

PIGS

January 2022

Edited by Amy Quinn



Welcome to the January edition of our monthly newsletter. The start of this year and the months ahead are unprecedented and extremely challenging for all producers.

The Teagasc Pig Development Department (PDD) is committed to work diligently on assisting producers during the current crisis in whatever way is needed. Much focus is on assisting producers review on farm costs and assisting in accessing finance that is much needed to help navigate through this extremely challenging period.

We in the PDD have been engaging with key stakeholders and in recent weeks we have had ongoing and regular contact with the IFA, meetings with the IGFA/Feed Mills and the Banks to outline the issues facing the sector, the losses occurring, what's required to fund the sector going forward and likely outlook for the sector for 2022.

We strongly encourage all farmers to talk to their bank to highlight the current circumstances and apply for the finance needed at the earliest stage

possible. The PDD advisory team are on hand to assist producers in preparing documents such as cashflows to support such applications.

We are also hosting a webinar on "Financial supports to weather the crisis" on February 16th at 1pm. Further details and registration link to follow.

The PDD are mindful that on top of this crisis there are a number of legislative changes that are going to impact pig production this year; such as the forthcoming ban on the use of Zinc Oxide as a veterinary medicinal product in June. We are holding a webinar on January 25th at 1pm on the "Practical considerations for the removal of Zinc Oxide". Further details can be found later in this newsletter.

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Quality Control of feed ingredients

Louise Clarke

Pig feed is normally considered to represent anywhere between 65-70% of the cost of production of pig meat. The forecast for 2022 is dominated by high feed costs and at the moment feed costs will constitute 75% of total costs. As producers are well aware at the moment we are in the midst of an unprecedented situation in terms of raw material prices and unfortunately this is not expected to change dramatically until well into the second or even third quarter of the year.

In an effort to reduce feed costs pig farmers need to make sure they implement a good system of quality control for all feed, particularly farmers that are home milling. When a farmer is home milling they assume responsibility for the quality control of the feed that they produce and feed to their pigs. To ensure consistency a thorough quality control program needs to be developed and implemented on your farm. In order to make sure the quality of your feed is up to standard there are a few points you should consider:

1. When purchasing grain/feed make sure it is from quality assured suppliers only that have an effective quality control programme.
2. Careful consideration must be given to the list of acceptable ingredients and allowable limits/tolerances.
3. At a very minimum a visual inspection to monitor the physical characteristics of all grain/feed is recommend to ensure consistent pig performance. At the intake point grain/feed should:
 - be free of moulds, dirt, stones and other foreign debris.

- be free of rodent or bird contamination
- be free-flowing and non-sticking
- be free of any wet spots or evidence of heating
- have a consistent characteristic smell, texture and overall appearance

Grain whether purchased or home grown is subject to a great deal of variation, with the composition of grain varying from year to year and even load to load. This is why it is very important to measure and analyse it in advance. Test weight, moisture, broken and/or damaged kernels and foreign material should always be examined. These parameters allow a reasonable estimate to be made of the suitability of the grain as an animal feed.

Table 1: Minimum moisture percentage and hectolitre weight in cereals.

	Min moisture %	Hectolitre wgt kg/hl
Oats	14	50-55
Barley	14	60-75
Wheat	14	70-83



Figure 1: A: Barley with hectolitre weight of 57.2
B: Barley with a hectolitere weight of 70

The general rule of thumb is that the hectolitre weight of wheat should be more than 72 and that of barley should be above 62 to achieve a feed of good value. Reports from the 2021 harvest were very good with barley having a hectolitre weight between 67-68 and wheat ranging from 76-78. There are numerous pieces of on farm equipment that allow fast, reliable and easy to use testing. If you are home milling and you do not have some of these testing equipment on farm, you should really consider investing in these tools when you take into account the financial impact that feed quality has on overall performance and profitability. For example, on a 600 sow integrated unit that is producing its own feed approximately 1968 tonne of barley and 1624 tonne of wheat will pass through your mill on an annual basis. Adding a monetary figure to that it means that approximately €1.07 million of barley and wheat pass through your unit annually. If you were to purchase the equipment for measuring hectolitre weight it would cost you around €4000-5000. Therefore return on money invested in on farm quality control measures equipment will be quickly repaid.



Figure 2: Grain Analyser computer

A feed quality control plan should also include bin and lorry hygiene. If bins are not periodically

cleaned, ingredients or feeds can build up on the sides, resulting in mould growth and cross contamination. Operate an effective bin hygiene plan including running bins down to empty at least once a month, dust with a mould inhibitor every 6 months (Spring and Autumn) and pressure wash bins, allow to dry and disinfect and fumigate to eradicate mites and insects on an annual basis while continuously being on the lookout for leaks or condensation that create hang ups in bins.

Lorries can also sometimes be overlooked as a source of moisture, mould and contamination so if you rely on your own lorries to deliver feed to your unit, make sure that an effective cleaning programme for the lorry is also in place.

In addition to the above points farmers whether home millers or compound buyers need to always be on the lookout and seek up to date information on feed ingredients. For example on mycotoxin prevalence on a quarterly basis but especially at the start of the key raw material season (September and January). Information is available online from website such as Feed Navigator or Neogen and always seek information from your supplier.

One of the primary goals of any pig farmer should be to produce/provide high quality feed to their pigs. However, this is virtually impossible to do if you are operating with poor quality ingredients/feed. Therefore a good well developed and implemented quality control plan will help you reach this goal.

Using pig slurry to save money makes more sense than ever

Gerard McCutcheon

Farmers can save themselves money by using pig slurry to replace chemical fertilisers. This is now more relevant as chemical fertiliser prices are at an all time high. Farmers using pig slurry should make sure that they use the most pig slurry they can while also complying with the relevant regulations to grow their tillage and grass crops.

The EC Good Agricultural Practice for Protection of Waters Regulations, or what are often called the “nitrate” regulations are the relevant regulations for the management of animal manures on farms. The current version of the regulations is SI 605 of 2017. These Regulations are in place since 2018.

A number of changes were implemented in SI 605 of 2017. One major change was the requirement to use the previous year’s stocking rate (N&P statement) data to determine the bovine grassland stocking rate to calculate the nitrogen and phosphorus requirements for each farm. The organic nitrogen of any other grazing livestock must be added to the bovine figure (sheep, horses etc..) to establish the total organic nitrogen for the holding.

These figures allow the calculation of the nitrogen and phosphorus allowances for the farm to be planned for the current year. The regulations try to encourage farmers to soil test their lands as part of good management on the farm. There is a generous allowance of extra phosphorus required on lands with a soil P index of 1 or 2. **The**

responsibility rests with the “occupier of a holding” for the management of fertiliser and soils on their own farm.

All farmers should be doing soil tests and having nutrient management plans drawn up for their farms if they want to optimise the growth of grass or tillage crops on their farms. They may not be getting the best value from their fertilisers (organic and/or chemical fertilisers). If a farmer is using pig slurry, doing a nutrient management plan may help ensure they do not use chemical phosphorus which will reduce the amount of pig slurry they may obtain.

Farmers need to plan ahead to get the best out of using organic fertilisers such as pig slurry to save them money. At the start of the year they should get their Advisor/ Agri-consultant to calculate how much pig slurry they could use to replace the chemical fertiliser. **If you fail to plan, you plan to fail!**

The PDD have produced a guidance document on importing pig slurry. **We encourage you to give this handout to any farmer who might be interested in saving money on chemical fertiliser** using the nutrients supplied in pig slurry. This handout encourages farmers to do the calculations for their farm early in the year. A copy of this handout is available on our website and can be found on next two pages of the newsletter.



Using pig slurry to save money makes more sense than ever

Pig slurry is **now worth €48 per 1000gallons**. This double its normal value because fertiliser prices have never been so expensive. Using pig slurry can save you money - now more than ever before!

With the nitrate regulations that now exist it is possible to calculate the amount of organic fertiliser a farm can use in the current year at the start of the year. Good decision making can now allow a farmer save money on chemical fertilisers – why don't you get the calculation done for your farm??

For a farmer using Pig Slurry:

The calculation of how much pig slurry a farm may use is dictated by firstly staying below the 170 kg of Organic Nitrogen (N) per hectare. This is based upon the N&P statement from the previous year which is a record of the bovine animals on the farm. If you have other grazing animals (sheep, goats, horses, donkeys and/or deer) on the farm these need to be added to the Organic N calculation.

The second part of the calculation is to ensure that you do not exceed the Phosphorus (P) requirements for the farm. This is where soil test results can be important, particularly if the soil P index is 1 or 2 for some plots on the farm.

The following factors are part of the calculation:

- The Organic N Stocking rate of the holding (excluding imports) affects the Phosphorus requirement on grassland.
- If silage or hay is sold off the farms (stocked at <85 kg grassland stocking rate) it will increase the P requirement for the farm.
- The quantity of concentrated feedstuff used in the previous year must be factored into the calculation.
- If chemical fertiliser containing P is purchased in the current year it will reduce the volume of pig slurry that the farm requires.

The area of various crops and the soil P levels for each crop is critical to this calculation.

List of Items a farmer needs to for a fertiliser plan for the coming year:

- N&P statement from the previous year.
- The number of non-bovine animals on the farm in the previous year (e.g. sheep, horses, etc).
- Total tonnage of feed concentrates fed to grazing livestock in the previous year.
- Planned tonnage of chemical fertilisers for the current year.
- Soil test results, area of plots and crops in each plot in the current year.

Note:

Soil test results are only valid for 4 years after taking the soil sample. A sample should be taken for an area of 4 hectares (or a max of 5 ha. in exceptional circumstances).

Pig Manure: A Valuable Fertiliser

Worth €47.59 per 1,000 gallons



€ = Nutrient Content
x Nutrient Availability
/100 x Fertiliser Cost

1m³ pig slurry
is worth €10.46
at 4.3% solids

1m³ = 220 gallons
1,000 gallons = 4.55m³
4.55m³ x €10.46 = €47.59

1,000
gallons =
1 Bag
19:7:20

	N	P	K
	Nitrogen	Phosphorus	Potassium
Nutrient Content kg/m ³	4.2	0.8	2.2
Nutrient Availability*	50	100	100
Fertiliser Cost per kg**	2.18	3.69	1.33
Value	4.58	2.95	2.93

* i.e. Available to crop. (SI 605 of 2017)

**Based on chemical fertiliser prices November 2021

For more information visit teagasc.ie/animals/pigs

Webinar: Zinc Oxide January 25th

The PDD will hold a webinar on January 25th at 1pm. During this lunchtime event we will focus on the practical steps and considerations for producers in advance of the ban on Zinc Oxide.

We will be joined by Dr. Francesc Molist, Manager of Research and Development with Schothorst Feed Research who will discuss nutritional and management approaches to Zinc Oxide removal. We will then hear from Edgar Garcia Manzanilla, Head of the Teagasc Pig Development Department who will discuss removing Zinc Oxide and reducing antimicrobials step by step. We will also hear from a number of pig producers who will share their experiences and insights thus far in removing Zinc Oxide from weaner diets.

We encourage as many as possible to attend this lunchtime event and strongly urge producers to ensure as many staff as possible attend as there will be plenty of information and discussion of value for all. To register please visit: https://zoom.us/webinar/register/WN_0ZJ8uMR_YQXaJEBuFswLp_g

Webinar: “Financial supports to weather the crisis” February 16th

The PDD will host a webinar on “Financial supports to weather the crisis” on February 16th @ 1pm. This webinar will highlight the current financial situation on Irish pig farms and detail how to calculate your current costs using a Teagasc PDD ready reckoner & work through cash flows for your farm. We will also hear about SBCI funding opportunities and how to prepare properly for a meeting with your bank. Further details and registration link to follow.

Polish financial assistance

In response to the crisis in the pig sector and the closure of pig farms in Poland, the Polish government has decided to grant financial assistance to pig producers to prevent such closures. The beneficiaries will be farmers who have sows with piglets born between November 15, 2021 and March 31, 2022. The aid will be PLN 1,000 (€215) for a maximum of 10 piglets born per sow and up to a maximum of 5,000 piglets (500 sows). The estimated cost of this aid totals PLN 400 million (86 million euros). Applications must be submitted between April 1 and 30, 2022 and aid will be paid in June. (Source; December 2, 2021/MRiRW/ Poland. www.gov.pl)

Welcome back Jen

Dr. Jen Yun Chou has returned to the PDD as a postdoctoral fellow, funded by the Teagasc Research Leaders scheme. Many of you will have met Jen already, as she carried out her PhD with us here in the PDD on the subject of environmental enrichment for pigs in fully slatted systems. Jen will now investigate ways to decrease aggression. She will be based in Austria for the next 18 months in the research group of Prof Jean Loup Rault at the University of Veterinary Medicine in Vienna, where she will look at in depth animal behaviour measurements, and during this time she will carry out a secondment at IRSEA in France, who are the developers of the pig appeasing pheromone (PAP). Finally, she'll return to Moorepark where the knowledge acquired will be applied to a semi-commercial longitudinal experiment. Her work will be useful in the context of not only reducing pig aggression in general or after mixing, but in reducing the impact of removal and re-introduction of pigs to a stable group, which could be increasingly common as efforts to stop tail docking continue.



For more information:

Please visit our webpage at:
<https://www.teagasc.ie/animals/pigs/>

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