

DIAGNOSIS AND PREVENTION OF INFECTIOUS BOVINE RHINOTRACHEITIS AND BOVINE VIRAL DIARRHOEA IN LITHUANIA

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Summary. The study was designed to estimate the distribution of infectious bovine rhinotracheitis (IBR) and bovine viral diarrhoea (BVD) in randomly selected high productive cattle herds in Lithuania. For this purpose the polymerase chain reaction (PCR) for detection of bovine herpesvirus type 1 (BHV-1) in the case of calves acute respiratory disorders was implemented, the one tube nested PCR for detection of BVD virus persistently infected (PI) animals was evaluated, and the role of PI animals on the rate of BVD virus spread within the herd was estimated.

This study demonstrated that in investigated nine cattle herds 45.9% of animals were seropositive to BHV-1. It was statistically higher amount of seropositive animals among cows compared to the heifers ($P < 0.01$). In addition, four outbreaks of calves' acute respiratory disorders were analyzed and in three cases BHV-1 nucleic acid in clinical samples was detected by PCR. A positive correlation between the presence of PI animals and BVD virus infection incidence within the herds was detected.

Keywords: Infectious bovine rhinotracheitis, bovine viral diarrhea, diagnosis, polymerase chain reaction.