

PREVALENCE OF PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME, EFFECTS PRODUCED BY PIG BREEDS

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Summary. The purpose of the present study was to investigate the distribution of PRRS from 2000 to 2005 in pig population in Lithuania, and to assess the influence produced by pig species on PRRS virus. To fulfil the requirements research was performed in 2005-2007 at the Department of Infectious Diseases, Lithuanian Veterinary Academy and the National Veterinary Laboratory. Serological analysis of 12435 pig blood serum samples over 2000-2005 revealed that 13.7 % of pigs were positive to PRRS. The results demonstrated that PRRS virus was more common in the first groups breeding-grounds compared to the highest groups breeding-grounds ($\chi^2=5,1$; $P=0,023$). Furthermore, PRRS virus was identified rare in sperm selling plants compared to the first and the highest group's breeding-grounds ($\chi^2=39,1$; $P\leq 0,001$). The highest rate (31.6%) of PRRSv specific antibodies was registered in blood samples coming from Yorkshire pigs. The lowest rate of positive pig blood serum samples was recorded among the animals of English Big White breed. In Lithuanian White the rate of serologically positive samples was 17.6%. The results showed that **frequency of** cases of PRRSv in Yorkshire, Landrace and Lithuanian White pigs were significantly different (L – Y $\chi^2=8,4$; $P=0,0037$; L – LW $\chi^2=18,1$; $P\leq 0,001$; Y – LW L – LW $\chi^2=94,4$; $P\leq 0,001$)

Analysis of blood samples representing male and female pigs selected over the six year period showed that 17.9% sows were positive to the specific PRRS virus, however, boars exhibited a lower rate (8.1%) of positive blood serum samples. There were no significant differences in PRRSv infection level of pigs between different age groups. The lowest infection level (11%) was observed in 0-2 month age piglets. Pigs aged 3-7 or 12-23 months demonstrated the highest rate of infection (16.4%). Further, in pigs aged 37-54 month all samples were negative for PRRS virus.

Key words: PRRS virus, seroprevalence, breeds, pigs.