

COMPARATIVE INVESTIGATION OF METHODS USED FOR IDENTIFICATION OF MASTITIS

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Summary. . It was determined that not all tests of physical and chemical milk indices are equally suitable for identification of subclinical mastitis in cows. The increasing alkalinity of milk reaction (up to 7.0-7.6) during the inflammation process has no significant diagnostic value (the results are not regular, milk pH changes in later stages of udder tissue inflammation). According to our data the most frequent electric conductivity (EC) of milk was 4.5 - 6.0 mS/cm (61.70 %). The EC exceeding 7.4 - 8.5 mS/cm occurred in 2.12 % of cases. Though the EC in milk tends to increase up to 8.3 mS/cm in cases of mastitis it always coincides with other indices (correlation coefficient with SCC – +0.6159, with Mastest –+0.6697). The electric conductivity of milk depends on the content of ions, which increases considerably later than the number of somatic cells. Therefore, by measuring the electric conductivity of milk it is not possible to determine exactly the beginning of udder inflammation.

Keywords: diagnosis of subclinical mastitis, milk pH, electric conductivity of milk, mastest.