

Effect of Ingelvac® PRRS MLV on boar semen quality in an endemic farm



Z.H. Cheah, E. Cheah, P.Q. Lim, C.K. Yong, K.Y. Kam
Boehringer Ingelheim (Malaysia) Sdn Bhd.

INTRODUCTION

Porcine Reproductive and Respiratory Syndrome (PRRS) is one of the most important diseases over the globe. Vaccination is one of the widely used tools in PRRS control strategies especially Modified live virus (MLV) vaccine. As we know that PRRSv can be transmitted vertically in utero as well as horizontal transmission via close contact, aerosol and by intrauterine via contaminated semen. Introducing negative and clean semen is one of the important control points in controlling PRRSv infection; however, many farmers believe that PRRS MLV vaccine will have negative effect on the semen quality. Thus, the objective of this study is to evaluate the effect of Ingelvac® PRRS MLV on boar semen quality.

MATERIALS AND METHODS

The trial was conducted in a 580 sows' farm with farrow-to-finish production system in Malaysia. It was a PRRSv positive and stable farm. Whole herd PRRS vaccination was done for more than 4 years including boars. 2 Boars were involved in this trial to observe the semen quality before and after vaccination of Ingelvac® PRRS MLV. Boar's semen was collected on day 0 (before vaccination) and weekly up to one month after Ingelvac® PRRS vaccination. A few parameters used (Sperm counts, Sperm motility, Livability and malformation rate) to evaluate the boar's semen quality.

RESULTS

Boar D-7-9 – 18 months old

Table 1: Comparison of sperm quality before and after application of Ingelvac PRRS MLV in boar D-7-9

	General Motility (%)	Live (%)	Sperm Conc. (x 10 ⁶ sperm/ml)
Before vacc.	65	74	175
After vacc.	66.67	75.83	273

Boar D-7-14 – 14 months old

Table 2: Comparison of sperm quality before and after application of Ingelvac PRRS MLV in boar D-7-14

	General Motility (%)	Live (%)	Sperm Conc. (x 10 ⁶ sperm/ml)
Before vacc.	70	90	350
After vacc.	65	89.33	337.5

Figure 1: Evaluation of boar semen's conc. with haemocytometer under microscope 10x10

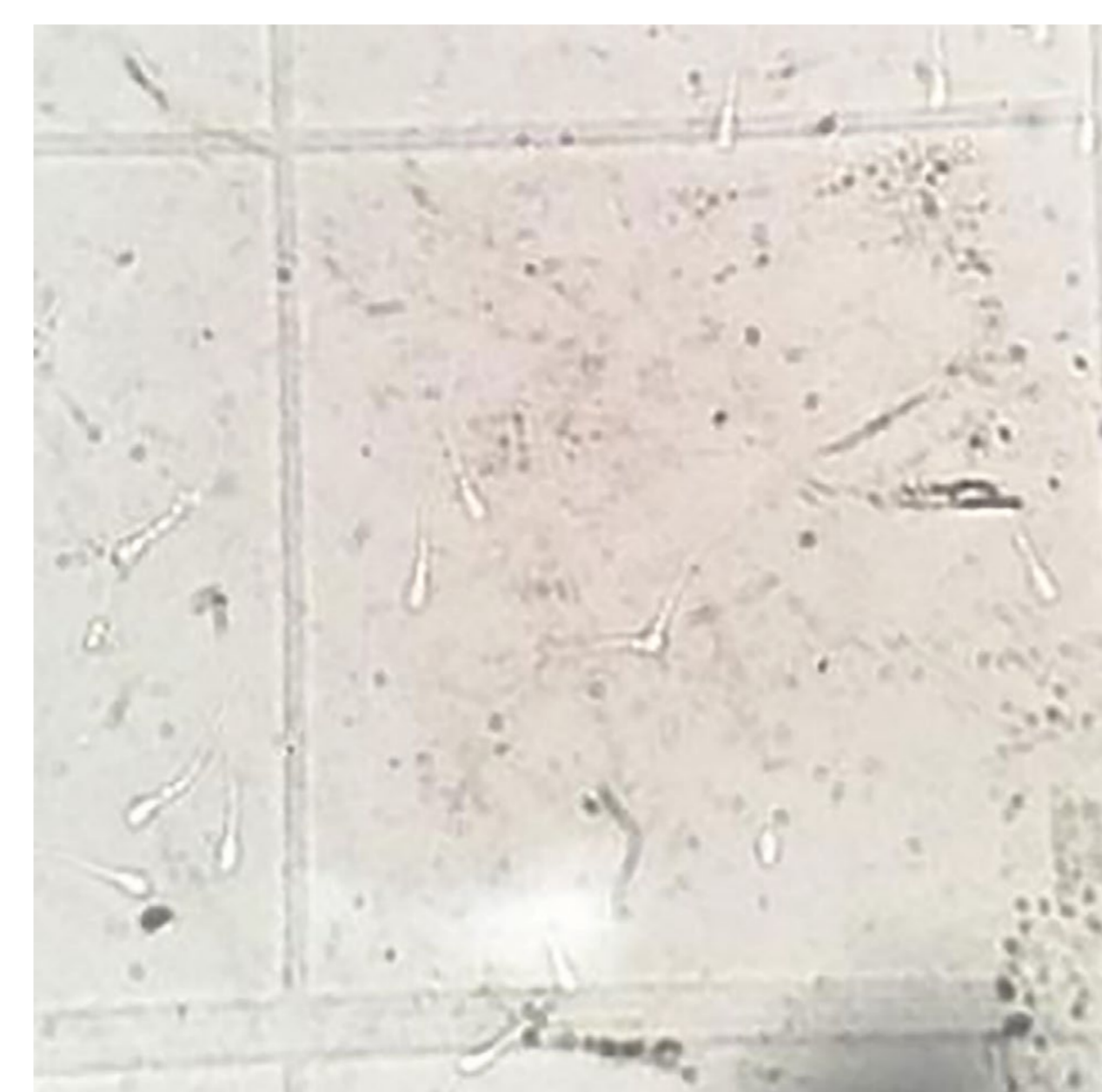
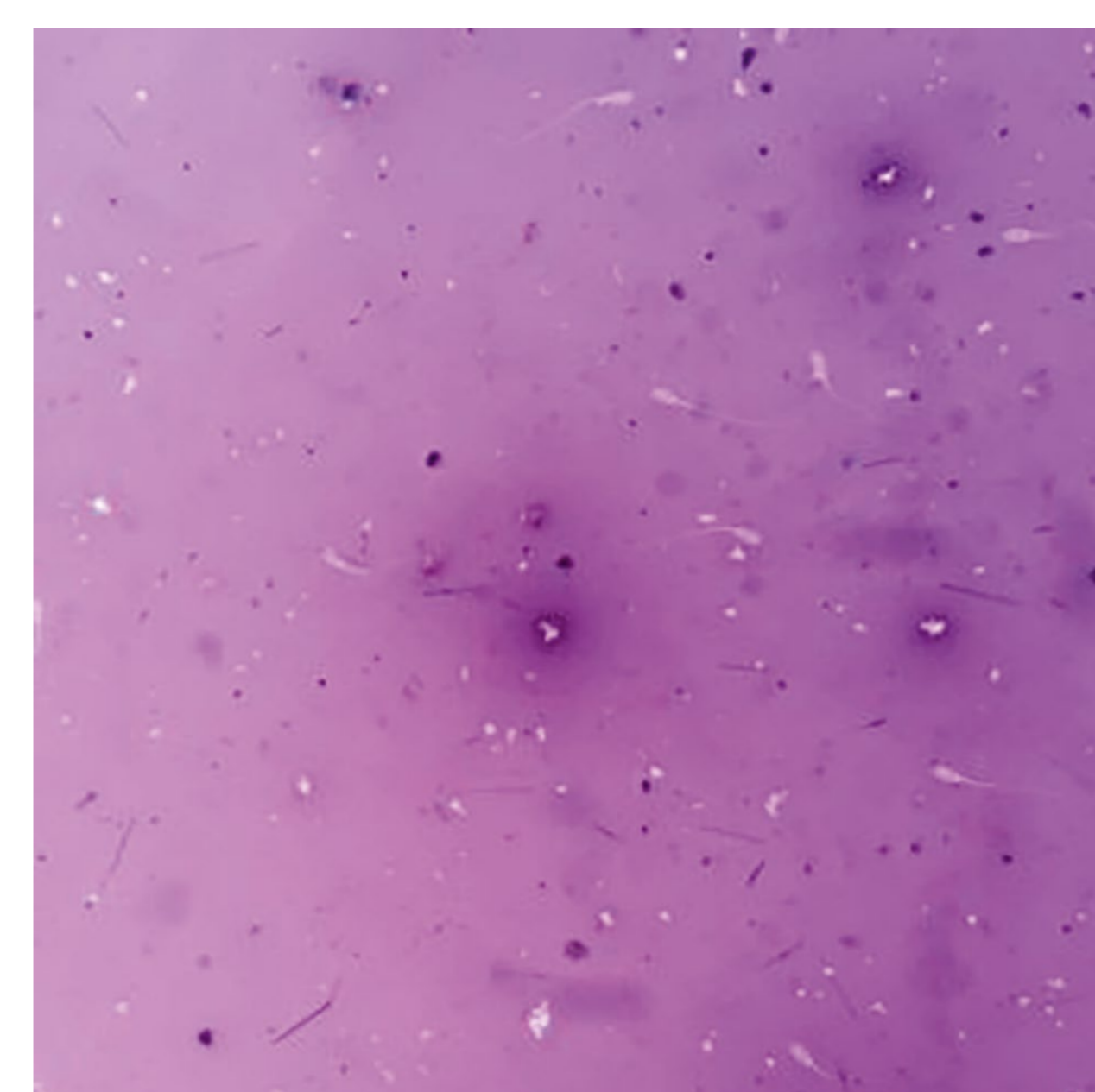


Figure 2: Evaluation of boar semen's livability with Giemsa Stain under microscope 10x10



DISCUSSION AND CONCLUSION

The study showed that Ingelvac® PRRS MLV vaccination did not have negative impact on boar semen's quality in an endemic farm. Based on this field experiment, we can conclude that Ingelvac PRRS MLV is safe to use in PRRS-positive boar.

REFERENCES

Liangke Su, et.al. (2016). Effect of attenuated PRRS vaccine Ingelvac®PRRS MLV on semen quality of boar.

