

## **TOTAL ESTROGEN HORMONE AS MARE EARLY PREGNANCY DIAGNOSTIC**

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### **ABSTRACT**

This research was aimed to analyze an estrogen concentration in mare blood as an early pregnancy diagnostic indicator in mare using ELISA method. Blood samples of estrus and pregnant mares were collected from jugular vein and let them until clotted. The edge of the blood bordered by tube wall pinned 4 to 5 times until loose from tube wall and wait for 1 hour. The clot of blood samples then were centrifuges at 3000 rpm for 10 minutes, the liquid part is serum and separated. The blood serum were stored frozen at  $-18^{\circ}\text{C}$  until assay for estrogen. The counting of each mare blood serum total estrogen using competitive ELISA method. The data were analyzed by t-test. The result of research showed significant differences between total estrogen pregnant mare with total estrogen estrus mare ( $p < 0.05$ ). The average of total estrogen in pregnant mare was  $923.2 \pm 44.092$  pg/ml, and the estrus mare was  $324.2 \pm 81.439$  pg/ml. It is concluded that total estrogen can be used as diagnostic indicator for early pregnancy in mare.

Keywords : Estrogen , Estrus, Pregnant, Mare, Serum, ELISA.