

ANALYSIS OF ESCHERICHIA COLI CONTAMINATION IN COW'S MILK FROM SANITATION HYGIENE ASPECTS IN THE SUMBER REJEKI BREEDER GROUP, SINGOLANGU HAMLET, SARANGAN URBAN VILLAGE, PLAOSAN DISTRICT, MAGETAN REGENCY IN 2022

Maqdaliska Istiqomah¹, Karno², Djoko Windu P.Irawan³, Denok Indraswati⁴

Indonesian Ministry of Health
Health Polytechnic of The Ministry of Health Surabaya
Sanitation Study Program Campus III Diploma Program Magetan Department of
Environmental Health
Email : maqdaliska123@gmail.com

ABSTRACT

Escherichia coli is one bacteria that is an indicator of contamination in milk. Bacterial contamination in milk can be sourced from personal hygiene, cage sanitation, and cow milking sanitation. This study aimed to determine the contamination of Escherichia coli bacteria in cow's milk and the physical quality of cow's milk from the aspect of sanitation hygiene in dairy farms of the Sumber Rejeki breeder group Singolangu Hamlet, Sarangan Urban Village, Plaosan District, Magetan Regency.

This type of research is descriptive observational research. The population of this study was all dairy farmers of Sumber Rejeki Group in Singolangu Hamlet, Sarangan Urban Village, Plaosan District, Magetan Regency as many as 26 farmers and the samples of this study was 13 farmers. The sampling technique was Stratification Sampling. Data collection was obtained by observation. Physical quality was tested organoleptically, and Escherichia coli contamination was tested using the conventional culture method.

The results showed a relationship between the quality of cow's milk and the sanitation hygiene of milking cows in the Sumber Rejeki Breeders Group, Singolangu Hamlet, Sarangan Urban Village, Plaosan District, Magetan Regency. Escherichia coli contamination in cow's milk as many as 8 samples of cow's milk showed positive results of Escherichia coli so that they did not meet the requirements. As many as 5 samples of cow's milk showed negative results of Escherichia coli so that they had met the requirements. The physical qualities of cow's milk, including color, smell, and taste, under normal condition and did not change, so they had met the requirements. Hygiene and sanitation for milking cows as many as 8 breeders or 61.54% are still classified as lacking criteria, and 5 farmers or 38.46% are classified as good criteria. To improve the quality of cow's milk and sanitation, farmers should pay more attention to personal hygiene, cage sanitation, and sanitation for milking cows. In further research can do water check used by farmers group.

Keywords: Escherichia coli, sanitation hygiene of milking cows, physical quality