

ABSTRAK

KORELASI JUMLAH PENGUNJUNG TERHADAP KADAR HORMON TRIIODOTIRONIN (T3) PADA FESES MACAW BIRU-KUNING (*Ara ararauna*) SEBAGAI ANIMAL-ASSISTED THERAPY DI MINI ZOO RUMAH SAKIT JIH YOGYAKARTA

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Burung macaw biru-kuning (*Ara ararauna*) merupakan salah satu satwa eksotik dengan daya tarik tinggi berkat warna bulunya yang mencolok, kemampuan sosial yang baik, dan tingkat kecerdasan yang tinggi. Daya tarik ini mendorong terjadinya interaksi langsung antara pengunjung dan burung, yang berpotensi menjadi stressor dan memengaruhi kondisi fisiologis hewan. Salah satu indikator fisiologis yang dapat diamati adalah kadar hormon triiodotironin (T3), yang berperan penting dalam metabolisme basal tubuh. Penelitian ini bertujuan untuk mengetahui korelasi antara jumlah pengunjung dengan kadar hormon T3 pada burung macaw biru-kuning di Mini Zoo Rumah Sakit JIH Yogyakarta. Jumlah pengunjung merepresentasikan tingkat kebisingan, interaksi, dan aktivitas di sekitar kandang. Data pengunjung diperoleh melalui observasi langsung selama jam operasional *mini zoo* (pukul 10.00–19.00). Sampel feses dikoleksi secara non-invasif selama tujuh hari, kemudian diproses melalui metode *freeze-drying* selama 72 jam dan diekstraksi menggunakan metanol 80%. Ekstrak feses kemudian dianalisis menggunakan metode ELISA untuk mengukur kadar hormon T3. Hasil menunjukkan kadar T3 feses burung macaw biru-kuning tertinggi sebesar 138,70 ng/g feses kering terjadi pada kondisi tanpa pengunjung, sedangkan kadar T3 terendah sebesar 12,01 ng/g feses kering pada jumlah pengunjung sebanyak 12. Analisis statistik menunjukkan adanya korelasi negatif namun tidak signifikan ($p > 0,05$) antara jumlah pengunjung dengan kadar hormon T3. Berdasarkan hasil penelitian tersebut, dapat disimpulkan bahwa jumlah pengunjung belum dapat memberikan pengaruh secara fisiologis terhadap kadar hormon triiodotironin pada burung macaw biru-kuning (*Ara ararauna*) di Mini Zoo Rumah Sakit JIH Yogyakarta.

Kata kunci: *Ara ararauna*, ELISA, jumlah pengunjung, sampel non-invasif, triiodotironin

ABSTRACT

THE CORRELATION OF THE VISITOR NUMBERS WITH THE LEVELS OF THE HORMONE TRIIODOTHYRONINE (T3) IN THE FECES OF THE BLUE-YELLOW MACAW (*Ara ararauna*) AS ANIMAL-ASSISTED THERAPY AT THE MINI ZOO RUMAH SAKIT JIH YOGYAKARTA

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The blue-and-yellow macaw (*Ara ararauna*) is an exotic species known for its vibrant plumage, high sociability, and notable intelligence. These unique traits encourage direct interaction between visitors and the birds, which can potentially act as stressors and influence physiological processes. One measurable physiological indicator is the level of the triiodothyronine (T3), an essential hormone for basal metabolic function. This study aimed to determine the correlation between visitor numbers and fecal T3 hormone levels in blue-and-yellow macaws at the Mini Zoo Rumah Sakit JIH Yogyakarta. The visitor numbers represents the levels of noise, interaction, and activity around the enclosure. The data were recorded during operational hours of the mini zoo (10:00–19:00). Fecal samples were collected non-invasively for seven days, processed via freeze-drying for 72 hours, and extracted using 80% methanol. The fecal extracts were then analyzed using the ELISA method to measure T3 hormone levels. The result showed that the highest fecal T3 level in the feces of blue-and-yellow macaws was 138,70 ng/g of dry feces under conditions without visitors, while the lowest was 12,01 ng/g of dry feces with 12 visitors present. Statistical analysis showed negative but not significant correlation ($P > 0,05$) between visitor numbers and T3 levels. Based on these findings, it can be concluded that visitor numbers has not been able to exert a physiological effect on triiodothyronine hormone levels in blue-and-yellow macaws (*Ara ararauna*) at the Mini Zoo of JIH Hospital Yogyakarta.

Keywords: *Ara ararauna*, *ELISA*, *visitor numbers*, *non-invasive sampling*, *triiodothyronine*