

DISTRIBUSI SPASIAL, WAKTU AKTIF, DAN KARAKTERISTIK HABITAT CENDERAWASIH DUA BELAS ANTENA (*Seleucidis melanoleucus*) DI WILAYAH ADAT KAMPUNG SAWESUMA, PAPUA

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INTISARI

Seleucidis melanoleucus merupakan salah satu burung cenderawasih endemik pulau Papua yang dapat dijumpai di wilayah adat Kampung Sawesuma, Papua. Masyarakat wilayah adat Kampung Sawesuma mempertahankan wilayahnya sebagai hutan lahan kering sekunder dan rawa-rawa. Wilayah tersebut menjadi daya tarik bagi *S. melanoleucus* sebagai habitatnya. Penelitian ini dilakukan untuk mengetahui distribusi spasial, waktu aktif, karakteristik habitat, serta faktor habitat yang menjelaskan distribusi spasial dan waktu aktif dari *S. melanoleucus* berdasarkan vokalisasi di wilayah adat Kampung Sawesuma, Papua.

Pengambilan data suara *S. melanoleucus* dilakukan dengan metode bioakustik *passive acoustic monitoring* (PAM) menggunakan alat *recorder* Audiomoth dan SwiftOne. Alat *recorder* tersebut diletakkan di 17 titik dengan jarak antar alat 1000 meter. Alat *recorder* diatur untuk mulai merekam pada pukul 05.00-18.00 WIT selama 7 hari. Data suara dianalisis menggunakan ARBIMON untuk mengetahui kehadiran *S. melanoleucus*. Kemudian data kehadiran tersebut disajikan dalam peta distribusi spasial dan grafik waktu aktif menggunakan *Kernel Density Estimation* (KDE). Data habitat dianalisis menggunakan *Generalized Linear Model* dengan bantuan aplikasi RStudio untuk menjelaskan kehadiran *S. melanoleucus*.

Hasil penelitian menunjukkan bahwa *S. melanoleucus* hanya ditemukan di 5 titik sebanyak 164 kehadiran. Burung cenderawasih ini paling aktif bersuara pada pagi hari. Kehadiran *S. melanoleucus* teridentifikasi di lima plot dan dipengaruhi oleh kondisi habitat, yaitu ketinggian, kelerengan, jumlah pohon mati, jumlah jenis pancang, jumlah jenis tiang, jumlah pancang, tinggi tiang, tinggi pohon, dan tinggi batang bebas cabang pohon.

Kata kunci: *Seleucidis melanoleucus*, bioakustik, Kampung Sawesuma, distribusi spasial, dan waktu aktif

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**SPATIAL DISTRIBUTION, ACTIVE TIME, AND HABITAT
CHARACTERISTICS OF TWELVE-WIRED BIRD OF PARADISES
(*Seleucidis melanoleucus*) IN THE INDIGENOUS AREA OF SAWESUMA
VILLAGE, PAPUA**

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ABSTRACT

Seleucidis melanoleucus is a paradise bird endemic to Papua island can be found in the indigenous people's area of Sawesuma village, Papua. The indigenous people in Sawesuma village has been maintaining their area as secondary dry land forests and swamps that can be an attraction for *S. melanoleucus*. The area is attractive for *S. melanoleucus* as their habitat. This research was conducted to determine the spatial distribution, active time, habitat characteristics, and habitat factors that explain the spatial distribution and active time of *S. melanoleucus* based on their vocalization in the indigenous land of Sawesuma village, Papua.

Vocalization of *S. melanoleucus* were collected using the bioacoustics passive acoustic monitoring (PAM) method by using Audiomoth and SwiftOne recorders. Those recorder were placed at 17 plots with a distance of 1000 meters between devices. The recorders were set to record during 05.00-18.00 Eastern Indonesia Time for 7 days. Sound data were annotated using ARBIMON to determine the presence of *S. melanoleucus*. Then the presence data was presented in a spatial distribution map and active time graph using Kernel Density Estimation (KDE). Habitat data were analyzed using Generalized Linear Model with RStudio application to explain the presence of *S. melanoleucus*.

The results showed that *S. melanoleucus* was only found in 5 plots totalling 164 presences. The bird of paradise was most active vocalizing at early morning. The presence of *S. melanoleucus* was identified in five plots, and was influenced by the habitat conditions i.e. elevation, slope, number of dead trees, number of sapling species, number of pole species, number of saplings, pole height, tree height, and height of stems free of tree branches.

Keywords: *Seleucidis melanoleucus*, bioacoustics, Sawesuma village, spatial distribution, and active time

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