THE VIROLOGICAL AND SEROLOGICAL INVESTIGATION OF PIGS WITH GASTROINTESTINAL SYNDROM

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Summary. On “Lekčiai” pig breeding farm 799 samples were collected and tested by indirect hemagglutination test (IHA) to detect antibodies against porcine respiratory coronavirus (PRCV) and transmissible gastroenteritis virus (TGEV). Antibodies against PRCV and TGEV were detected in 88 (11.01%) of samples; the variations among different porcine groups were from 5.66% to 20.93%. The antibody titres ranged from 1:16 to 1:64. The investigation of porcine coronavirus serostatus during a year showed that 6.16% of seropositive samples were detected in the winter period, 12.55% — in the spring, 10.00% — in the summer and 12.33% — in the autumn periods. During the virological investigation four cytopathogenic agents were isolated in primary porcine kidney cell subcultures from the small intestine. Cytopathogenic effect induced by the isolates was not characteristic to porcine enterovirus strain “S-72”. Titres of standardized virus strains were identified: coronavirus TMK strain — 10 −7 TCID50 0.025/ml; coronavirus VGNKI strain — 10 −5 TCID50 0.025/ml and enterovirus S – 72 strain — 10 −6 TCID50 0.025/ml.

Keywords: virology, pigs, coronavirus, referent virus strains, indirect hemagglutination.