

Survey of PMWS Impact on Brazilian Swine Companies

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Introduction

At the present time, PMWS is the most important infectious disease syndrome in the Brazilian swine production⁽¹⁾. With a variety of symptoms, this syndrome affects the immune system and can thus open the door for co-infections⁽²⁾, which results in performance losses⁽³⁾. An epidemiological survey was carried out in the Brazilian swine production areas, in both vertically integrated companies and cooperatives, with the objective of identifying the distribution and impact of the main problems associated with PCV-2.

Materials and Methods

The survey included 13 companies in the south, southeast and midwest regions of Brazil, involving a total population of 620,000 sows. Questions were asked about the occurrence of PCV-2, associated symptoms including mortality, diagnostic methods used, results of the main production parameters and use of antimicrobials.

Results

Out of the 13 companies that participated in the survey, 11 identified PCV-2 as being a significant obstacle to optimize their herds' production performance. The majority of companies named increased mortality and wasting as the parameters with the highest impact. In addition to that, clinical signs due to enteric disease were reported by 8 of the 13 companies, while 4 companies mentioned mainly respiratory signs. One company reported the occurrence of both (enteric and respiratory clinical signs), with no difference in their incidence. The range and average production data after PMWS occurred are displayed in Table 1 compared to the average data before. Macrolides are the antibiotics used most often to control bacterial infections, frequently given as pulses.

An amount between US\$ 1.90 and US\$ 5.20 was identified as the additional cost per animal as a result of PMWS.

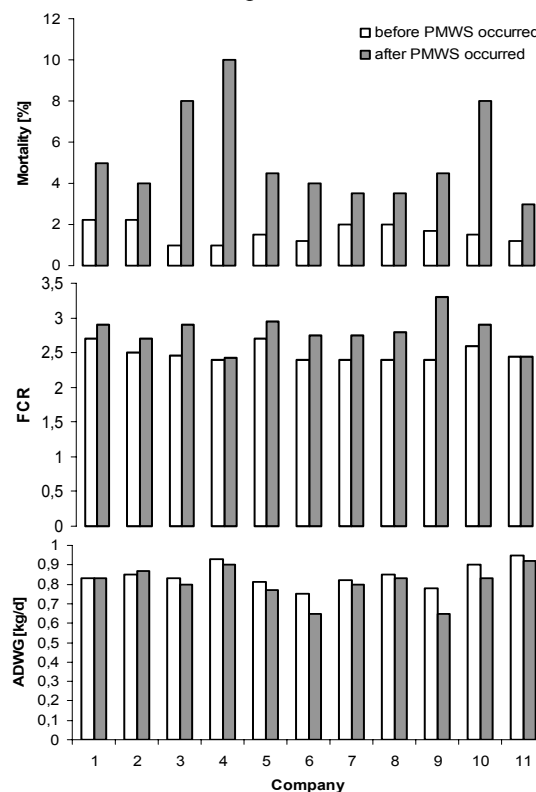
Table 1: Average production data of 11 Brazilian companies before and after occurrence of PMWS.

| Parameter | Before PMWS | After PMWS | |
|---------------|-------------|------------|-----------------|
| | Mean | Mean | Minimum/Maximum |
| Mortality (%) | 1.6 | 4.9 | 2.5 - 10.0 |
| FCR (kg/kg) | 2.60 | 2.90 | 2.3 - 3.3 |
| ADWG (g) | 824 | 787 | 650 - 922 |

Discussion

Considering that the technified swine production in Brazil involves some 1.5 million sows⁽⁴⁾ and that the present survey included around 40% of the housed sows, it can be concluded that PMWS has a considerable negative impact on the health status of pigs in Brazil being responsible for a significant increase in the cost of swine production. Some average results shown in Table 1 are acceptable in many production environments. However, it can be seen in Figure 1 that the performance parameters in the various companies indicate marked production problems when compared to the pre-PMWS period.

Figure 1: Mortality, FCR and ADWG of 11 PMWS affected Brazilian companies



References

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