

ABSTRAK

PENGARUH JUMLAH PENGUNJUNG TERHADAP KADAR TESTOSTERON DALAM FESES KUDA (*Equus caballus*) DI MINI ZOO JOGJA EXOTARIUM

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Agrowisata merupakan jenis wisata yang kini tengah diminati wisatawan. Salah satu jenis yang populer adalah agrowisata yang mengusung konsep perpaduan peternakan dan pertanian. Salah satu agrowisata dengan konsep tersebut dapat ditemukan di *Mini Zoo* Jogja Exotarium. Kawasan wisata ini menawarkan fasilitas untuk berinteraksi langsung dengan berbagai macam hewan, di antaranya adalah kuda. Tujuan penelitian adalah untuk mengkaji pengaruh jumlah wisatawan yang berkunjung ke kawasan wisata *Mini Zoo* Jogja Exotarium dengan kadar testosteron feses kuda.

Sampel feses kuda yang diteliti merupakan hasil koleksi selama dua belas hari. Sampel diekstraksi menggunakan methanol 80%, kemudian dianalisis secara kuantitatif menggunakan metode *Enzyme-Linked Immunosorbent Assay* (ELISA). Hasil penelitian menunjukkan bahwa kadar testosteron kuda terendah 52,52 ng/gr feses kering saat jumlah pengunjung mencapai 199 orang, sedangkan kadar testosteron tertinggi adalah 192,24 ng/gr feses kering ketika pengunjung berjumlah 34 orang. Hasil analisis statistik menunjukkan kedua variabel memiliki *Correlation Coefficient* sebesar -0,298. Analisis kedua dilakukan untuk mengonfirmasi hubungan kedua variabel dengan menggunakan data jumlah pengunjung pada satu hari sebelumnya. Kadar testosteron terendah saat pengunjung mencapai 90 orang, sedangkan kadar testosteron tertinggi terjadi ketika pengunjung berjumlah 29 orang. Hasil analisis *Correlation Coefficient* didapatkan sebesar -0,140. Berdasarkan kedua hasil analisis dapat disimpulkan bahwa tidak terdapat korelasi antara jumlah pengunjung dan kadar testosteron pada kuda yang dipelihara di *Mini Zoo* Jogja Exotarium. Bagi penelitian lanjutan diharapkan melakukan perhitungan jumlah pengunjung yang berinteraksi dengan hewan dan dilakukan pengamatan mengenai macam interaksi yang dilakukan.

Kata kunci: Kuda, *non-invasive*, testosteron, feses, ELISA

ABSTRACT

EFFECT OF THE NUMBER OF VISITORS AT MINI ZOO JOGJA EXOTARIUM ON TESTOSTERONE LEVELS IN HORSE (*Equus caballus*) FAECAL SAMPLES

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Agro-tourism is a type of tourism that is currently in demand by tourists. One of the popular agro-tourism concept is the one which carries the concept of a combination between animal husbandry and agriculture. This concept can be found at the Mini Zoo Jogja Exotarium. Mini Zoo Jogja Exotarium offers facilities for the visitors to interact with various kinds of animals, including horses. The purpose of this study was to examine the effect of the number of the visitors at Mini Zoo Jogja Exotarium on testosterone levels in horse feces samples.

The faecal samples that were being used were non-invasively collected for 12 days. Horse faecal samples were extracted using 80% methanol, then being analyzed quantitatively using the Enzyme-Linked Immunosorbent Assay (ELISA) method.

The results showed that the lowest horse testosterone level was 52.52 ng/gr dry feces when the number of visitors reached 199 people, while the highest testosterone level was 192.24 ng/gr dry feces when there were 34 visitors. The results of statistical analysis showed that both variables have -0.298 as Correlation Coefficient. The second analysis was performed to confirm the relationship between the two variables using the number of visitors from the previous day. The results showed that the lowest testosterone levels were when visitors reached 90 people, while the highest testosterone levels occurred when there were 29 visitors. The Correlation Coefficient analysis is -0.140.

Based on the analysis results, it can be concluded that there is no correlation between the number of visitors and horse testosterone levels that was kept at Mini Zoo Jogja Exotarium. For further research, it is expected to calculate the number of visitors who interact with animals and observe the types of interactions carried out.

Keywords: Horse, non-invasive, testosterone, feces, ELISA