

Effect of extremely low frequency (ELF) magnetic field on processing and quality of local fresh milk

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Abstract

5 This research aims to examine the effect of exposure to extremely low frequency (ELF) magnetic fields on the processing and quality of fresh milk. Furthermore, an environmentally friendly technology that does not require LPG gas or fuel was generated for handling and processing fresh milk. This research consisted of two treatments, such as the type of milk and storage time, which included 0, 5, and 19 hours. Each treatment combination was replicated three times, and the parameters observed were pH as well as the number of microbes. The result shows that exposure to ELF of 801 μ T waves for 90 minutes affects the type of milk and total microbes. In addition, the pH

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value decreased with increasing storage time, while the total microbial value increased with increasing storage time. The use of ELF waves extends shelf life and has the potential for environmentally friendly processing of fresh milk without the use of LPG and fuel.

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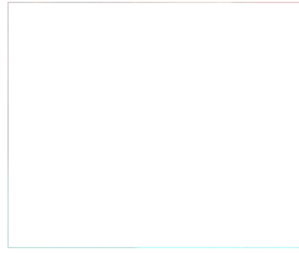
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