

ABSTRACT

MOST PROBABLE NUMBER (MPN) TEST AND COLIFORM BACTERIA DETECTION IN INSTANT DRINKS IN ELEMENTARY SCHOOL AT SUKABUMI DISTRICT IN BANDAR LAMPUNG

By

LAILATUS SYIFA SELIAN

Contamination of coliform bacteria in drinks can cause disease. The disease can occur including diarrhea, dysentery, fever, and many other diseases . One of the most commonly consumed beverages school-age children are instant drinks, and it is not guaranteed hygiene, that can cause many diseases. This study was laboratory experiment. Sampling was performed in November 2013 at the Elementary School Sukabumi District in Bandar Lampung. In this reaserch, the sampling technique was taken with Slovin formula, and obtained a total of 16 samples. First step is using MPN method for detecting gram-negative coliform bacteria with Lactose Broth Single Strength, Lactose Broth Triple Strength, brilliant green lactose bile broth and Eosin Methylene Blue Agar, then planted in the media SIM (Sulfur Indole Motility) order , and Simmons Citrate Agar and Sugars Test. The results show 93.75% positive results coliform bacteria contamination. Bacteria were detected include *Escherichia coli* (75%), *Salmonella sp.* (56.25%), *Shigella sp.* (50%), *Klebsiella sp.* (68.75%), *Enterobacter sp.* (68.75%), and *Proteus sp.* (43.75%). From these results it can be concluded that the quality of the instant drinks in elementary schools at Sukabumi District in Bandar Lampung have poor quality.

Keywords : coliform bacteria, instant drinks, mpn