第 8 届亚洲猪病学会（APVS）论文征集通知（第一轮）

尊敬的各位同仁：

由亚洲猪病学会（Asian Pig Veterinary Society, APVS）主办，我院承办的“第 8 届亚洲猪病学会议”将于 2017 年 5 月 12-15 日在美丽的武汉市东湖国际会议中心举行。会议主题是“健康养猪，健康食品，健康人类”。

本次学术会议将邀请国内外知名专家围绕重要猪病（如猪伪狂犬病、猪繁殖与呼吸综合征、猪圆环病毒病和细菌性呼吸道传染病）、抗生素耐药机制、新发猪病和人兽共患病、猪场生物安全建设等方面做主题发言。大会也将设立分会场和企业卫星会议，在呼吸道病、消化道病、繁殖障碍疾病和寄生虫病控制等开展深入交流，旨在为亚洲各国养猪行业提供技术交流机会，促进亚洲共同发展。

为充分展现近 2 年来亚洲各国在猪病研究和防控领域取得的新进展，大会热忱欢迎国内外科技工作者和生产一线技术人员踊跃提交与猪病防控有关的案例报告和研究论文摘要（包括 5 个部分，即前言、材料与方法、结果、讨论和参考文献）。论文格式为 2 栏式排版。要求见会议网站要求，www.apvscongress.com），或本通知附件 1、附件 2、附件 3 和附件 4。

论文摘要有中文和英文两个版本，以方便国内外读者阅读理解。论文摘要可从会议网站在线提交，也可以同时发送 2 个邮箱：apvs2017@yahoo.com 和 apvs2017@163.com。我们确定优秀论文进行口头发言交流和墙报交流。论文截止时间是 2017 年 3 月 15 日。

我院在养猪和猪病领域取得很多成果，为丰富和提升大会的学术内涵，并扩大我院的国际影响力，大会现面向我院师生征集会议论文摘要，希望大家不吝赐稿。同时，大会欢迎各位科技工作者、企业家和技术人员注册和参会，共话猪病防控和净化的策略与方案。

第 8 届亚洲猪病学会学术会议组委会

华中农业大学动物医学院

附件 1：论文要求

Abstract guidelines

The abstract consists of title, affiliation, introduction, materials and methods, results, discussion, acknowledgements and references. The authors and their affiliation are written *in Italics*. The name of author who will give a presentation is in bold and underlined. The body of abstract should be written in Times New Roman with font size of 10.5 and line spacing of 13. The abstract should be edited in 2.5cm of margins on all four sides and in two-column format. A single spacing between each part in the body of abstract is required. Please refer to the abstract template when necessary.

摘要指南

摘要包括标题、单位、简介、材料方法、结果、讨论、致谢和参考文献。作者和单位使用斜体，做口头报告（如会务组接受）名字使用粗体和下划线。摘要的格式为新罗马字体（英文）和宋体（中文），大小为 10.5（英文）和 5 号（中文），行间距为 13（英文）和 20（中文）。摘要的编辑方式为两栏式，四边的页边距为 2.5 厘米。摘要的每部分之间使用空格。可参考摘要模板。

附件 2：墙报（Poster）

1. 海报字体和大小由作者自行确定
   The font and size are determined by authors.
2. 会务组提供展板，但请作者自行打印墙报，带到会务制定编号的位置张贴。会务组提供张贴用具。
   The authors are required to print their own posters, bring them to fix in the space provided by APVS, which will also provide necessary items for poster fix.
3. 海报大小：宽度 90cm，高度是 120cm.
   Size of poster: width is 90cm and height is 120cm
4. 会议结束后，建议作者带走自己的海报。
   After meeting, the authors are suggested to bring back their valuable posters.

附件 3：

Detection of Pseudorabies virus from oral fluids of experimental infected pigs

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Introduction

Pseudorabies is one of the important infectious diseases, causing enormous economic losses to swine industry. Pseudorabies virus (PRV) is the causative agent that is monitored mainly from nasal swabs and tissue samples collected from pigs. Oral swabs have been widely used for the detection of animal viruses, such as Porcine circovirus type 2(PCV2) (1) and Porcine reproductive and respiratory virus (PRRSV) (2) in swine herds due to its simplicity in sampling. However, there is no report about the application of oral fluids sampling for PRV surveillance till now. In this study, we attempted to collect the oral fluids from experimental infected pigs with the oral cotton swabs for detection of PRV.

Materials and Methods

The new PRV-HNX isolate was propagated in Vero cells, and the virus titer was determined. 35-day-old PRV negative pigs were randomly divided into 2 groups of 6 and then inoculated with PRV infection (2 mL, 1×10^7 $TCID_{50}$/mL) and equal volume of DMEM, respectively. Sterilized cotton ropes were hung in the pens for about 30 min for pig biting to collect the oral fluids at 0d, 1-14d, 21d, and 28d post infection, respectively (Fig.1) Meanwhile, the nasal swab was also collected from the same pig. The oral fluids collected were freezing and thawing for three times, and then centrifuged at 8000 rpm/min for 5 min. The supernatant was used for DNA extraction. Then, the conventional gD-PCR and real-time PCR were performed to qualitatively and quantitatively monitor the presence of PRV.

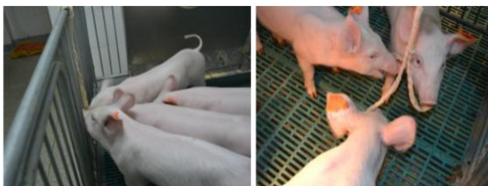

Fig.1 Collecting oral fluids by Sterilized cotton ropes

Results

As shown in Fig.2, conventional PCR detection indicated that PRV was positive at 1-28d post infection, while it was negative prior to infection. And the PRV was negative in control group all the time. Data from real-time PCR showed that PRV was positive at 1-28d post infection. Additionally, the copies of PRV detected were consistently increasing at 1-4d post infection, and peaked at 4d post infection (Fig.3). Meanwhile, the method based on oral fluids sampling can detect more viruses than from nose swabs. Clinical validation test was also successful.

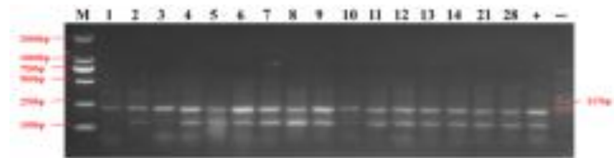

Fig.2 PRV shedding surveillance by conventional PCR M: DNA Marker DL2000. 1-14, 21, 28: days post infection

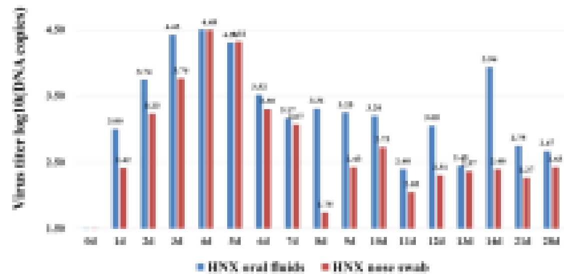

Fig.3 PRV shedding surveillance by real-time PCR

Conclusions

In the present study, we first demonstrated that oral fluids can be used for PRV detection. Compared with nasal swab, we concluded that the oral cotton swab has higher sensitivity to be applied for clinical PRV surveillance.

Acknowledgements

This study was supported in whole by China Agriculture Research System (CARS-36).

References

(1) Prickett JR et al., 2011, Transbound Emerg Dis., 58(2):121-7

(2) Decorte I et al., 2015, J Vet Diagn Invest., 27(1):47-54

附件 4

应用猪口腔液检测伪狂犬病毒

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引言

伪狂犬病是一种重要的传染病，给养猪业带来了巨大的经济损失。伪狂犬病毒是引发该病的病原体，该病毒主要通过鼻拭子和组织样品来检测。由于取样简便，在猪场唾液拭子已被广泛应用检测一些动物病毒，例如猪圆环病毒 2 型 (1) 和猪繁殖与呼吸综合征 (2)。然而，当前还关于没用使用唾液样品来检测伪狂犬病毒的报道。本研究中，我们试图通过使用棉绳采集唾液样品检测伪狂犬病毒。

材料和方法

PRV-HNX 毒株为实验室新分离毒株，使用 Vero 传代并测定了毒价。购买 12 头 35 日龄 PRV-gB 抗体阴性小猪。随机分成 2 组，每组 6 头，分别饲养在单独的动物房。两组小猪分别感染 PRV-HNX 毒株（1×10^7 TCID50/mL,2mL）和等量 DMEM。在感染后 0d，1-14d，21d 和 28d 将灭菌的棉绳悬挂于猪栏 30 分钟，让猪只咬棉绳，采集唾液样品（图 1）。同时，也采集了鼻拭子。采集的唾液样品反复冻融三次，8000 rpm/min 离心 5min，取上清进行 DNA 的提取。使用常规 gD-PCR 和荧光定量 PCR 定性和定量监测伪狂犬病毒。

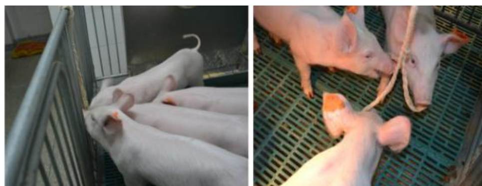

图 1. 使用棉绳采集唾液检测 PRV

结果

常规 PCR 检测结果表明 PRV 阴性猪群在感染伪狂犬病毒后 1-28 天呈阳性，对照组在整个实验过程中均为阴性（图 2）。荧光定量 PCR 显示感染后 1-28 天检测结果为阳性。此外，伪狂犬病毒拷贝数在感染后 1-4 天持续升高并在第 4 天达到峰值（图 2）。同时，与基于鼻拭子样品的检测方法相比，基于唾液拭子样品的检测方法可以检测到更多病毒，临床上也证明了该方法的成功

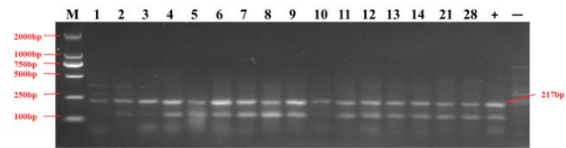

图 2. 常规 PCR 监测人工感染排毒结果

M: DNA marker DL2000. 1-14, 21, 28: 感染后天数

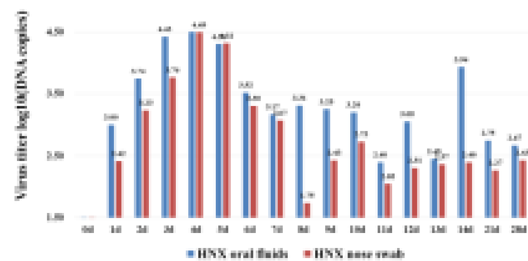

图 3. 荧光定量 PCR 检测人工感染排毒结果

结论

基于目前的研究，我们初步证实了唾液拭子可作为样品，用于检测伪狂犬病毒。相较于鼻拭子，我们推测唾液拭子用于伪狂犬病毒的临床监测具有更高的敏感性。

感谢.

感谢国家生猪产业技术体系的赞助。

参考文献

(3) Prickett JR et al., 2011, Transbound Emerg Dis., 58(2):121-7

(4) Decorte I et al., 2015, J Vet Diagn Invest., 27(1):47-54