

# Newsletter MAY

## 2022

**JGRENNAN**  
& SONS



## Silage - Aim for a 72 hour Fermentation

By Colm Nolan – (B.Agr.Sc) - Ph: 086 441 0762

While grass silage is still the most economical forage available, it is going to be 35 – 40% more expensive to make this year than previous years. It's well known that even a good, well-managed silage harvest will result in DM losses of 10-15%. DM losses in a wet/difficult year or because of a poorly managed ensiling process can easily end up between 35 - 50%. Dry matter lost = feed energy lost, so almost half of the energy value of your field of grass can end up being lost.

A key driver of these energy losses is the length of the fermentation process i.e., the length of time between sealing the pit and the heating process in the pit ceasing.

Once in the pit, the naturally occurring population of bacteria on grass start converting grass sugars into mild acids. These acids gradually build up in the pit, eventually to a level that makes it impossible for any further microbial life to continue, so heating ceases and the pit effectively locks itself down. At this point the silage is fully preserved and energy losses cease at that point.

All **heat losses from a pit are energy losses**, so your entire aim should be to have this period of heating as short as possible. Well preserved pits start to cool down within 72 hours of being covered. We see other pits continuing to heat for up to 3 weeks after covering. The difference in energy losses between the two situations are colossal.

While there are many factors involved in achieving a rapid pit lockdown, a key factor is the level and type of fermentation bacteria in/on the grass. This can be a very variable feast so you simply cannot depend on the wild bacterial population on the grass to deliver a rapid fermentation every time. We have always contended that ALL silage should be inoculated with an aggressive strain of Lactic Acid producing bacteria in order to ensure you get a rapid fermentation and pit lockdown - every time. Given where feed prices are going, the argument for cutting down on all unnecessary energy losses from your silage clamp was never stronger.

We've been recommending **Powerstart** silage innoculant to customers for almost 10 years now and have seen time and again, how effective it can be. While we don't claim it will solve all wrongs (bad weather/poor wilting etc), **Powerstart** will always deliver a more rapid fermentation because it contains a unique strain of aggressive Lactic Acid producing bacteria.

This strain was first isolated by Aberystwyth University in Wales over 25 years ago. It was patented and propagated by Aberystwyth because of its highly aggressive nature in attacking grass sugars and delivering a much more rapid build up of acidity in silage pits (fermentation). **Powerstart** delivers a better preserved, more palatable, more stable and higher performing silage. Try it and see for yourself.

## 7 REASONS TO CHOOSE **POWERSTART**®

- **Powerstart**® is the only silage additive to contain *Lactobacillus plantarum* Aber F1, which can access more of the sugars in the grass.
- This ensures a more rapid fermentation which means nutrients are better preserved to give a more nutritious feed.
- Aber F1 only produces lactic acid which is more palatable than other fermentation acids produced such as acetic acid (vinegar).
- This means **Powerstart**® produces a better smelling and more palatable silage – silage cows are keen to eat.
- If silage is more palatable, cows will eat more.
- Higher intakes of a silage higher in true protein and sugars mean that the rumen is more effective which means more production from forage and lower purchased feed costs.
- And now **Powerstart**® has been shown to reduce calving to conception interval by 10 days, worth €50 per cow. And it is the only silage additive proven to have this effect.

	Fed Powerstart treated silage	Not fed Powerstart treated silage
Herds	49	54
Cows	11621	13415
Average herd size	237	238
Calving to conception interval	125	135

Source – RMS herd sample 2011  
Statistical significance  $P < 0.05$

# Clover Establishment - Maximising it's success on your farm

By Aisling Claffey - (B.Agr.Sc., Ph.D.) – Ph: 086 0317483

With the increased cost of inputs on farm, particularly N, there has been renewed interest in establishing clover on farm. Successful clover establishment needs diligent management in terms of paddock selection, sowing conditions and management of the sward thereafter.

## Paddock identification:

- Soil fertility is key for clover establishment. Clover requires a pH of 6.5 and Index 3 for P and K. Potassium is particularly important for all legumes.
- Choose weed-free swards as there are limited clover-safe sprays available (ideally weed control should be carried out in the previous autumn).
- Choose an open sward if over sowing clover into existing sward.

## Sowing conditions:

- Ideally on most farms clover should be over sown by mid-May as drier conditions thereafter may affect establishment.
- Clover seed is small. Max sowing depth of 10-12mm, at a rate of 2- 2.5 kg/ac (naked seed).
- Apply 2-3 bags of 0-7-30 at sowing time.
- Ideally sow with a pneumatic seeder, such as the Einbock, but if broadcasting, seed can be pre-mixed with 0-7-30 (pre-mix on the headland to avoid separation while travelling).

- Sow in both directions across the length and width of the paddock. Good soil seed contact is critical, so rolling is essential.
- Apply a light coating of watery slurry after sowing.

## Grazing management:

- Whether reseeding or over-sowing, it is critical to graze the sward at 1000 kg DM/ha (8-10cm) for several rotations to allow light down to the new clover plant
- This will affect production and is hard to achieve so avoid over-sowing more than two paddocks at any one time.
- Apply normal N in the first year while the Clover is establishing but apply little and often to match the shorter rotation. Keep overall fertiliser N to less than 120u/ac/year in the following years.
- Avoid poaching in the autumn and spring on newly established clover swards.
- Aim to graze late in the autumn to avoid carrying a heavy cover over winter.
- The plant will only be establishing in its first year. So you can only expect to benefit from reduced N requirement in the following growing seasons.



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# Reducing Parasite Challenges to Optimise Lamb Thrive

By Damien Conboy – (B.Agr.Sc) – Ph: 087 2124036

Coccidiosis is one of the main challenges that young lambs (4-8 weeks old) will face. Lambs take in coccidia oocysts (eggs) by mouth. Inside the gut, the oocysts hatch, invade the gut cells and multiply dramatically with two results:

1. Damage to the inside lining of the lamb's gut, by bursting of the cells as the coccidia emerge.
2. Dramatic increase in the number of oocysts shed in the lamb's faeces.

It takes two to three weeks from infection to the passing oocysts in the faeces, and in this time, the number of oocysts shed can be many million-fold higher than the number that were ingested.

Damage to the cells lining the ileum, caecum and colon results in diarrhoea which may contain mucus or blood, and be accompanied by straining, pain, weight loss and possibly the death of the lamb. Even in animals that show no obvious clinical signs, sub-clinical disease (which can be apparent in older lambs) can lead to poor weight gain as the gut has a reduced ability to absorb nutrients from food.

## How to prevent, contain and cure coccidiosis

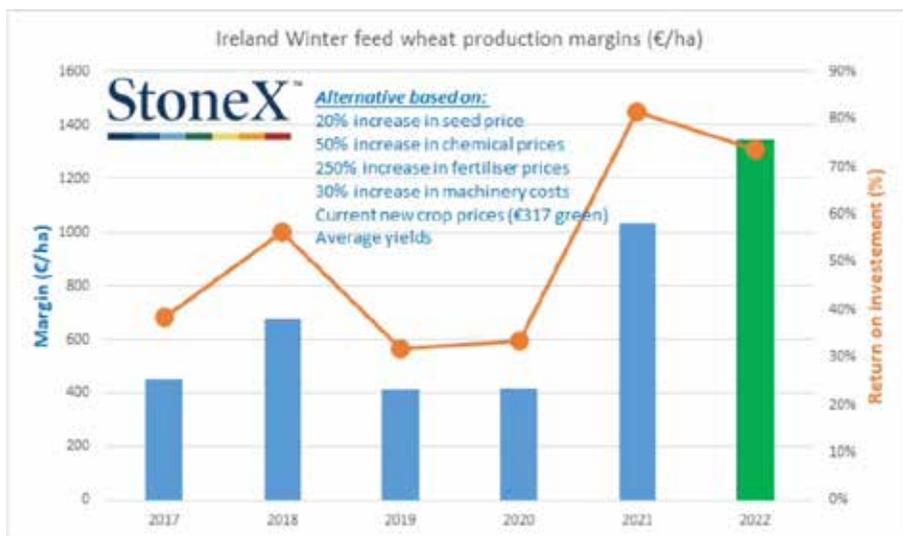
**Diclazuril** and **Toltrazuril** are licensed for the treatment and prevention of clinical coccidiosis in lambs.

- Treatment timings are very important, so it is rarely appropriate to treat every lamb on the farm on the same day.
- Toltrazuril has a longer duration of action so one dose is all that is necessary.
- Various studies have shown that, in the face of a coccidia challenge, lambs treated with either **Diclazuril** or **Toltrazuril**
  - shed fewer coccidia oocysts
  - have less or no diarrhoea and
  - have better growth rates than untreated lambs.

*Remember, prevention is always better than cure*

# Return on Investment for Grain Production Never Looked Better!

By Paul Mooney – (B.Agr.Sc) – Ph: 086 3532342



Graph comparing margins over inputs for winter wheat over the last 5 years, with projected margins for 2022.

Grain price has risen by 50% since February which is having a big impact on margin outlook for 2022. Projected harvest prices are currently hovering around €315/t for green grain. Provided we achieve good yields, which is always at the mercy of growing and harvesting conditions, this year is shaping up to be a very profitable year for grain production. While costs have rocketed, the pay-back from applying the optimum level of inputs is now more justified than ever, and can be seen in the the above graph.

“Our thoughts and prayers continue to be with all the brave people of Ukraine at this horrific time”

## Acidosis in Calves at Grass

By Joe Naughton – (B.Agr.Sc) - Ph: 086 145 2586

On many farms, calves get varying levels of scour shortly after they go to grass. Calves begin scouring, have poor appetite and start losing weight. It can happen over the 1st week or more slowly over the first 3 weeks. Calves can have a brown or grey scour (grey indicating a more severe level of acidosis). Scour can do serious damage to the overall health and long term thrive, particularly in younger calves. Calves get these Summer scours for a variety of reasons such as Molybdenum toxicity, Coccidiosis, wet grazing conditions, Pneumonia, stress etc., but **acidosis** is often the primary cause.

Calves are often put out on lush green pastures where high levels of nitrogen may have been applied. The lush highly digestible, high sugar, low fibre grass breaks down much faster in the rumen than the hay/straw based diets they were used to indoors. This can lead to a rapid build-up of acid (acidosis) leading to digestive upset and scour.

### To help avoid acidosis

- Ideally, turn calves out to older permanent pastures that have received little or no fertiliser and that have high covers where some stem will be available.
- Feed fresh straw each day for a period of 6-8 weeks until calves get adjusted to the grass diet. Straw is a source of fibre which is necessary to continue to aid rumen development.

- Have calves eating 2 kg of concentrate before turnout. Ideally Grennan's Early Graze Calf Nuts. Feed 1kg twice daily for at least the first 4 weeks.
- Continue to feed 2 kg of concentrate after turnout for at least 4 weeks until calves get adjusted and then feed 1-2 kg per day over summer months where there is sufficient grass.

**Grennan's Early Graze Calf Nuts** are designed specifically to help prevent acidosis. They are low in starch and high in fibre, contain a high spec mineral and vitamin pack. They also contain extra Rumen Buffers to help prevent acidosis.

Make sure water troughs are clean and select a sheltered paddock to start off in.

If scour arises on farm, it's important to rule out other common causes first, such as Coccidiosis, Nematodirus and Molybdenum (Mo) toxicity. So, carry out faecal egg counts first and consider testing grass for Mo and Cu levels.

Where problems with summer scour syndrome have arose, calves have responded well to buffers, yeast and adding fibre to their diet. The worst affected calves may need to be rehoused, put back on milk and given rumen powders to get the rumen micro flora up and running again.



## Grennan's Immuno Products

Proving their worth this calving season

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We are continuing to see tremendous results from our various **Immuno** products over the last few months.

- Much improved cow health around calving time.
- Higher IGG levels in colostrum.
- Big improvement in calf health and shine.
- Reduced levels of crypto and rotavirus scours on farms with history of same.
- Significant reductions in SCC's when cows are fed **Immuno** products.

Currently we have **Immuno** in our **Immuno Mega Milk**, **Immuno Calf Nuts**, **Immuno Per-Calver mineral**, **Immuno Pre-Calver Nuts**.

At a cost of only 15c/cow/day and in light of the increased restrictions on antibiotic usage, we see a tremendous future for this natural product and plan to make it an integral part of our feed health packages going forward. We are now considering introducing a new dairy nut which will be designed to deliver a reduced level of **Immuno** for the entire lactation and thereby have cows in a much higher health status for drying off. Watch this space.....