

**The pH SCALE OF CERVICAL MUCOUS AS AN INDICATOR OF NON
RETURN RATE PERSENTAGE ON ARTIFICIAL INSEMINATION
ACCEPTOR OF DAIRY CATTLE IN GRATI AND TUTUR
DISTRICTS, PASURUAN REGENCY
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ABSTRACT

This study aimed to know the best pH scale of cervical mucus for the artificial insemination and its correlation to the Non Return Rate (NRR) percentage at dairy cattle. Eighty six dairy cattle were used as sample for this study were divided into two research location. Fourty four dairy cattle from Grati district and fourty two dairy cattle from Tutar district. The pH scale was measured manually on every dairy cattle at the time of artificial insemination using pH meter. Observation was done on the 21st day after insemination to determine the percentage of Non Return Rate. The method used in this research was regresion tree analysis to get the best pH scale for the artificial insemination and its correlation in NRR percentage. The results of this study showed that the Non Return Rate on the 21st day was 81,8% which was a representation of 36 dairy cattle out of 44 samples in Grati district, and 80,9% which was a representation 32 dairy cattle out of 42 samples in Tutar district. Results of this study can be concluded that pH scale has a great influence in the pregnancy rate and the best pH scale to perform artificial insemination is 7,1.

Key word : dairy cattle, artificial insemination, cervical mucus, non return rate, pH scale