THE INVESTIGATION ON THE COMPOSITION, CONCENTRATION AND EFFICIENCY OF THE RAW MILK SAMPLES PRESERVATIVE

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Summary. A preservative for raw milk samples for detection of the inhibitors and the freesing-point temperature is prepared. A new system buying-up milk and evaluation of its quality is operating in Lithuania for a few years. Milk samples are centralised investigating in the independent laboratory “Pieno tyrimai”. Long Distances and time are required delivery of the samples – sometimes it takes one or two days. This causes problems, especially in the summer a part of the samples corrupt.

In oder to guarantee a proper detection of milk freezing point and inhibitors in buying-up milk, a new preservative was prepared and tested. The composition of the preservative is as follows: 5-nitro-2-furoaldehide-semicarbazone, 2-bromo-2-nitro-1,3-propandiol, natrium azid, ethanol, methylene blue. The most proper concentration of the preservative is 0.9 %, because such quantity help to retain the milk sample till research. This preservative stabilises the number of the bacteria in the sample and does not change the milk freesing – point. The usage of this preservative assures the delivery of unspoiled milk samples for the research to the “Pieno tyrimai”. The preservative makes no influence on inhibitors detection test, does not supress the growth of the test-culture and does not falsify the measurement of the milk freesing point temperature results even in the hot seasons.

Keywords: raw milk, preservative, freezing point, inhibitors.