

**The Case Study of Semen Quality of Holstein Friesian Bull which Experienced Infertility with Different Protein Woof**

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**ABSTRACT**

The aim of this study was to know the quality of semen of Holstein Friesian bull who experienced infertility at the Radju Bendul Merisi Surabaya farm. The research method used in this study was descriptive analysis and would be compared with the quality of semen of fertile Holstein Friesian bulls and the standard of semen at Singosari BBIB. The numbers of samples were 3 Holstein Friesian bulls. The variables that was observed were volume, pH, consistency, color, odor, concentration, motility, and viability. The results showed that infertile bulls had a normal pH, smell, and color of semen. There were differences in the volume, consistency, concentration, motility and viability of spermatozoa. Infertile bull is lower than fertilized bulls and Singosari BBIB standards. The average volume of semen of infertile bull is  $4 \pm 1.41$  ml while the volume of fertilized bull is  $6,27 \pm 3,59$  ml and the standard of BBIB Singosari is 6-15 ml. The consistency of semen of Infertile bull is liquid while the consistency of semen of fertile bulls is rather thick . The spermatozoa concentration of infertile bull is  $292.5 \pm 10.6 \times 10^6 / \text{mm}^3$  while the spermatozoa concentration of fertile bull is  $824 \pm 522 \times 10^6/\text{mm}^3$  and the standard is  $1000 \times 10^6 / \text{mm}^3$ . Spermatozoa Motility of Infertile bulls have an average individual movement of  $12.5 \pm 3.53\%$  progressive, while infertile bulls of individual movements are on average  $76,25 \pm 4,78 \%$  progressive and Singosari BBIB standards are 70% progressive. Spermatozoa mass of infertile bulls is 0 while mass movements of fertile bulls is 2 (++) and singosari BBIB standard is 2 (++) . Viability of spermatozoa for infertile bull is 20 % while spermatozoa viability of fertile bull is  $79,5 \pm 6,65 \%$  . From the results of this study, it can be concluded that the quality of semen of infertile Holstein Friesian bull is lower than the quality of semen of fertile Holstein Friesian bulls and standard of semen of Singosari.

**Key word :** Infertile Holstein Friesian Bull, Semen, Quality of Semen.