We are delighted that the International Pig Veterinary Society Congress 2004, decided to select South Africa as the host country for the 20th IPVS Congress. The Pig Veterinarians of South Africa will ensure that this congress lives up to the best traditions of previous congresses; incorporating an interesting and topical scientific programme, fascinating accompanying persons tours and an excellent social programme, allowing delegates the opportunity to network with their overseas colleagues.

This, the first IPVS congress on the African continent, will undoubtedly be of enormous benefit in generating solutions to the emerging pig veterinary challenges, especially those related to exotic and changing viral diseases, decreased use of antimicrobials and nutritional advances. The congress is important to further pig veterinary science in South Africa, to encourage younger veterinarians to join the pig industry, as a vehicle to generate funds for research and to improve the pig industry in Southern Africa.

South Africa is a magnificent and beautiful country, and offers tourists value for money. Thus, pre and post congress tours will be a major attraction for delegates to come to South Africa. Durban, in KwaZulu Natal, is a vibrant multi-cultured city with magnificent beaches, easily accessible game parks, theme villages and a moderate winter climate making it an ideal tourist destination. We urge our colleagues throughout the world to use this opportunity to get a glimpse of the continent’s rich and fascinating wonders and to enjoy the hospitality of their African friends.

Dr Peter Evans
Chairman: Local Organising Committee: IPVS 2008
A TWO-YEARS STUDY OF THE EVOLUTION OF PRRSV INFECTION DYNAMICS IN A HERD VACCINATED WITH A MODIFIED LIVE EUROPEAN-TYPE STRAIN

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Introduction
The aim of this 2-years field trial was to monitor the evolution of the porcine Reproductive and Respiratory Syndrome Virus (PRRSV) infection dynamics, and the evolution of the mortality rates, in a farm suffering from an acute outbreak of PRRS in their breeders, after vaccination with a European-type modified live (MLV) PRRSV vaccine.

Materials and Methods
Farm selected: a 500 Farrow-to-Finish (FF) sow unit, with post-weaning and fattening buildings located few meters away from each other. Gilts were purchase always from the same source, and no quarantine units were available at entrance.

Herd history: In March 2002, an outbreak of late-term reproductive failure and high mortality (>12%) in lactation, clinically related to an acute PRRSV infection was recorded. Respiratory complications and high mortality rates (7%) were also observed in the post-weaning and fattening periods.

PRRSV diagnosis: lung and lymphoid tissues from dead or weak piglets at birth, and from 6 to 7 week old weaned pigs were collected at the start (Mar’02) and at the end of the study (Oct’03). Tissues were subjected to PCR analysis; RNA extraction, amplification and analysis were performed as previously described (1).

Herd serum profiling: Four ELISA serum profiles (CIVTEST SUIS PRRS/ES, Hipra, Girona, Spain) were done as follows: every 6 months starting from Mar’02 to Oct’03, blood samples were randomly taken from pigs (3, 5, 7, 9, 12, 18 and 24 weeks of age) (n=70) and breeders (gilts, 1st, 2nd, 3rd and ≥4th parturitions) (n=50).

Immunization schedule: In March 2002, two shots of MLV (AMERVAC-PRRS®, Hipra) were mass-administered to all the breeders, within 4 weeks interval. Four weeks after the second mass-vaccination, a routine vaccination programme was implemented in sows, consisting in mass-vaccination of lactating sows with 1 shot of MLV at 5 to 8 days after each farrow, and a second shot at 60 days of each gestation) and gilts (2 shots within 3 weeks interval at arrival, before mating).

Results
PCR results: 98.7% and 0% of tissues sampled from born dead and weak pigs were positive for samples collected in Mar’02 and Oct’03 respectively; and 85% and 0% of lungs collected from 6 to 7 week-old pigs sampled in Mar’02 and Oct’03 were positive, respectively.

Mortality: post-weaning period mortality recorded was 7% and 2% in Mar’02 and Oct’03 respectively. Fattening mortality was 7.3% and 5% in Mar’02 and Oct’03, respectively.

Serology: In breeders, antibody levels were diminished along the period of the study (Figure 2). Seroconversion in pigs showed a clear delay from Mar’02 to Oct’03 (Figure 1).

Discussion
The immunization scheme implemented, helped to control the reproductive problems in sows, recovering their reproductive performance (data not shown) progressively and until the end of the study. The serum profiles showed a clear tendency to decrease progressively the antibody titres in breeders, as well as a delay in the age of seroconversion in pigs. The stabilisation of the sow herd had a direct effect on the dynamics of infection in the post-weaning and fattening units. PRRSV circulation was moved from weaners to the early stages of fattening period. Consequently, a beneficial effect on reduction of mortality in weaners and fatteners was noticed. The present study confirms that the use of EU type MLV administered in gilts and breeders in a FF system could control the negative effects on performance when an acute outbreak is clinically detected.

References

Figure 1 Evolution of mean PRRSV antibody titres in pigs.

Figure 2 Evolution of mean PRRSV antibody titres in breeders.