad acre spray. Both these methods require very careful consideration as timing is critical, we recommend the use of Gaucho seed treatment.

**Post Establishment:**
Once successfully established there are several issues to think about that involve further insect protection where required and the very important grazing management.

**Pest control:**
Once past the establishment phase your brassica crop can be attacked by a wide variety of insect pests, they include aphids, diamond back moths, leaf miners and white butterfly. All of these can be successfully controlled by using the appropriate chemical however in all cases early detection is very important. There are several very good publications describing these pest problems in more detail, please feel free to contact us for your free copy.

**Grazing Management:**
When introducing stock to a brassica crop there are several vital points to remember:

1. Introduce stock to your brassica crop slowly for the first 7-10 days to allow the rumen adjust to the high quality feed.

2. Be very careful aware of the potential to get nitrate poisoning. Nitrate poisoning can occur in almost any rapidly establishing crop but is of particular importance in brassicas. Sudden stock death can occur. There are several situations that can increase the occurrence of nitrate poisoning they include rapid crop growth, overcast days and sudden temperate change etc. Crops can and should be tested for nitrated levels prior to grazing.

3. While brassica crops are very highly digestible they are low in fibre (also very important part in an animal’s diet). Particularly when you are introducing stock to brassicas it’s...
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important to allow stock access to pasture, straw, silage or hay. You should never introduce them with an empty rumen. Most farmers use either of these fibre sources for the entire time they are grazing on their brassica which is best practice.

4. Always have an excellent source of good clean water available to your stock at all times while grazing brassica.

**Important Recommendation:**

Rape Scald, Nitrate poisoning, Red Water and Goiter are all problems that can arise from the incorrect grazing management of brassicas. Therefore Specialty Seeds recommends a consultation with your local vet prior to the grazing of any brassica to discuss the successful grazing management of your brassica crop.