

**EARLY PREGNANCY DIAGNOSIS IN BUFFALOES THROUGH DETECTION
OF PREGNANCY-ASSOCIATED GLYCOPROTEINS (PAGs) IN MILK
USING ENZYME-LINKED IMMUNOSORBENT ASSAY**

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ACCEPTANCE SHEET

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ABSTRACT

MATIAS, DANICA D., College of Veterinary Science and Medicine, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines. **June 2019, EARLY PREGNANCY DIAGNOSIS IN BUFFALOES THROUGH DETECTION OF PREGNANCY-ASSOCIATED GLYCOPROTEINS (PAGs) IN MILK USING ENZYME-LINKED IMMUNOSORBENT ASSAY**

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Early pregnancy diagnosis is a management tool required for shortening the calving interval in water buffaloes. The identification of non-pregnant buffaloes as early as possible after insemination reduces inter-insemination interval for herds performing synchronization and resynchronization without estrus detection. The study aimed to determine the earliest day to detect pregnancy in water buffaloes by detecting the level of pregnancy-associated glycoproteins (PAGs) concentrations using optical density values present in the milk samples. Intense color changes were observed in the plates as the day of pregnancy increases using IDEXX ELISA. Plasma samples were run in BIOPRYN ELISA and results were used to compare the results obtained in milk samples. In this study, day 26 is the earliest day PAGs were detected from the milk samples, while day 28 in the plasma samples. All pregnant buffaloes detected by IDEXX ELISA were subjected to ultrasonography to confirm pregnancy.

Key words: BIOPRYN ELISA; IDEXX ELISA; Pregnancy-associated Glycoproteins (PAGs); Ultrasonography

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