

Tryptophan for young piglets - Part 2

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Absoulte technology gains a new convert

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Absolute technology gains a new convert



Robert Sabeta
Inseminating a sow
using Absolute SOW.



Following a trial at Brookside Farm in Tarlac province in the Philippines, ISA Q. TAN reports that the Absolute Swine Insemination System has gained a new convert.

For the most part, deep insert artificial insemination remains the expertise of a handful of breeding experts.

In the December 2004-January 2005 issue of *Asian Pork Magazine*, Mark Anderson, inventor of the AbsoluteSow and AbsoluteGilt deep AI catheter, said that with his products, this no longer needs to be the case.

While it is not the only deep AI catheter in the market, the Absolute catheter is different because it has a specially designed membrane inside that turns itself inside out when semen is squeezed into a rod. Anderson explains that the

membranes are designed to open inside the cervix to deposit the semen directly into the uterus where it will have the most effect.

The latex membrane gives the catheters a flexibility that makes them safe to use. Other deep AI and transcervical catheters have semi-rigid rods inside which could lead to injuries that may permanently damage the sow's or gilt's reproductive system.

In late 2004, Absolute Swine Insemination Co (ASIC) began a trial with Brookside Farm in the Philippines. The trial was to compare the performance of the Absolute catheters with the

traditional cervical catheters that was being used at the time by the farm.

Slow start but good end

There was a slow start as farm hands had to learn the new protocols in using the Absolute catheters.

Anderson explains that while there was a slight learning curve for the technicians to deal with at the beginning of the trial, there was a marked improvement over the traditional catheter by the end of the trial.

But perhaps more than improving the conception rates in the farm, Anderson says that the trial gave ASIC "a chance to clearly illustrate the pros and cons of proper versus improper implementation of the Absolute technology."

"Since Absolute animals are bred in refractory heat and the semen gets into the horns immediately, an initial insemination delay was determined necessary based on each animal's individual number of dry days, post weaning. Such an effort is very easy to coordinate on



Left:
Mylna Tendo, Farm Coordinator for
Brookside and RH Farms and
Pacific Roque, Brookside Farm Manager.

farm and was found to be critical to the overall success when using the ASIC technology."

During this time, Anderson and his assistant Dr Jo Ann Hachuela found out that Brookside's animal were cycling into oestrus later than expected. This resulted in some initial difficulties, and modifications were made in insemination timing and scheduling.

Doing well with Absolute

Two other farms that did trials with the Absolute technology have reported improved results.

One farm is Pilpride Pig Breeding Farm in Bulacan province. According to farm owner and veterinarian Dr Rodrigo Catindig, Pilpride's conception rate has been averaging 89.23% in the 10 months that they have been using the Absolute catheters.

"This is remarkable since using traditional spiral catheters before gave us only a conception rate average of 80% to 85%," said Dr Catindig.

"It is important to note that during our initial trial, we even hit a farm record of 96% conception rate. Farrowing rate has also been consistent for the past ten months at an average increase of 5% compared to our previous farm performance."

Dr Catindig points out that since using the Absolute catheter, the farm's viable litter sized has gone up by 1.25 piglets per sow, and this has resulted in higher income.

"The technology has truly maximised the potential of our pig breeding farm. With continuous proper farm management plus the use of the Absolute Swine Catheter, we are very optimistic that we can maintain or even look forward for greater performance in the years to come."

For his part, Dr Mel Santiago, owner and veterinarian of Mel Farms in Rizal province, says that the Absolute technology has also led to improved performance in his farm.

He admits that when he first used the technology he didn't know the proper timing and movement protocols, which led to inconsistent results. However, once he started using the catheters properly there was a marked and consistent improvement in his farm performance.

"At present we are enjoying an average



Dr Catindig



Dr Santiago

improvement of 18.72% compared to last year's performance in conception rate, and an improvement of 17.49% in farrowing rate," notes Dr Santiago.

"Although there is only a slight increase in litter size, the improvement in the performance of the herd is more than enough to cover the investment made in shifting from the conventional rods to the Absolute technology."

Dr Santiago explains that the reason his litter size only showed a slight increase is because he made a conscious decision to sacrifice litter sizes to save on feed costs.

"I wasn't able to capitalize much on the litter size aspect because I deliberately lowered the nutrient specification of my sow ration," he says. "Although I'm aware of the immediate and long term effects of this action, I still did it because the amount I saved is enough to compensate for the opportunity lost due to failure in higher litter size. Granting all factors are set for the optimum, increase in litter size is possible"

"Based on my experience, and assuming all protocols and recommendations are done properly, continuous use of the Absolute rods will be beneficial to the farm in terms of improved production capability and profitability.

"In production management a lot of factors are considered and in reducing some variables like uncertain breeding, performance will greatly enhance the competitive edge of any farm. We are confident with the Absolute technology we can attain this competitive edge which we believe is essential for the future."

"Since semen generally dies in the reproductive tract within 24 hours of deposit, it is important that you do not service the animal too soon," explains Anderson.

"On the other hand, it is equally important that you do not service the animal too late."

Animal movement also affected the farrowing rates of the animals. Anderson says that between 10-45 days following insemination, animals should not be moved because it is during this critical period that the embryos are attaching themselves to the uterine horns. Moving the animals during this period could lead to embryos aborting.

Once the proper timing and movement protocols were implemented in Brookside, the results showed that Absolute

Comparison between using Absolute catheters and traditional catheters *.

| Parameters | Absolute | Traditional catheter |
|----------------------------|----------|----------------------|
| Number of animals bred | 188 | 238 |
| Number of animals farrowed | 155 | 158 |
| Farrowing rate | 81.71% | 65.27% |
| Total pigs produced | 1554 | 1114 |
| Average pigs born alive | 10.02 | 8.04 |

*Data provided by Pacific Roque, Brookside Farm Manager.

outperformed the traditional catheter (see table above).

Following the initial trial, and while waiting for farrowing results, Brookside returned to the traditional catheter for insemination. In doing so, the farm's conception rates, farrowing rates and litter sizes returned to their former lower levels.

However, the Brookside Farm's owners have decided to convert the farm 100% to Absolute, so it is expected that the farm performance

will now swing up again.

From the result of the trial, it seems that at the very least, this technology is worthy of serious consideration by farms who might be looking for ways to increase their productivity and profits.

Those who want to try the technology must bear something in mind: they must be ready to follow ASIC's instructions to the letter, and must be open minded to welcome changes in their breeding routine and procedures. ■