



## Milk Quality Advisor Dairy Health Certificate 2021

Each herd that supplies milk must be certified by your vet annually to meet specific animal health requirements as specified by the department of Agriculture, Food and the Marine.

The certificate must be submitted to Arrabawn Co-op each year. The recommended time to certify your herd is at your annual herd test which enables you and your vet to fully complete and sign the form while inspecting the cows.

If you have misplaced your blank health Cert which was sent to you earlier this year by post please contact your milk advisor.

**Note: Arrabawn will not be in a position to collect milk from your holding from the 1<sup>st</sup> of January 2021 unless it has received the fully completed certificate.**

1. It is no longer a requirement to submit a list of animal tag numbers with the completed certificates.
2. **On page 1**, Veterinary Certification of Compliance the vet **MUST** complete the number of animals presented to him as milk yielding animals for certification.
3. **On Page 3**, herdowner Declaration of compliance the herd must complete the number of animals presented as milk yielding animals to the vet for certification.
4. Please send a completed health certificate by the 31<sup>st</sup> of December 2020 to

Arrabawn Co-Op  
Stafford Street  
Nenagh,  
Co. Tipperary

## Antibiotic Residues in Milk

With the resumption of milk production in most spring calving herds we are now in a high-risk period for antibiotic residues being found in milk from the dry cow period. The following procedures should be followed to avoid antibiotic contamination of milk

- Freshly calved cows should be clearly marked and ensure the correct withdrawal is observed in accordance with the dry cow therapy used check the dry cow instructions to ensure the correct withdrawal time is used.
- If possible, freshly calved cows and cows under antibiotic treatment should be kept separate from main herd and milked last.
- Any cow being treated with antibiotics must be clearly marked and withheld for the entire withdrawal period. we recommend testing the milk before it is allowed back in the milk pool.
- If a supplier suspects their bulk tank has milk containing antibiotics, he needs to follow the following steps
  1. Contact your milk lorry driver telling him of the problem and instructing him **not** to collect the milk until the supplier contacts him again.
  2. Contact your milk advisor and organise to have milk tested.
  3. Once the farmer has the result contact the milk lorry driver and inform him if the milk has to be collected or if it has been dumped.
- If a supplier's milk is found to be positive a penalty of **4 cent per litre** is applied. The milk must be dumped and collection is suspended until a fresh bulk sample is tested and is antibiotic negative.

## Mastitis control starts today

With calving now in full swing on many farms it is important to remember that over 75% of mastitis out breaks will happen in the next couple of months. Recording all cases of clinical mastitis is essential. When it comes to measuring the success of drying off and the dry period, monitoring udder health performance during the year, or investigating a herd problem, too often farmers rely on memory to provide these key details.

Recording these mastitis events on the ICBF system is another way to get even more value from your milk recording reports, as the "Clinical Mastitis" graph on the CellCheck Farm Summary report will then provide you with valuable information on your mastitis control protocols on farm.

Teat spray/dip product choice is also very important in the battle against mastitis on farm level. A recent Moorepark study has compared 100 teat spray products in lab conditions and also in on farm tests to determine their effectiveness on staph, strep and E. coli bacteria on the cow's teat ends.



## Public Advice-Covid Scams Warning

Garda Síochána, the HSE and The Department of Health would like to advise members of the public to be aware of potential scams relating to the Covid-19 vaccine.

In recent days, An Garda Síochána is aware of members of the public having received fraudulent text messages and calls regarding Covid vaccination.

The text messages have made requests for people to confirm private and sensitive information such as PPS number, date of birth and address.

Other people have received phone calls requesting they make an appointment for a COVID-19 vaccine jab at a random hospital. In most cases, the person receiving the call will say they are not in a position to travel to the hospital. This allows the caller to extract further personal details. Some individuals might confirm that they live alone or reveal their home address. The caller will then offer to come to their residence to administer a vaccine.

The HSE will never text or call individuals requesting personal information and they will never request payment for a Covid test or Vaccine.

Your local GP will be the first point of contact about vaccination or Covid testing.

The Covid-19 vaccine is free and it is not available privately.

We would ask that members of the public make contact with any vulnerable friends or family to make them aware of these calls and text messages.

### Tips and Advice

*Never disclose private information over phone or via text message.*

- Do not give out your PPS Number to anyone who makes unsolicited contact with you whether by phone or email. The HSE will never call or text you and ask for your PPS number
- The HSE will never call you to request your home address
- Never give away personal data or disclose who you may live with or if you live alone
- The HSE will never request payment for a Covid test or vaccine
- If you receive such a call, just hang up
- Anyone who mistakenly provides personal information in response to this scam should contact report the matter to their local Garda Station

If you have questions or concerns relating to Covid testing or vaccination, contact your local GP

**ARRABAWN**  
**€20** KIDS OVERALLS  
 Available Online

## Topstart Milk Replacer

Give your calves the best start with  
**TopStart**



**Buy 25 bags or more  
 for €42 a bag**  
**Buy a pallet for €41 a  
 bag**  
**Bag Price is €43 a bag**

TopStart quality-assured calf milk replacer, specifically designed and manufactured for Irish calves, has already been used to successfully rear over 20,000 calves across Ireland under the Co-op Source brand.

In order to achieve the target weight for breeding (330kg), farmers should be encouraged to include 150 grams milk powder per lt. – not added to a litre!

### Key advantages:

- **Performance:** replacement heifer calves have significantly improved first-lactation yields and fertility performance;
- **Reduced risk of scour:** consistent and acidified to improve digestion and decrease the risk of scour;
- **Earlier weaning:** earlier feed intake, rumen development and ultimately weaning;
- **Health:** Feeding antibiotic milk greatly increases the risk of development of resistant organisms (at a minimum, do not feed to heifers). Feeding whole milk greatly increases the risk of spreading disease such as Johne's disease.

TopStart is an easy-mixing powder that is suitable for ad-lib, computerised and once-a-day feeding systems.

24% protein (recommended 23 – 26% !)

18% Oil (recommended 16 – 20% !)

0% Fibre

7.5% Ash

Whey based - 20 kg bag

Contains PEP+ to aid digestion and gut developments

More information - TopStart is available in all Arrabawn Stores.

## Animal Health

### Annual Lepto vaccination is essential for both man and beast!

Leptospirosis is a highly contagious bacterial infection that can affect both you, your family and your cows and heifers. In humans the infection can be acquired from infected cows by coming in contact with their urine. This could be as little as a flick in the face with a wet tail or urine splashing in the parlour. Once infected, people may become tired, depressed or suffer from flu-like symptoms. Infected cows and heifers show signs of infertility including abortion, the birth of mummified calves, still births or the birth of weak calves. Dairy cows may also suffer from milk drop syndrome. Recently we have heard of cases of this mastitis/milk drop syndrome in herds that have “lapsed” vaccination programmes, where they have not vaccinated against Lepto in the past few years.

Leptospirosis is widespread in Ireland, with approximately 80% of dairy herds and beef herds infected<sup>1,2</sup>. In this country the disease in cattle is caused by *Leptospira Hardjo*. Once animals become infected, the bacteria colonise the kidneys and cattle may become carriers who shed the bacteria intermittently in their urine and pass the infection into the environment, infecting other cattle and their stockmen. Traditionally vaccination is carried out in the spring, heifers receiving their first vaccination in mid-February and the whole herd their booster injection in mid-March. Vaccination with Spirovac can be done at any time of the year. It will both reduce the colonisation of the kidneys, so reducing the number of carriers in the herd and shedding from those animals that are already infected. This then reduces the infectious pressure on the farm for the benefit of both man and beast.

The control of Lepto requires a 2-pronged approach

1. Reduced exposure to the disease
  - Try to maintain a closed herd where possible and don't buy in heifers or a bull
  - Ensure there are good boundary fences to keep other stock out
  - Use piped water, rather than open watercourses and do not co-graze with sheep, as sheep can be a reservoir for Lepto infection, maintaining the disease on a farm.
  - Minimise the infection reservoir through treatment, vaccination and/or culling of carriers
2. Increase immunity
  - Vaccinate breeding animals as early as possible before they are exposed to the disease with Spirovac, **2 injections of 2ml under the skin 4 to 6 weeks part**
  - Annual booster vaccination after initial course is completed, with 2ml of Spirovac under the skin



## Milk Recording

Reduce bulk tank SCC

Add value to animals

Improve Yield and solids

Breeding decisions - breed best

Accurate EBI's

Identify best and cows to cull

### Benefits of Milk Recording

Milk Recording is a tool which is vital on every farm to make data-based decisions! So why not start this year?

1. Reducing bulk tank SCC will be easily seen as cows contributing to the high value can be easily removed. 2 or 3 cows in a 100-cow herd can drive up the overall value very easily.
2. Earn more for surplus heifers or cows being sold from by having the data to back up their EBI's and potential milk supply.
3. By knowing the amount of milk solids being produced you can feed more accurately according to their production values and removing cows with high SCC will stop the spread of disease in the herd ensure udders are healthy and in turn raise solids.
4. Breed from the best cows only, use the best bulls on your best cows to produce great calves. Don't breed from poor performers! This can only be known from milk recording regularly.
5. EBI values are great but don't always give the full pictures. Two cows with the same EBI's can vary hugely in milk volumes produced. One cow may have higher milk solids values while another cow with the same EBI could be made up from fertility values.
6. Identify cows to culls follows on from breeding decisions. The bottom few cows in the herd should be ideally removed each year to allow for younger cows with better genetics to enter the herd. Cows with millionaire values for SCC have no place being in the herd and be shipped out!
7. So don't wait - do it now, start building your SCC story on your herd now - Costs € 12 with a potential gain of € 120 / cow.
8. Jars are not necessary; milk recording can be carried out in any parlour.
9. If you have any queries regarding Milk recording, please contact Arrabawn 087 6697010, Progressive Genetics or Munster AI

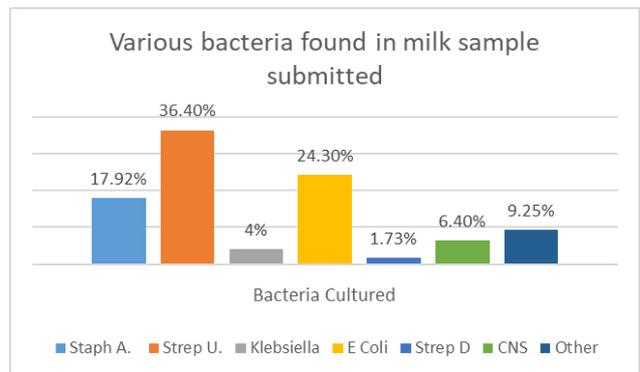
#### The importance of Pre-dipping

Everyone is aware of the importance of Teat Dipping post milking to control mastitis and its effect on SCC values. But, did you know dipping the cow's teat prior to milking is just as important?

Many of our milk suppliers submitted milk samples for Culture and Sensitivity testing before the dry period and the results were quite interesting. Majority of cultures (bacteria present and grown) showed **Strep Uberis** or **E. Coli**. These 2 strains of bacteria are from the environment. During the spring main sources

of bacteria are cubicles, straw in calving pens, splashing dirt with hooves in collecting pens or roadways. Even the cleanest looking cubicles or straw contains bacteria and can be passed onto the cow's teat skin. These bacteria can migrate from the outer skin into the teat canal causing an infection, in turn rising SCC bulk tank levels.

While cows are indoors the dirt can be physically seen and will take the extra step to remove the physical dirt. While the weather improves and cows get out to grass, they will start to clean off and dirt may not be as visible so cleaning teats before milking may be skipped. However, bacteria are plentiful on the skin surface even on the cleanest looking cow, this is why pre-dipping is crucial. Pre-dipping will remove these harmful bacteria and prevent them entering the teat canal while milking or passing on to the next cow via cluster surface. The bacteria can enter the teat canal before you get the chance to disinfect with post milking teat dip. There are many great products on the market such as Deosan Teat Foam Advance and Biocel Duo-Cel RTU. You may already have these products on farm so why not start using them before milking rather than just after!



So why not start this year off to a great start and give the cow's teats a dip before milking too! Contact your local Rep or Branch to find more information on products available.

## SPECIAL OFFER - UdderGuard

Chlorhexidine based Pre and Post Teat Spray/Foam, from Arrabawn, for the control of mastitis causing bacteria. Suitable for pre and post milking routine and also pre calving teat disinfecting.

Buy 2 X 200 litres get 2X 20l FOC.

Buy 1,000 IBC – 1,000 litres

give 3 X 20 litres FOC.

Both offers delivered direct to your farm

Offer expires 31<sup>st</sup> March 2021



## Mini portable milk cart available now from Arrabawn.

- Portable milking machine for goats, sheep or cows
- One milking unit
- Stainless steel 40lt milk tank with milk viewing lid. Capacity to milk 2 cows.
- Robust milk clusters & claw with milk sights.
- Full adjustable pulsators
- Milk cluster support arm that swings for easy milking access



AVAILABLE FROM ARRABAWN STORES

  
**Arrabawn**



Large range of stockman feeders now available at Arrabawn stores. These will be available to view online at [www.Arrabawnhomevalue.ie](http://www.Arrabawnhomevalue.ie)

Another very useful product which may have many very useful benefits around the farm is Stalosan powder. This powder can be used on cow cubicles, calving pens, individual calf crates or larger calf pens to control hygiene. Stalosan powder has the ability to soak up moisture while also creating a low pH in which bacteria can not survive. The bacteria gets a double hit without affecting the animals. Stalosan is highly recommended in farms where E. Coli mastitis may be issue around calving/early lactation in sheds or high volumes of calves passing through the individual calf crates to disinfect. It also helps to control ammonia smells in calf pens. (Apply rate 30g/m<sup>2</sup>).



## Grass Measuring Service

Weekly grass measuring service in North Tipperary  
Register your farm up on **Pasturebase**  
Walk the farm and give advice for the week ahead  
Advice given on Spring/Autumn Rotation Planner  
Explain how to address Defecits/Surpluses  
Make sure your farm hits key targets  
For more information contact Ger 087 9660794

## KEEP YOUR DAIRY COWS & CALVES HEALTHY

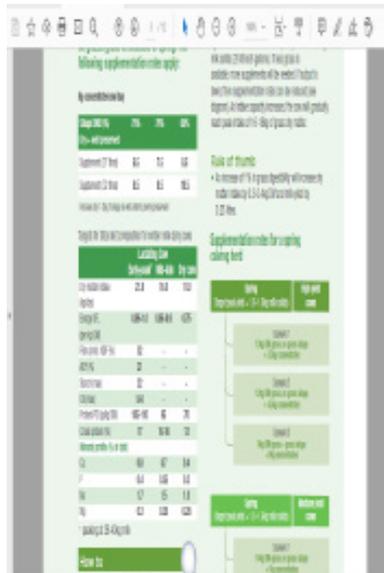
Apply Stalosan directly to straw, under straw and to cubicles.

- Apply to calving & dairy cubicles.
- Keeps disease at bay during critical calving periods.
- Effective against bacteria responsible for scour, pneumonia, lameness, mastitis and more.
- A 15kg bag covers 300m<sup>2</sup>

## Early Cow Nutrition- 100 days post Calving.

Early lactation is most stressful time of the year for your cows. Between calving down, reaching peak yield, prepare to cycle again while not being able to consume their peak dry matter intake. All these events require a lot of energy which must be supplemented through the diet. It is natural that cows will lose some weight but it can be controlled with good diet management.

- Cows require 17-18% Crude Protein in their diet for early lactation. Ensure to choose a good quality dairy nut with the sufficient protein content. This protein will support milk peak yield, maintain body condition and general health (immune function). Cows may need up to 8-10Kgs of concentrates in early lactation, ideally spilt into morning and evening feed. (CP = Crude Protein)  
 $CP \text{ Silage} + CP \text{ Dairy Nut} \div 2 = \text{ideally } 17-18\%$   
E.g » 13% Silage + 22% concentrate = 17.5% CP in diet
- If February grass is of good quality, the protein level in the grass could be high enough to allow you to feed a 16-18% protein nut, however if grass is poor quality due to the weather, the protein levels will drop and cows will require a 18-22% protein nut.
- Energy and carbohydrates are also critical to balance. Energy is in high demand and must be higher than energy expenditure. Ketosis and NEB- Negative Energy Balance are a result of low energy intake, which will have a knock-on effect on feed intake, loss of BCS, lower yield, longer to cycle again.
- A cow could lose 0.7kg/day if not feed its daily energy requirements. A high genetic merit cow will mobilise body fat at a higher rate than a lower genetic merit cow.
- Cows should be encouraged to up their feed intake as every additional kg of Dry Matter consumed can support 2-2.4kg more milk. Feed intake can be encouraged by;
  - Good forage quality- DM and DMD.
  - Increased feeding frequency- little and often. Consistent feeding times.
  - Feed Infront of cattle 20hrs of the day.
  - Forage length of at least 2.6cm to encourage chewing and rumination.
  - Avoid major changes in diet
  - Cows tend to eat straight after milking, ensure sufficient feed is available directly after milking.
  - High producing cows will tend to eat 12 times a day for roughly 23 minutes.



## Livestock sales

Portumna Mart wishes to advise that a calf/weanling sale will be held every **Monday evening @ 5pm**.

Collection service available if required.

For further details please contact the office on 0909 741115.

Usual sales each week – Sheep sale every Tuesday @ 10.30am, Cattle sale every Wednesday @ 11am.

## Central Auctions - Nenagh Mart

- Calf Sale every **Thursday at 11am**.

Intake from 9 am with a drop and go system for Sellers.

Viewing from 10.00 – 10.50.

**Calf collection Service available on request.**

- Dairy Sale every 2<sup>nd</sup> Thursday from 12pm, with Annual Show and Sale on Thursday 11<sup>th</sup> March.
- General Cattle Sale every Tuesday from 10.30am.

Entries welcome for all the above Sales.

To view Sales download

Martbids app.

For further details contact 067 31380 or David at 086 8904036.

## DoveaGENETICS

### SAINTBRIGID FRANK JOSEPH (FR5860)



EBI €318

- One of Irelands Leading EBI Sires
- + 35 Kgs of Milk Solids with Excellent Percentages
- Available in Sexed Ultra

Spring Directory Available Now

Dovea Genetics Ltd. | Dovea, Thurles, Co. Tipperary

Tel: 0504 21755 | Web: [www.doveagenetics.ie](http://www.doveagenetics.ie) | Email: [info@doveagenetics.ie](mailto:info@doveagenetics.ie)



EBI €280

### GLENABOY RONALD (FR4785)

- Your No.1 Heifer Bull for 2021
- 3.8% C.D on Dairy Heifers (88% Rel)

## Spring Grazing advice

Very few farmers have been able to get out to grass in the last couple of weeks. Teagasc have shown that each extra day at grass in spring is worth €2.80 per cow so it's important to get spring grazing management right. However there are a number of important management decisions to be made in order to capitalise fully on this.

1. Fertiliser – at this stage the milking platform should have received a half bag of protected urea per acre. If not, get it out straight away. The only exception is ground that received slurry. 1000 gallons of typical slurry is equivalent to a bag of 6-5-32, so 3000 gal/acre is the same as 15 units of N. At this time of year, it should be possible to grow 10-12 kg DM for every kg of N fertilizer applied, so it's an excellent investment. If soil tests show P & K is required, a little and often approach is recommended for P. However, for K moderate applications are ok in early spring (up to 20 units/acre) but avoid large applications (more than 30 units/acre) until later in the year as too much K in spring grass can result in Magnesium deficiency and grass tetany. In early-mid March, a further 46 units of N (1 bag of P. urea) should be spread across the whole farm, to reach the target of 70 units/acre of N by April 1st. If you are too busy get a contractor to do this job, don't delay as it will cost you money in lost grass.

2. Spring rotation planner - There will never be enough grass to exactly match forage demand in early spring. So some form of plan is needed to ensure the right amount of grass is utilised. The first step is to select the anticipated start date of the second rotation. For dry farms, this should be close to April 1st. On wetter ground, it might be April 15th or thereabouts. The spring rotation planner will then calculate the exact area you should graze each day between the start of grazing and the start of the second rotation. The example below shows the weekly area to be grazed on this farm. PastureBase Ireland has the spring rotation planner feature as part of the online programme. It can also be found online on the Teagasc website. Accurate use of this tool will ensure you don't overgraze and run out of grass before rotation 2 starts. Remember the target cover for the first paddock of rotation 2 is 1200-1300 kg DM/ha. You need to follow the spring rotation planner as closely as possible or you won't have enough grass to start rotation 2 at the target date.

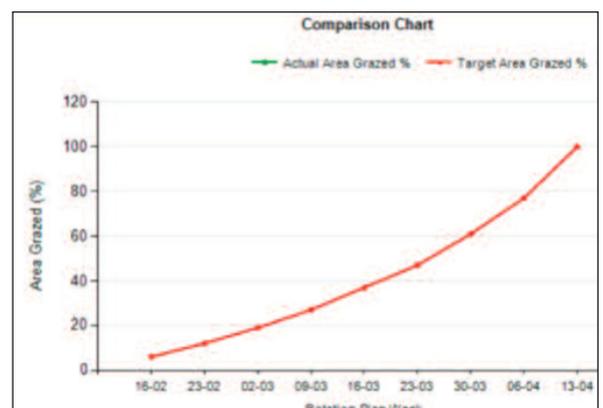
3. Post grazing residuals or 'clean outs' - The target grazing residual sward height is 3.5 - 4 cm. It's important to graze tightly at all times of the year so that the following regrowth is high quality grass. Leaving half grazed paddocks behind will result in more dead material in the sward base in the subsequent rotation and a poorer quality sward that is lower in leaf and higher in stem. This will affect milk protein levels and yield at an important time of the year when cows are at peak yield.

4. Grazing in wet weather. All of the above points depend largely on weather conditions. However, you have to be flexible and ready to take an opportunity when weather provides. Often, March can be wetter than April. If a couple of dry days come, take advantage and get cows out. There are numerous strategies to improve grass utilisation in wet weather. They include:

On-off grazing – let cows out for 3 hours after each milking. They will consume 90% of their total daily intake of forage during this time.

If out full-time and its wet, use 12 hour breaks – set up your paddocks so that cows do not back graze over yesterday's allocation.

Use back fences and temporary spur roadways if necessary to avoid poaching.



Example of a spring rotation planner. Note that as growth accelerates in March & April, the curve moves upwards & the daily area grazed becomes larger.

## Protected urea: what is it, does it work, and is it cost effective?

Ireland has a very favourable climate for growing its largest crop, grass. To achieve grass growth potential, fertiliser nitrogen (N) is a key input. However, fertiliser nitrogen also plays a role in gaseous N losses and water quality. The Irish government has committed to reduce national losses of both ammonia and the potent greenhouse gas nitrous oxide while achieving good status for all waters. In relation to gaseous emissions agriculture accounts for 33% of national GHG emission and 98% of ammonia emissions and as a consequence is under the spotlight to reduce emissions. The use of protected urea nitrogen fertiliser is the largest single avenue currently open to Irish agriculture to meet these commitments to reduce GHG and ammonia emissions.

### What is protected urea?

Protected urea is urea which is treated with an active ingredient called a urease inhibitor. The urease inhibitor can be either a) coated onto the outside of the fertiliser granule or b) incorporated into the urea granule melt during manufacture.

### How does a urease inhibitor work and what role does it play in stopping ammonia loss?

Urease is the enzyme which catalyses the conversion of urea to ammonium. It is during this conversion that ammonia gas is lost from untreated urea. A urease inhibitor blocks the active site of the urease enzyme. This moderates the rate at which urea converts to ammonium. In so doing ammonia loss is reduced to low levels.

### Will slowing the conversion from urea affect the availability of N for the grass crop?

No, because the conversion of protected urea to ammonium begins as soon as the fertiliser granule starts to melt. The urease inhibitor moderates the rate at which the urea-N converts to ammonium. The result is that the conversion occurs over period of a few days rather than a few hours, as would be the case with conventional urea. Remember, when fertiliser N is applied to soil its aim is to supply the grass or crop with N over a period of days to weeks rather than hours.

### Are there different urease inhibitors used to manufacture protected urea? What are they?

Yes, the following products are recognised as acting effectively as urease inhibitors: a) NBPT b) 2-NPT, c) NBPT+NPPT. Teagasc has conducted research with all three inhibitor options, most extensively with NBPT and NBPT+NPPT.

### Are these approved for use in Ireland?

Yes, these active ingredients are approved for use by the European Chemicals Agency through the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) process.

### Can I spread protected urea throughout the growing season?

Yes, you can spread protected urea across the growing season at times when you would otherwise spread calcium ammonium nitrate (CAN) or unprotected urea. This may potentially simplify the fertiliser spreading programme on the farm and setting up of fertiliser spreader for only 1 straight N product each year.

### Will using protected urea reduce yields?

No, published Teagasc trials (Figure 3) have shown that protected urea consistently yields as well as CAN in Irish grasslands with no difference in annual production between the two fertilisers

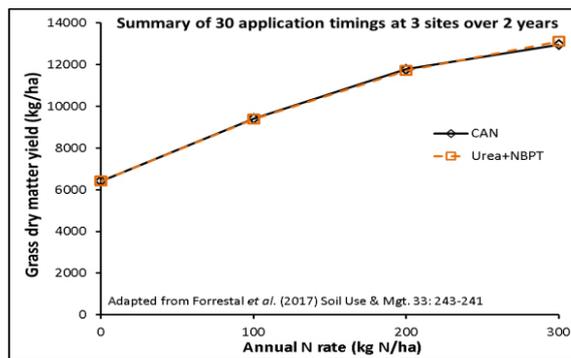


Figure 3. Summary of total annual grass dry matter yield (kg/ha) for CAN and protected urea evaluated across 2 growing seasons (2 years) on three soils (locations)

### Will using protected urea reduce efficiency?

No, published Teagasc trials conducted in different areas of Ireland have shown that the nitrogen recovery efficiency of protected urea and CAN are consistently the same.

### Is protected urea cost effective?

The costs below show protected urea to be less costly than CAN while performing just as well in terms of yield and N recovery efficiency. Bear in mind that fertiliser costs fluctuate but always make the cost comparison on the basis of cost per kg N for straight N products.

Fertiliser N product	N Content %	Cost per tonne	Cost/kg N (€)
Urea	46%	€355	0.85
Protected Urea	46%	€295	0.95
CAN	27%	€270	1.05

### Does protected urea reduce Emissions?

**Does protected urea reduce loss of the potent greenhouse gas nitrous oxide?** Yes, published Teagasc trials have shown that protected urea has 71% lower nitrous oxide emissions than CAN

**Does protected urea reduce loss of Ammonia?** Yes, based on published Teagasc research protected urea has comparable ammonia loss to CAN and ammonia loss is reduced by 79% compared to urea

### Is there potential for protected urea to reduce nitrate loss to water?

Yes, during periods when leaching occurs nitrate present in the soil is vulnerable to leaching loss. Protected urea does not deliver N directly as nitrate to the soil, therefore reducing the risk of nitrate losses occurring with rainfall post fertiliser application. Reduced ammonia loss compared to urea will also reduce the risk of ammonia N being deposited from the atmosphere onto sensitive habitats or into sensitive water bodies.

### Summary

Use of protected urea can reduce agricultural greenhouse gas emissions and ammonia emissions while maintaining yield and saving cost.

GHG emissions	Ammonia emissions		
	Level	High	Low
	High	CAN	CAN
Low	Urea	Protected Urea	

Table. Relative greenhouse gas and ammonia emissions from three N fertilisers

### Stay connected with us!!

Check out our **website** for weekly farming updates. Find us at **www.arrabawn.ie**  
 Connect with us on social media on Twitter **@arrabawncoop** and **@milk4profit** for regular farming updates and promotional offers.  
 We are also on Facebook at **Arrabawn Co Op**  
 For further information or advice on any subjects or products mentioned in this newsletter  
 Please ring **087 6697010** Email: **farmsupport@arrabawn.ie** • Check out our Website: **www.arrabawn.ie**