Diagnostics of Subclinical Mastitis in Dairy Cows

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Abstract : Mastitis is widely spread among dairy cows bringing large economic damage resulting in decreased milk yield, deterioration of the milk quality, gastrointestinal tract disorders among young animals, culling of breeding stock, and expenses for sick animal treatment. Up-to-date and accurate diagnostics of subclinical (latent) mastitis in dairy cows has huge practical and economical significance. The aim of the research was to develop a new optimal alternative rapid method for the diagnosis of subclinical mastitis in cows. The study was performed in the laboratory of the Hygiene and Sanitation of Kazakh National Agrarian University. The first stage was to evaluate the different percentages of "Promastit" preparation. It showed that the best diagnostics capacity had 10% dilution. The second stage was to compare "Promastit" with some of the domestic and foreign analogues "Somatic-Test" (Denmark), "MastTest" (Russia), "Mastidin" (Ukraine), "Diagmast" (Kazakhstan). The observation was carried out on 520 dairy cows with subclinical mastitis on farms of Almaty region of Kazakhstan. The effectiveness was checked by milk sedimentation test. Our research tends to show that the diagnostic test "Promastitis" revealed subclinical mastitis in 193 out of 520 lactating cows (37.1% of those examined). At the same time, in the case of using other diagnostic tests, the given index was as follows: 35.5% (mastidin), 34.4% (masttest-AF), 33.8% (somatic-test Ecotest), 30.7% (diagnast).

Keywords: dairy cows, diagnostics, subclinical mastitis, test Promastit

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