

**DETECTION OF BRUCELLOSIS ON DAIRY CATTLE MILK IN THE
TROPODO VILLAGE FARM, KRIAN, SIDOARJO WITH
*POLYMERASE CHAIN REACTION (PCR) METHOD***

ABSTRACT

The aim of this research was to detect brucellosis which is caused by *B. abortus* bacteria on dairy cattle milk in the Tropodo Village farm, Krian, Sidoarjo with PCR method. This research used 62 samples of milk and blood taken from dairy cattle in the area. The milk was extracted to obtain Deoxyribonucleic Acid (DNA). DNA extraction was then amplified through PCR process. The PCR reaction used DNA thermal cycler with the initial heating temperature of 94⁰ C for 2 minutes, denaturation temperature of 94⁰ C for 1 min, annealing temperature 64,8⁰C for 1 minute, extension temperature of 72⁰C for 1 min and the termination temperature of 72⁰ C for 5 minutes with 30x total cycles. The results of DNA amplification from 62 samples of dairy cattle in the Tropodo Village farm, Krian, Sidoarjo did not produce a band with a length of 157 bp (negative) and results of RBT test show five positive (+) samples while the rest are negatives (-). The conclusion of this research is Brucellosis Detection on dairy cattle in the Tropodo Village farm, Krian, Sidoarjo with examination method of *Polymerase Chain Reaction (PCR)* showed negative results.

Key words : Brucellosis, milk, serum, PCR, RBT