

RELATIONSHIP BETWEEN *Brucella abortus* INFECTION WITH SOMATIC CELL COUNT (SCC) ON DAIRY COWS AT DAIRY FARMS CENTER IN EAST JAVA

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ABSTRACT

The aim of this research was evaluated the relationship between *Brucella abortus* infection with Somatic Cell Count (SCC) on dairy cows at dairy farms center in East Java. A total of 267 milk samples were collected from milk-can at dairy cooperation in Tulungagung Regency, Malang Regency and Pasuruan Regency by stratified random sampling method. All milk samples were tested with Milk Ring Test (MRT), but only milk samples of MRT positive 3 and MRT positive 4 which cultured for bacteriological examinations. All milk samples were measured for SCC with an Improved Neubauer counting chambers. Based on the statistical analysis results with Linear Regression, showed significant relationship between dairy cows with MRT positive 3 and MRT positive 4 which considered Brucellosis with SCC increased ($p < 0,05$) and correlation value (r) was 0,504. Significant relationship also showed between dairy cows with bacteriological examinations positive which considered infected by *B. abortus* with SCC increased ($p < 0,05$) and correlation value was 0,347.

Key word : dairy cows, *Brucella abortus*, Somatic Cell Count, Milk Ring Test, bacteriological examinations.