

SEROPREVALENCE OF PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS (PRRSV) IN LITHUANIAN PIG FARMS

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Summary. The main objective of the present work was to determine the level of porcine reproductive and respiratory syndrome virus (PRRSV) infection in Lithuanian pig population. 3327 sera samples collected between 1997 and 2001 were tested in the IDEXX-ELISA for the presence of the antibodies directed against PRRSV. The seroprevalence of PRRSV was significantly higher (61.6%) in 1997 when PRRS disease first recognized in Lithuania and late in 1998-2001 the number of seropositive pigs have shown 38.7%, 40.7%, 36.1%, 29.2%, respectively. Furthermore, our studies indicated that the prevalence of PRRS virus antibody in the Lithuania swine population tested was relatively high (42.2 %) and swine farms with seropositive pigs were widely distributed in the 19 of 23 Lithuanian regions. The seroprevalence studies on PRRSV infection in 16 breeding farms have shown that the number of seropositive pigs in 6 farms range from 50.4 to 96.2%, and only two farms remained serologically negative. The seroprevalence in the endemic Lithuanian white swine breed was significant lower than in other breeding herds ($p < 0.05$). Analysis of the effect of the herd size on the distribution of PRRSV infection has revealed that in the large pig farms the number of seropositive animals was two times higher than in the small farms – 63.4-66.3 % and 22 %, - 37 %, respectively ($p < 0.05$). It was found no significant ($p > 0.05$) difference between the distribution of PRRSV infection in the selected production or age groups (piglets, gilts, sows, boars).

Keywords: porcine reproductive and respiratory syndrome virus (PRRSV), seroprevalence studies, antibody against PRRSV, pigs.