TOTAL TEST OF *Escherichia coli* ON FRESH COW MILK AT DAIRY FARMER COOPERATIVE KARYO NGREMBOKO KECAMATAN PURWOHARJO KABUPATENBANYUWANGI

Adhitya Yhoga Pradika

ABSTRACT

This study aims to measure the quality of fresh cow's milk deposited by farmers to the cooperative and then count the number of *Escherichia coli* bacteria which are then compared with SNI. Sampling is carried out when farmers deliver fresh cow's milk to the farmer cooperative. The samples taken were milk in milk can which was taken with sterile pipette and also the suction rubber. The next sample is stored in a sterile bottle and brought by coolbox frozen ice gel, then tested in the laboratory. Furthermore, planting on Lauryl Tryptose Broth (LTB), *Escherichia coli* Broth (ECB), Levine Eosin Methylen Blue Agar (L-EMBA) and biochemical test of Indole, Methyl Red, Voges Proskauer, Citrate (IMViC) using the Most Probable Number (MPN). The result showed that *Escherichia coli* bacteria exceeded the standard of SNI > 3 APM/ml 5 of 16 samples or 31,25%. The result of calculation based on MPN, sample 7 of 3 APM/ml, sample 9 is 3,6 APM/ml, sample 10 is 23 APM/ml, sample 13 is 7,4 APM/ml and sample 14 is 3, 6 APM/ml. *Escherichia coli* bacteria contamination probably come from the farmer who lacks of their own personal hygiene before flushing, the sanitary environment is lacking, milking equipment is not washed clean enough, bathing the cow before milking less clean and the time of depositing fresh milk is not as soon as possible. The author recommends that farmers to keep the environment sanitation, clean the dairy equipment, clean the cattle cleanly. The author also advised Karyo Ngremboko Cooperate Dairy Farmers (KPSP) to held a re-education on sanitation for livestock.

Keywords: Fresh milk, Escherichia coli, MPN