THE PIG ISSUE
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Garth Pig Practice Ltd

Timing of Iron Supplementation in Piglets

The supplementation of iron to new born piglets is widely done within the industry in order to prevent anaemia. Despite the fact that this practice is widely adopted, the timing of the administration, usually by injection, of the iron does vary from farm to farm. The reasons behind these differences are usually related to the timing of other procedures but what is the optimal timing from the point of view of reducing anaemia?

Iron is vital to produce haemoglobin. Haemoglobin is the compound responsible for carrying oxygen and if iron is deficient, blood concentrations of this compound are reduced. At birth, piglets have an average haemoglobin concentration of 125g/L and without supplementation this reduces to 65g/L by days 10-14. A piglet would be defined as anaemic if its haemoglobin concentration drops below 80g/L. In one study supplementation at days 1, 3 and 4 were compared. Piglets were supplemented with a standard commercial dose of iron by injection. The results showed that by day 7 piglets injected on days 1 and 3 had sufficient levels of haemoglobin. With piglets injected on day 4 being slightly anaemic at 78g/L. However the group injected on day 1 had the highest levels by quite a margin.

However the next question is what happens after day 7? Traditionally it has been accepted that once the piglets start eating creep feed they are then able to maintain their iron levels. However some recent research has highlighted that using what are very high doses of iron early on in a piglet's life negatively impacts on iron absorption later. This has negative effects on growth rate. Alternative strategies involve using lower doses of iron split into two injections at days 3 and 14. Obviously, this does involve handling and injecting piglets twice which would not suit every unit. However the advantages are that iron levels are maintained without reducing iron absorption and metabolism.

In summary, the research suggests that iron should be injected before day 3 in order to prevent piglets entering an anaemic state. This is in line with the data sheets for the products. As for how much mileage there is in using the lower dose - two injection strategy this should be discussed with your consulting vet as it would be off label. Further research is likely in this area and we will keep you posted.

Light Colour and Seasonal Infertility

Some recent research from the University of Manchester has demonstrated that the body clock of mammals is much more related to the varying colour of light rather than the brightness. That is to say that our body clock knows that it is dusk due to the increase in the proportion of blue light detected by our eyes rather than because it gets appreciably darker. The researchers believe that the mouse model used in their study also applies to humans so, why not pigs?

The relevance of the study may be to seasonal/autumn infertility. A large factor in the drop in fertility at this time is due to the rapidly decreasing day length. This goes back to the days when the wild pig only produced one litter per year in the spring.

In the indoor unit we can manipulate the day length using artificial light but this only has a limited effect especially when the sows are exposed to some natural light changes. Is this because the artificial light does not mimic the varying frequency pattern of natural light? Obviously no work has yet been done on this in the pig farming environment however there could be some mileage in it in the future. Especially now LED technology is so much cheaper and the colour of the light LEDs emit can be more easily altered.

Keep sows cool this summer

Check water flow rates (at least 2L/min), check insulation, ensure fans are kept clean, sprinkler systems can be useful or on straw based systems leave some damp concrete for sows to lie on.

Wild Boar in the Forest of Dean

Having lived next to and worked in the Forest of Dean for four years now I am acutely aware of the problems posed by Wild Boar.

They are very destructive especially on bin day and pose a danger on the roads. There are also incidences of aggression between boars and dogs. The numbers of boar are now estimated to be around 800 in the Forest however this is likely to be a low estimate.

True wild boar have actually been extinct from England for centuries however the boar we find running wild today are actually derived from farmed variants illegally released. As such, they are quite effective at breeding, producing 6-10 piglets per litter and at least one litter per year.

Forestry Commission culling has been going on since 2008 when a target population of 90 animals was set. Since then numbers have increased every year despite the culling. The original culls targeted 100 animals compared to last year when they took out 350 leaving a population of around 400-500. This evidence clearly shows that current culling is struggling to control the wild boar population.

This is very crucial for our pig industry because, should African Swine Fever reach our shores, populations of wild boar could act as a reservoir of disease. This would be a similar pattern to that seen in Eastern European countries and would make the disease much harder to eradicate.

Rodent Control Training Courses

Sadly the free BPEX courses on rodent control have come to an end. However training can still be sourced through LANTRA – see their website for details. It is likely still worth doing a course because under potential upcoming HSE legislation you may not be able to poison rodents without a recognised qualification.

LANTRA AWARDS

Combined PCV2/M hyo vaccine due for launch in July

MSD Animal health will shortly be making available their new vaccine Porcilis PCV Mhyo. This vaccine will provide protection against wasting disease (PCV2) and Enzootic Pneumonia (EP) via a single 2ml intramuscular injection which can be given from 3 weeks of age. Please speak with your unit vet regarding this product if you are interested.

Topical Talk – what we are seeing….Tail biting

Not only is tail biting a welfare issue, but the production efficiency of the unit is greatly reduced, in terms of increased mortality/need for euthanasia, increased antimicrobial use, abattoir condemnations and lost growth rate.

It is known that tail biting is multifactorial in origin, resulting from the interaction of various factors with the animals. It can be very frustrating to pin point the cause.

- Ensure that all tails are docked to a consistent length. Variability in tail length within a pen predisposes to tail biting.
- Reduce stocking rates: Red Tractor and Freedom Food guidelines are maximums – not a target!
- Take the tops off yards early to avoid over-crowding and competition.
- Avoid mixing pens of pigs/splitting down pens.
- Increase feed space and water access. I recommend at least 1 hopper/nipple per 10 pigs and water flow of 1.5L/min.
- Any health problems should be treated quickly. Respiratory problems and diarrhoea almost double the risk of tail biting occurring.
- Maintain comfortable temperatures whilst allowing adequate air flow. Ammonia levels >10ppm will increase tail biting. Avoid draughts and high air speeds. Adjust gale breakers/inlets several times a day.
- Ensure quality feed is delivered with adequate Vitamin E and salt levels. Consider salt levels of up to 0.9%.
- Offer toys as enrichment BEFORE tail biting becomes an issue. Although straw is adequate in terms of Red Tractor compliance, extra must be added to stimulate and occupy the pigs. Whole bales, chains, plastic pipes, drums with stones in that rattle, large tree branches (no leaves) newspaper/magazines, mineral salt blocks, hanging tote bags, are good choices. Offer both floor and suspended toys. Change/rotate toys regularly.

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