

Planning for Second Cut Silage

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Second cut silage is approaching us and for some farms they will already have it closed. The second crop is usually a light crop but is very important as a fodder source during the winter months. It is very important that you know the amount of silage that will be required on your farm.

What fodder is required on your farm?

Table 1 - Animal Type	Amount of silage required /animal/month
Dairy cows	1.6 tonnes
Suckler cows	1.4 tonnes
0-1 years	0.7 tonnes
1-2 years	1.3 tonnes
2+ years	1.3 tonnes
Ewes	0.15 tonnes

Total bales needed (tonnes x 1.25)

If cattle slurry has not been already applied to silage ground it should be applied to the fields that are going for a second cut as it is a very valuable source of nutrients. Trailing shoe is the preferred application method

2nd Cut Grass Silage - N, P & K Requirements (off-takes) ^{3,4} Based on Grass Yield & Fertilizer Programmes					
Grass Yield (ton DM/ha) ²	N kg/ha (units/ac)	P kg/ha (units/ac)	K kg/ha (units/ac)	Fertilizer Options ¹	
				No Slurry ¹	Cattle Slurry
2 (4t/ac fresh grass) ⁵	50 (40)	8 (6)	50 (40)	2 bags/ac 15-3-20	1,500gals/ac 1 bag/ac CAN
3 (6t/ac fresh grass) ⁵	75 (60)	12 (10)	75 (60)	3 bags/ac 15-3-20 0.75 bag/ac CAN	2,000gals/ac 2 bags/ac CAN
4 (8t/ac fresh grass) ⁵	100 (80)	16 (13)	100 (80)	4 bags/ac 15-3-20 0.75 bag/ac CAN	2,500gals/ac 2.75 bags/ac CAN

¹ Protected urea can replace CAN as N source. ² Apply 4kg P & 25kg K per tonne of grass dry matter (DM). ³ N, P & K advice for crop off takes based on grass DM yield at harvest time. ⁴ Apply 0-7-30 / 16% Super P or 50% K to build soil fertility levels on soils at P & K Index 1 & 2. ⁵ Fresh grass @ 20% DM.

If fields have gone to strong and need to be taken out in bales > 10-12 cm (1200kgs-1500kgsDM/HA), it is important to remember that the nutrient that is taken off in the bales needs to be replaced. If this is not done over time the P and K of these fields will become depleted and soil fertility could be affected. According to Dr. Stan Lawlor (head of specialty business in Grassland Agro) for every 1,000kg of DM/ha cut in bales – rather than grazed will add 2.5kg/ha of P and 25kg/ha of K to the requirements for maintenance to a paddock. Slurry is a very efficient way to replace the off takes.

Sulphur (S)

Some soils are more common than others to have a sulphur deficiency than others this is most likely on light sandy /free draining soils with low organic matter. Second cut silage has a requirement of 10-15kgs s/ha per cut. Sulphur is important as it will improve grass DM yields and quality of the crop. Sulphur should be applied little and often.

Silage Sampling

- Timing of silage harvesting is critical in determining quality of the crop ensiled.
- Sugar and nitrate content of grass needs to be checked in order to see if it is at the correct target
- Grass sugars are converted to acid during fermentation. This is what preserves the feed value of the crop in a sealed pit or bale.
- The target sugar content of 3% or higher is optimum
- Buffering capacity measures the resistance to drop in pH. Crops with a high buffering capacity may poor initial fermentation.
- High nitrates in grass increase buffering capacity. This can be tested using nitrate test strips.
- Sugars are more important values than nitrates. Grass will ensile correctly with up to 800 ppm nitrate once sugars are adequate
- Wilting the crop to >28 % DMD will overcome effects of high nitrates level.



Bale handling

Incorrect handling can damage the film and cause aerobic spoilage and mould if plastic is damaged. There are many factors that influence the damage caused by handlers to bales. Some of which include

- These include bale size, shape and weight
- Time of handling
- Handler type, size and adjustment

- Operator technique
- Number of handling events
- Quality of film on bale

Damage of bales must be prevented to avoid mould development and aerobic spoilage. Silage is a very valuable source of feed and it is important all is done to avoid bale damage.

It is important that you contact your silage contractor to give them enough notice to when you will need to cut your silage as it is a very pressurised time of year for both farmers and contractors.