Aseptic Feed Sampling Techniques for Detection of PED virus in Feed or Feed Ingredients

February 14, 2014
Kansas State University Applied Swine Nutrition Team

Due to the ubiquitous nature of PED virus in infected farms and sensitivity of the PCR testing it is important to minimize potential for cross contamination when sampling feed or feed ingredients.

Materials needed for each sample:

- Clean disposable gloves
- Sterile transfer utensil such as a cup
- One sterile whirl-pak bag or similar

Wear clean disposable gloves over a sterile ob sleeve and use aseptic technique. Change gloves and sleeves between each sample.

Packages – External surface should be wiped with a bleach wipe (12 oz/gallon). Use sterile whirl-pac bag. (If whirl-pac bags are not available, use 2 sterile disposable 250 ml/8 oz cups per sample.) Open package in such a manner to permit withdrawal of sample without contacting packaging material. Use a separate sterile transfer utensil for each sample, to transfer product from container to whirl- pac bag. Fill bags a maximum of 2/3 full.

Bulk - Use sterile whirl-pac bag. (If whirl-pac bags not available, use 2 sterile disposable 250/ml/8oz cups per sample.) Take five well-spaced sub-samples directly by scooping from the lot with sterile sampling cup or by passing sterile sampling cup or whirl-pac through the stream of a lot being transferred into or out of a storage bin. If using sampling cup, transfer sub-samples to whirl-pac bag. Close bag immediately.

Sample size of 1.1 - 2.2 pounds (500 grams - 1 kg).

Adapted from AFCO feed inspectors manual 2nd ed 2000.

Further recommendations are to maintain the samples frozen while transport to the lab.

Diagnostic Laboratories for Porcine Epidemic Diarrhea (PED) virus testing

Lab	Address & Phone	Estimated turnaround time	Web link	Fees	PED specific link	Submission form
KSU	Kansas State Veterinary Diagnostic Laboratory 1800 Denison Avenue Manhattan, KS 66506 Phone: 866-512-5650 dlaboffice@vet.k-state.edu	1 business day	Click here	Click here	<u>Click</u> <u>here</u>	Click here
ISU	Veterinary Diagnostic Laboratory Iowa State University 1600 South 16th St Ames, IA 50011 Phone: 515-294-1950 Fax: 515-294-3564 isuvdlv@iastate.edu	Same day if sent before 11 a.m.	Click here	Click here	<u>Click</u> <u>here</u>	<u>Click here</u>
SDSU	Animal Disease Research and Diagnostic Laboratory South Dakota State University Box 2175 North Campus Drive Brookings, SD 57007 Phone: 605-688-5171 Jane.Hennings@SDSTATE.EDU	Same day if sent in the morning	Click here	Click here	<u>Click</u> here	Click here
MN	Veterinary Diagnostic Laboratory University of Minnesota 1333 Gortner Avenue St. Paul, MN 55108-1098 Phone: 612-625-8787 / 800- 605-8787 Fax: 612-624-8707 vdl@umn.edu	1-2 business days	Click here	Click here	<u>Click</u> here	<u>Click here</u>

Ensure timely delivery to the diagnostic laboratory and ensure samples are not in transit over a weekend.

Also, if retaining samples it is important to store samples frozen in a freezer without automatic defrost.