ORAL FLUID COLLECTION IN PIGS

Supplies for Oral Fluid Collection

The supplies needed are simple and inexpensive to acquire. The following is a list of supplies that may be used during the sample collection:

1. 3-strand twisted undyed cotton rope (1/2 inch (1.3cm) for nursery pigs; 5/8 inch (1.6cm) for grow/finish and adult pigs). Because cotton rope is highly absorptive, you can remove one of the strands, and use the remaining two twisted strands for nursery pigs.

2. Clean plastic bag, single-use plastic boot, or semen collection bags

3. Side cutters, knife or scissors

4. Snap-cap, screw-top tube, or red-top tubes

   Collection tubes may include most tubes with a cap. However, make sure that tubes do not contain additives such as EDTA or heparin. If using glass blood collection tubes, use only red-top tubes without additives.

5. Permanent marker

6. Gloves

   Wear disposable gloves to prevent contamination of oral fluid samples. If you squeeze down the rope and the rope is not in the bag, wearing disposable gloves is recommended.

7. Bracket (optional)

   Occasionally, pigs will bite ropes from pen dividers, so a bracket or device to secure the rope may be needed. Also, brackets are useful when sequential collections are made. The type of bracket or how it is hung may need to be modified depending on the layout of pens and pen dividers. Tools may be needed to secure brackets.

Handling and Shipping of Oral Fluid Samples After Collection

- Contact the diagnostic laboratory before collection to confirm the laboratory uses assays optimized for oral fluid.
- Always extract the oral fluid from the rope before submitting the oral fluid to the diagnostic lab. If samples are clean, no further processing is needed. If samples contain particulates, centrifuge for 10 minutes and deposit fluid into a clean tube.
- Oral fluid samples to be submitted on the same day should be chilled and submitted with ice packs. Samples submitted for PCR or antibody detection should not contain large amounts of organic material such as feed or fecal material.
- Samples for shipment to the testing laboratory must be prepared in compliance with the same federal guidelines required for serum samples. This includes, for example, shipping in a properly labeled, insulated and leak proof container that is lined with a plastic bag. Pack the samples with ice packs and an absorbent material to absorb any unexpected leakages. Remember to include the proper paperwork indicating that the samples are oral fluid samples for diagnostic testing.
- If you squeeze down the rope and the rope is not in the bag, wearing disposable gloves is recommended.
- If you use cotton rope, you can remove one of the strands, and use the remaining two twisted strands for nursery pigs.

Troubleshooting Tips

Pigs are more active in the morning. If pigs are inattentive to the rope, the afternoon collections may take more time than the standard 20-30 minutes. If reluctant to approach the rope, pigs can be trained by placing a rope into the pen to play with or by flavoring these practice ropes with sugar solutions. The pigs will then more aggressively chew on the diagnostic sample ropes in the future. Those training ropes should be discarded. Do not collect diagnostic samples from ropes contacting the floor or from flavored ropes. Samples submitted should not contain large amounts of organic material such as feed or fecal material.

For more information, refer to the Oral Fluid Collection DVD.