

Collection - Achieve full potential of semen



How to achieve full potential when collecting semen

Proper preparation and sanitation are of the utmost importance when it comes to in the process of semen collection and an important for achieving the full value of DanBreds reproductive performance.

Achieve full potential when collecting semen

As artificial insemination (AI) has become more of a standard especially among modern farms working with high-quality genetics as DanBred. The quality of the semen is of the highest importance to unlock of the full genetic potential of DanBred boars while assuring the unprecedented reproductive results correlated with not only meeting production targets but greatly exceeding them. Proper preparation and sanitation is of the utmost importance and is one step in the process of improving overall on-farm boar production and performance and achieving the full value of the extraordinary reproductive performance within the DanBred breeding animals.

Preparation to assure quality and attain full potential

Organisation, planning and sanitation are key elements in the proper semen collection process and will help realise the full efficiency of a proper workflow by making all task quicker, safer and more hygienic as well as improving the production productivity.

Success can easily be obtained by following some simple but effective procedures before on-farm boar collection.

Reduce the risk of semen contamination, by ensuring only semen from healthy boars is collected. Diseased boars may lead to rapid transmission of pathogens and disease outbreaks, why the herd veterinarian should introduce a protocol health surveillance in the boar unit (Weitze, 2008).

Have the boars brushed down routinely and maybe even washed once in a while. The preputial





area should be cleaned before collection and the hair preputial should be trimmed regularly. This will reduce the risk of dirt and bacteria from the preputial area entering into the collection cup (Weitze, 2008).

Ensure the pens are cleaned and the floors are dry, have good traction and proper drainage. This both ensures the safety of the boar when it jumps the dummy and the safety of the staff performing the collection, should an expected situation occur (DPRC, 2018).

An easy to adjust dummy which to regulated to fit the boar is vital. A washable cover in a soft washable material should be used. This is to protect the boars' sternum during collection, as this will be the main point of contact while the boar mount the dummy and almost the full weight of the boar is resting during collection (DPRC, 2018).

Use appropriate professional materials when collecting semen. Use disposable vinyl gloves as these have shown to have no effect on semen quality, use the double glove method with 2 gloves on top of each other to increase hygiene (Weitze, 2008).

On the day before collection all materials that are to be utilized should be prepared and stored in a sealed, clean area.

Prepare an insulated collection cup with a clean disposable plastic liner for collecting the ejaculate. It is an advantage to pre-warm the collection cup to around 38°C before collection. This will ensure the sperm cells are not exposed to a damaging cold shock when the boar ejaculates. The collection cup should be insulated and if reused it should be possible to wash and sterilise it, between each collection.

Fit the collection cup with an airtight plastic bag and place a double layer filter over the container and plastic bag and secure with a rubber band. (Weitze, 2008).

Besides the essential equipment for collection, you might also need, an extra clean pair of vinyl gloves,

clean the tools between collections (DPRC, 2018).

a thermometer, a notepad and pen, wipes for cleaning and a trash bag for garbage. It can be convenient to make a collection "tool-box" which can follow you in the collecting area but always beware of hygiene and









12 easy steps for preserving semen quality

- 1. Follow health surveillance protocol, ensure the boars are fit for the collection.
- 2. Clean the pens on a daily basis.
- 3. Ensure floors are dry, have good traction and proper drainage.
- 4. Brush down the boars regularly.
- 5. Trim the excess hair from the preputial opening.
- 6. Adjust the dummy to a proper height to fit the boars scheduled for collection.
- 7. Cover the dummy with a soft and washable material.
- 8. Fit the collection cup with a clean airtight disposable plastic liner.
- 9. Cover the collection cup with a double layer filter secure with a rubber band.
- 10. Ensure the collection cup is pre-heated to around 38°C before collection.
- 11. Wear 2 vinyl gloves on top of each other.
- 12. Prepare a clean tool-box with, extra clean vinyl gloves, a thermometer, a notepad and pen, wipes for cleaning and a trash bag for garbage.







References

Danish Pig Research Centre (DPRC); H6C – Intern KS-Tapning af orne (2018). Online, Manual om repromanagement. SEGES Videncenter for Svineproduktion. Retrieved 13/05/19 https://svineproduktion.dk/Viden/I-stalden/Management/Manualer/Repro

Weitze, K. F. (2008): Hygiene tips for good semen quality, Pig International, October, 14-16.