THE EFFECTIVITY OF LOW ELECTRICITY FLOW TO ELIMINATE
*Escherichia coli* IN MILK

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ABSTRACT
Milk which one of the most important food substance contained many important nutrients that needed by health, but easily contaminated with bacteria. Due to that reason researcher try to find the best way to sterilize milk, which is in this research by electricity flow. This research used 3 treatments: first treatment used 250ml milk which already inoculated with $1,0 \times 10^6$ CFU/ml *Escherichia coli* and electrified for 20 minutes with 10 V, second treatment with 15 V, and third treatment with 20 V. From the Processed data, the total amount of bacteria decreased in almost of all treatment, however the most significant result is on the treatment group with 20 V electricity flow. Research result showed that 20 V electricity flow for 20 minutes could decreased total amount of bacteria *Escherichia coli* in milk until one log cycle colony forming unit.

**Keyword:** Milk, *Escherichia coli*, electricity flow