

MOLECULAR DETECTION OF *Anaplasma marginale* IN CATTLE FROM SELECTED FARMS IN CAVITE USING POLYMERASE CHAIN REACTION

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ABSTRACT

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The study was conducted to detect the presence of *Anaplasma marginale* in cattle from selected farms in Cavite. One hundred blood samples of cattle were collected from different municipalities in Cavite. The template DNA was extracted using the PREP DNA/RNA kit (Life Science, Germany). Mammalian *actin* gene served as internal control of the study. DNA samples positive for *Anaplasma spp.* was further screened for *A. marginale* using *A. marginale* specific primers. The detection rate was correlated to different risk factors such as sex, age, backyard or commercial, type of feeding operation, breed, topography, and acaricidal treatment. It was found out that there is a 66 % detection rate of *Anaplasma marginale* in Cavite. Based on the results of the study, there is a significant association between three topographical areas in Cavite with the lowland areas having the highest detection rate (88%). However, no association between different age groups, sex, type of production, type of feeding management and used of acaricide were observed. The results of the study show that there is high incidence of *Anaplasma marginale* infections in Cavite. The study also suggests that *A. marginale* infections in cattle is endemic in Cavite.

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