

## **Could your Farm benefit from Alternative Fodder Crops?** **By Keith Fahy, Teagasc B&T Drystock Advisor, Teagasc Galway/Clare**

In the next couple of months we will see farmers saving their winter feed. Grass growth last week according to Pasturebase Ireland was 57kgDM/ha similar to the same week last year which was 60kg DM/ha. Grass growth predictions for Athenry next week are 84kgDM/ha we should see a big jump in grass growth rates in the coming weeks when grass surpluses will be available for harvesting. However, I have decided to look at alternatives that are available to farmers as a winter feed source.

Every year we get a number of calls in the office wondering about alternative fodder crops. There are an array of different types of fodder crops that can either be grazed in situ or indeed harvested. Grazing in situ generally works out cheaper for the farmer but it can be time consuming moving fences, bolusing cattle, sowing the crop etc. However these crops can be very beneficial in terms of animal performance, growing high protein and energy crops and thus stretching silage stocks.



**Picture 1: Cattle grazing fodder crops on Teagasc Green Acres Programme**

### **Why sow Fodder Crops?**

Fodder crops can be an excellent way of incorporating a break crop into a reseeding programme, the field can be grazed during the winter months thus breaking down the soil thus providing ideal conditions for early reseeding the following year. Alternative fodder crops such as kale, rape or hybrid brassicas can provide cost effective winter feed, increase average daily weight gains over winter and help where winter housing maybe insufficient. Kale can provide a high crude protein crop of around 18 to 20% C.P while delivering a yield of approx. 8tDM/Ha.

### **What types of alternative Fodder Crops do farmers generally sow in this area?**

From my experiences with farmers, the 3 most common alternative forage crops grown locally would be Kale, Rape and Hybrids (A mix of kale and rape in that the forage rape

genes provide quick growth while the kale genes provide excellent winter hardiness). Swedes and stubble turnips are also grown but not to the extent of Kale and Rape.

### How are these Crops sown?

Brassica crops are a hungry crop in that they have a high requirement for N, P and K. The pH of the soil should be ideally 6.3 to 6.5. Generally these crops are sown where farmers decide to reseed a field, so they may spray off the field with a glyphosate based spray, either min till or plough, sow crops usually at approx. 3 kg/acre (More when broadcasting the seed), 2 bags of lime per acre if min till method, ensure good seed contact and that the crop is rolled well then you will apply N, P and K depending on soil sample results. Generally the Nitrogen application is split in two. 50% is spread at sowing and the remaining 50% is spread approx. 4 weeks after crop emergence. Boron is also a requirement of Brassicas, usually if there is Farm yard manure or slurry spread on the field this should suffice for Boron levels however if not a fertiliser with Boron should be used.

**TABLE 2: QUICK GUIDE TO WINTER FORAGE CROPS**

Forage Crop	Sowing Date	Sowing Rate	Fertiliser Requirements at Sowing* kg/ha	Feeding Period & yield potential
*Assumes soil index 3 for P & K, N Index 2				
<b>Kale</b>	Early May To Mid June	4.5 kg / ha  Drill direct	130 Kg/ha N  30 kg/ha P  170 kg/ha K  + Boron	November to February   6-9 t DM/ha
<b>Forage Rape</b>	Mid May to Mid-August	6.5 kg / ha  Drill direct	120 kg/ha N  20 kg/ha P  50 kg/ha K  + Boron	October to February   3-5 t DM/ha

## What do I need to be cautious of when growing these Crops?

1. Brassicas are a high protein high energy crop and thus a long fibre source needs to be available. This can be provided by feeding Silage/Hay/Straw. The most common way of providing a long fibre source would be by leaving round bales in the field around sowing time. Therefore round feeders can be moved as the crop is being strip grazed.
2. Brassicas are low in some elements such as Iodine, Copper, Selenium and cobalt. So it is of paramount importance that you ensure these animals are bolused or drenched to ensure there are no mineral deficiencies.
3. Kale should not be provided as 100% of the diet, only up to a max of 30%. This can be done by providing a long fibre source and some farmers may feed 1kg of barley to weanlings to stretch the kale and to ensure animals are hitting desired daily intakes.
4. Only graze animals that are in good condition and have no underlying health issues as weather can be harsh and only the fittest animals should be outwintered.
5. Always ensure there is fresh water available and a sheltered dry lieback area for the stock.
6. Make sure there are no run offs and that poaching is minimised and adhere to all GAEC regulations.

If we look at growing Kale, there are many different varieties of Kale however one common early variety for sowing e.g Maris Kestrel can provide a crop of approx 8tDM/Ha when sown in late May/Early June with an 80% utilisation rate. This crop, if sown in correct conditions and fertilised accordingly can provide a crop 150 days post sowing. If we look at the cost and demand of feeding 20 weanlings for 4 months i.e 120 Days.

Animals	Diet	Cost	Performance
20 Weanlings	3.5kgDm Kale/Day	3.5kgX12cX120 days = €50	
350kg eating 2% of Body Weight	2.5 kgDm Silage/Day	2.5kgX25cX120 days = €75	
Daily Demand 7kgDM	1kgDm Barley/Day	1kgX20cX120 days = €24	
	Bolus/Dose/Vacc/Other	€15	
		Total Cost = €165/head or €1.37/Day	Assuming 0.75DLWG/Head @€2.30 live weight is worth €1.73/day
Margin			36c/head/day €43/Head over 120 days

Figures based on 68%DMD silage, Barley at €200/tonne, continental weanlings at €350kg and €2.30/kg live weight, Dairy bred stock will be lighter eat less and price per kg will also be less.

Alternative fodder crops can work well as part of a reseedling programme and may suit certain farmers. Wishing all a happy, healthy and safe summer.