SENSITIVITY TEST OF BACTERIA *Escherichia coli* FROM RAW MILK ON FARMS DAIRY CATTLE IN SURABAYA TO ANTIBIOTICS

Annisa Vivianti

**ABSTRACT**

This study was conducted to show resistance to the antibiotic sensitivity test in bacteria of the species *Escherichia coli* from raw milk. The first step of this research is to prepare the isolation of *Escherichia coli*. Milk samples were collected from dairy farms in Wonocolo, Pogot, Kaliwaron and Bendul Merisi. Milk samples taken during the morning milking at 04.00-06.00 WIB. Preparation of the isolation and identification was confirmed by Brilliant Green Bile Broth, Eosin Methylene Blue Agar, and indole test using media Peptone Water 1%. *Escherichia coli* isolates were tested using the test sensitivity to antibiotics by the Kirby-Bauer method. The results showed that isolates of *Escherichia coli* from raw milk at a dairy farm in Surabaya, resistant to antibiotics Oxytetracycline and Erythromycin by 100%, 40% were resistant to Trimethoprim but still sensitive by 60%. Based on these results, we can conclude that there are *Escherichia coli* bacteria that are resistant to antibiotics Oxytetracycline, Erythromycin and Trimethoprim. This is because the use of antibiotics that are not rational, and in the long term can lead to the emergence of antibiotic resistance.

**Keywords**: *Escherichia coli*, Oxytetracycline, Erythromycin, Trimethoprim, Sensitivity test.