

DESCRIPTION OF TOTAL AND DIFFERENTIAL COUNTING LEUKOCYTE OF DAIRY COW THAT INFECTED BY SUBCLINICAL AND CLINICAL MASTITIS

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ABSTRACT

This study aims to describe total and differential counting leukocyte of dairy cow that no infected by mastitis (normal), infected by subclinical mastitis, and clinical mastitis. This research through several step, first step is doing mastitis test in 75 lactating dairy cows, second took a blood sampling in dairy cow that no infected by mastitis (N), infected by subclinical mastitis positive 1 and 2 (SK), and infected by clinical mastitis (K) through vena jugularis, and last step is counting the total and differential leukocyte among of them. Subclinical mastitis samples taken by the positive reaction between milk and CMT reagent, whereas clinical mastitis samples taken by the physical state of the yellowish milk and malfunction of one or more nipples. The data obtained was analyzed using ANOVA followed by Duncan test. The result of the total and differential counting leukocyte (neutrophils and lymphocytes) showed a significant difference ($P < 0.05$) between N, SK, and K. The highest is K then SK, and the lowest is N, while differential count of leukocyte (eosinophils, basophils, and monocytes) not significantly different among of them ($P > 0.05$).

Keyword : Total and Differential Counting Leukocyte, Dairy Cows, Subclinical and Clinical Mastitis