|Virology & Viral Diseases-PRRS|



Experience of controlling PRRSv in an 1800-head sows farm in Southern China

Brook Fang¹, Lv Huang¹, Shengsheng Wu² Tingting Liu¹ ¹Boehringer Ingelheim Int'l Trading (Shanghai) Co. Ltd, Beijing100004, China ZhS Agriculture and animal husbandry Co.Ltd, Zhongshan 528451, China lv.huang@boehringer-ingelheim.com

Introduction

Porcine respiratory and reproductive syndrome Virus (PRRSv) is capable of causing respiratory symptoms and reproductive disorders. It has been confirmed that highly pathogenic strains of PRRSV are the cause of "high fever" disease in China since 2006. PRRS modified live virus (MLV) vaccination of pigs is an effective tool to control PRRS. The present case report compares the efficacy of Ingelvac® PRRS MLV and other domestic PRRS vaccines in PRRS control.

Materials and Methods

The study was conducted in an 1800 sow 2-site production system. The nursery pigs are transferred to grower & finisher site at about 70 days of age. The breeding herd was vaccinated against CSFV, FMDV, PRV and PRRSV. Ingelvac® PRRS MLV was introduced in August 2008. Pigs were vaccinated against CSFV, PRV and PRRSV (MLV).

In February 2011, the farm was hit by PED. The culling rate and mortality among sucking piglets was high this time. HP-PRRSV was also present in this farm confirmed by lab diagnoses. The farm changed the PRRSV vaccine to a domestic one (strain JXA1) between March and May. During this period, the farm experienced another outbreak of PRRS where 5-10% of 15-day old piglets showed fever and respiratory symptoms. Nursery pigs at about 35 days of age also showed fever, anorexia, wasting, labored breathing and viremia, the incidence of which was between 30% and 40%. About 80% of the pigs had swollen joints with neurological symptoms. Laboratory diagnosis in May indicated that the major problem in the farm was HP-

The farm decided to shift back to Intevac® PRRS MLV given at 14 days of age. No changes were made for other vaccines.

Results

Seen from the production record of this farm from August 2010 to September 2011, it was clinically stable until the PRRS vaccine was changed to a different strain (Figure 1). Culling and mortality was high in February caused by PED and so was it in March. After changing to a domestic PRRSV vaccine, the survival rate of nursery went down to 77.3% among April and July. When Ingelevac® PRRS MLV was given from June, survival went up to 92.9%. The sucking piglets and nursery pigs turned to clinical stability later on again. The same trend was seen in litter size and viable piglets (Figure 2).

Figure 1. Farrowing rate, pre-wean and nursery mortality thru time

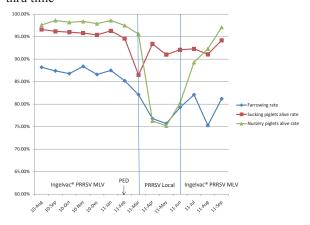
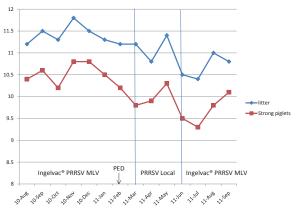


Figure 2. Litter size and viable piglets thru time



Discussion

This study demonstrates that Ingelvac® PRRS MLV was an effective measure to control PRRSV. It also demonstrates that Ingelvac® PRRS MLV is cross protective to HP-PRRSV strains which was also shown previously [1].

References

1. Zhang JW and Yuan SS et al. (2008) International PRRS Symposium. P274.