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Introductory study regarding the optimization of a new qualitative method used for checking the milk pasteurization

Florica BUŞURICU[a], Doina Paula BALABAN[a], Gabriela STANCIU[b] and Andrea ANGHEL[c]

[a]*Department of Biochemistry, Ovidius University of Constanta, 7 Ilarie Voronca Street, Constanta, Romania*
[b]*Department of Chemistry, Ovidius University of Constanta, 124 Mamaia Blvd, 900527 Constanta, Romania*
[c]*Department of Biochemistry, Palas ICDOC,166 I.C. Bratianu Street, Constantza, Romania*

Abstract. The actual methods in checking the milk pasteurization are based on the determination of the enzymatic activity of alkaline phosphatase, using standard phenol solution. This paper presents a new qualitative method for checking the milk pasteurization by replacing the standard phenol solution with a standard alkaline phosphatase solution of marine origin. The standard solution is made of an enzymatic extract obtained from *Mytilus galloprovincialis* mediums and *Rapana thomasiana* mollusk from the Black Sea. According to these results, we choose the concentration of 1µg/µL with enzymatic activity of 20UI, which represents a small amount of raw materials. For the calculation of the enzymatic activity of alkaline phosphatase, it was also taken into consideration the minimum quantity of phenol equal to a correct pasteurization -2µg phenol/mL.

Keywords:qualitative method, pasteurization, *Mytilus galloprovincialis* and *Rapana thomasiana*

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