

The reduction of post weaning mortality through management changes and the use of Porcilis PRRS vaccination

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Summary

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PMWS related mortality from wean-finish reached 20%. Management changes such as segregation and all in-all out procedures were introduced as a means to reduce mortality to 10%. The use of diagnostics identified that the herd was PRRS positive, and a vaccination regime using Porcilis PRRS vaccine was initiated. This dramatically reduced mortality to 3-4%, and improved overall growth rate from weaning to 100kg to an average of 756g/day.

Herd details

The herd contains 700 sows of which approximately 50 are purebred Duroc, these are inseminated with Landrace semen to produce first cross replacement gilts. First cross sows are mated with Large White boars or semen via AI. The herd has been closed since 1986, except for the introduction of semen for AI. The sows are all outdoors, except for the mating period.

Weaned pigs are housed in Booth dry sow arks, and at 40-45kg are moved to one of two indoor finishing units. All buildings are solid floored with straw bedding, and are operated on an all in-all out basis. This strict policy is maintained by using a third indoor unit as a 'dump' site for any small or poor pigs.

Herd health status

The site has been continuously stocked with pigs for more than 40 years. The herd is PMWS, PRRS, Enzootic Pneumonia, and Glasser's positive. Lungworm is evident and *Brachyspira pilisicoli* has been isolated.

Herd performance history

During the latter part of 2001 a high incidence of respiratory disease was evident, with mortality in the wean-finish period reaching approximately 20%. The most significant losses occurred at 10-12 weeks of age.

Management changes to control disease

Early in 2002, the weaning age was increased to 5 weeks of age, and all in-all-out 'weaner villages' were established on two outdoor sites. The pigs were housed in dry sow arks with an outdoor run, at stocking rates of 60 pigs per ark. From these management changes alone, mortality was reduced to 10%, and growth rates significantly improved.

The first finishers produced through this new system were blood tested for PRRS using Intervet's PRRS VetCheck.

The serology showed that 11/12 pigs had significantly high PRRS titres, and it was concluded that PRRSV infection was acting as a primary stressor, resulting in subsequent PMWS.

In April 2002 Porcilis PRRS vaccination commenced in pigs weaned at 5 weeks of age.

Improved performance

Response to the vaccination regime was excellent. There was a dramatic reduction in the incidence of respiratory disease, particularly at 6-8 weeks post weaning, and the overall mortality was reduced to around 3-4%. Exceptional improvements in recorded growth rates were seen. Between weaning and 45kg, pigs average 590g/day, and from 45-100kg, average 920g/day, or 756g/day from wean-finish. This level of performance has been maintained throughout 2003.

Conclusions

- ~ A knowledge of the pathogens present in the herd assisted in the planning of management changes.
- ~ The use of weekly weaner villages and a fresh-site for each batch, together with strict adherence to all in-all out improved pig health and ultimately performance.
- ~ PRRS VetCheck was useful to ascertain the presence of PRRS and when seroconversion occurred, and its potential as 'trigger' for PMWS.
- ~ Vaccination with Porcilis PRRS assisted in further reducing mortality to 3-4% from 10%, and an improvement in growth rate.

Weaners are housed in dry sow arks in weekly 'weaner villages' from weaning at 5 weeks of age through to 45kg.

