

The benefits of brassicas

Brassica crops offer a versatile feeding solution to bridge summer grazing gaps, extend autumn grazing and support out-wintering systems. They also offer a cheaper feed source for cattle and can cost less than 50p/head/day.

The energy content of leafy and root brassicas is normally higher than other forage due to a high readily-digestible carbohydrate content, see table at bottom of page. However, they are low in fibre and protein, so a good source of fibre such as hay or straw and a protein supplement must be fed alongside brassicas. They must be introduced over seven to ten days to ensure the rumen of the cattle adapt to the change in diet.

It is recommended that to plan feed intake accurately the dry matter (DM) yield should be measured see how in table below.

In order for brassicas to be successful they must fit into the system. And once the feeding gap has been identified, the right crop can be selected. The brassica chosen will depend on when the crop will be fed, the number of stock that require feed and when the land is available from. There are a wide variety of brassica crops which can fill in throughout the year, but they also differ in performance and palatability, see table below.

Field selection is also really important and can benefit future crops in the field. The best fields for brassicas are those where production is falling, the soils are free draining and there is no threat to water courses. Brassicas should not be grown year on year, a minimum of five years after dry weather and eight years, if conditions have been wetter, between crops.

Producers are advised to prepare fields by having soil tests carried out. The pH should be 5.8-6.5 and the phosphorus (P) and potassium (K) values should be 2, therefore the results from the soil test will highlight any applications required prior to the crop being sown.

How to measure DM

Place 1m frame in the forage crop

Use shears to cut every plant within the frame (10cm from ground) and place in a bag

Weigh the bag per metre squared

Take a number of samples from each field

Calculate the DM yield

$DM\ yield/ha =$
 $fresh\ weight/m^2 \times expected\ crop\ DM\ percentage$

	Sowing rate (kg/ha)	Days to grazing	No. of grazings possible	Summer or winter use	Dry matter %	Digestibility (D-value)	ME (MJ/kg DM)	CP (% DM)	% utilisation	Average DM yield (kg/ha)
Swedes <i>Precision sown</i>	1.00	170-250	1	winter	17-20	87	12-13	10-11	80	8,000
Kale <i>Precision sown</i>	6.25	150-220	1	both	15-17	80	10-11	14-17	80	9,000
Stubble turnips <i>Drilled</i>	5.00	60-100	1	both	12-15	85	10-11	17-18	80	6,000
Grazing turnips <i>Precision sown</i>	5.00	60-100	2+	both	12-15	75	10-11	17-18	75	3,000 (+ 2,000 regrowth)
Rape/kale hybrid <i>Drilled</i>	6.25	90-110	2 <i>Will bolt if not grazed</i>	winter	12-15	80	10-11	18-19	80	6,000
Forage rape <i>Broadcast</i>	6.25	90-110	2	both	10-12	80	10-11	19-20	80	4,800

Take a look at the BRP manual [Using brassicas for Better Returns](#) for more information