PREVALENCE OF BOVINE VIRAL DIARRHEA VIRUS ANTIBODIES AMONG THE INDUSTRIAL DAIRY CATTLE HERDS IN SUBURB OF SHIRAZ-IRAN

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A cross-sectional study was made to investigate the prevalence of bovine viral diarrhea (BVD) virus using an indirect enzyme-linked immunosorbent assay (ELISA) test in industrial dairy cattle herds in suburb of Shiraz (Iran). Blood samples were collected from 952 dairy cows of different parities in 43 herds. None of the herds were vaccinated against BVDV. The cows were divided into different groups according to herd geographical location (North, West, East and South of Shiraz city), herd size (small, medium and large), parity and production level (low, average and high yielding cows). Five hundred seventy three (60.19%) cows were ELISA seropositive. However, the true BVDV seroprevalence was 59.46%. All of the herds were antibody positive against BVDV. The prevalence ranged from 37 to 86% within the herds. There were no significant differences between the presence of antibodies to BVDV and the herd size. The proportion of seropositive cows increased with their parity (P< 0.05), but there was no difference between the seroprevalence of BVDV among the cows in different production groups and four geographical regions. According to the results, it was inferred that the presence of persistently infection (PI) animals within the herds in suburb of Shiraz-Iran, is responsible for the presence antibody.