INTISARI

Pemeriksaan Klinis Reptil dan Isolasi serta Identifikasi Bakteri *Salmonella sp* pada Reptil Indonesia yang dilalulintaskan melalui Bandara Yogyakarta International Airport

Permintaan reptil sebagai hewan eksotik dan peliharaan secara global mengakibatkan banyak reptil dilalulintaskan lewat bandara yang berakibat meningkatkan risiko penyebaran *Salmonella* sp. asal reptil. Penelitian ini ber- tujuan melakukan pemeriksaan klinis reptil serta isolasi dan identifikasi *Salmonella* dari reptil yang dilalu-lintaskan melalui Bandadara Yogyakarta Inter- national Airport Penelitian ini menggunakan 48 reptil yang dilalulintaskan melalui Yogyakarta International Airport. Semua reptil diperiksa secara klinis, meliputi suhu tubuh, frekuensi napas denyut jantung, dan pulsus, kemudian diambil swab kloaka. Selain itu diambil sampel swab dari kulit, box, kantung, tempat pakan dan kulit perawat hewan. Sampel diidentifikasi adanya *Salmonella* sp secara fenotip menggunakan *Selenite, RV, XLD,* dan *Chromed Salmonella Agar* serta uji biokimia *Salmonella* sp yang diidentifikasi secara genotipik menggunakan PCR untuk gen *16S rRNA* (201 bp), *invA* (1138 bp), dan *ssrB* (704 bp). Hasil pemerik- saan klinis didapatkan reptil gerakan lincah, feses lembek sampai padat, responsif rangsangan, nafsu makan baik, mata normal, sehingga reptil didiagnosis sehat. Hasil isolasi dan identifikasi secara fenotipik dan genotipik menggunakan PCR gen *16S rRNA* didapatkan 26 isolat *Salmonella* sp dari dari 48 ekor reptil dan tid- ak ditemukan dari swab dari bahan/faktor yg dianggap menjadi pembawa *Salmo- nella* sp. Identifikasi lanjutan dari 26 isolat *Salmonella* sp. didapatkan 14 isolat mengamplifikasi gen *invA*, dan 13 isolat mengamplifikasi gen *ssrB*. Analisis sek- uensing 8 amplikon gen invA didapatkan kemiripan 100 % dengan *Salmonella enterica* subsp enterica serovar *Bareilly, Reading*, dan *Hadar* yang memiliki potensi zoonosis. Hasil uji sensitivitas antibiotik menunjukkan bahwa >80,76% isolat *Salmonella* sp. pada penelitian ini sensitif terhadap enroflksasin, trimethoprim-sulfametoksasol, tetrasiklin, kloramfenikol, dan amoksisilin, se- dangkan isolat lainnya resiten terhadap siprofliksasin, dan amoksisilin. Kesimpulannya adalah reptil yang dilalulintaskan melalui Bandara Yogyakarta International Airport secara klinis sehat, tetapi 54,83% -nya dapat diisolasi *Samo- nella* sp, dengan 29,16 % diantaranya adalah *S. enterica subsp enterica*, yang berisiko zoonosis. *Salmonella* sp yang diisolasi masih sensitif terhadap antibiotik.

Kata kunci: antibiotika, *Salmonella*, reptil, zoonosis

ABSTRACT

Clinical Examination of Reptils and Isolation as well as Identification of *Salmonella sp* Bacteria in Indonesian Reptils Transported Through Yogyakarta International Airport

The global demand for Reptils as exotic pets has led to many Reptils being transported through airports, increasing the risk of spreading *Salmonella sp* originating from Reptils. This study aims to conduct clinical examinations of eptils as well as isolate and identify *Salmonella* from Reptils transported through Yogyakarta International Airport. The study involved 48 Reptils transported through Yogyakarta International Airport. All Reptils underwentclinical examinations, including measurements of body temperature, respiratory rate, heart rate, and pulse. Cloacal swabs were then collected. Additionally, swab samples were taken from the skin, transport boxes, bags, feeding containers, and handlers' skin. The samples were phenotypically identified for *Salmonella sp* using Selenite, RV, XLD, and Chromogenic Agar, as well as biochemical tests. Identified *Salmonella sp* were further genotypically identified using PCR for 16S rRNA (201 bp), *invA* (1138 bp), and *ssrB* (704 bp) genes.The clinical examination results showed that the Reptils were agile, had semi-solid to solid feces, were responsive to stimuli, had good appetite, and normal eyes, leading to a diagnosis of healthy Reptils. Phenotypic and genotypic isolation and identification using PCR targeting the 16S rRNA gene revealed 26 isolates of *Salmonella sp* from 48 Reptils, but not from other materials. Further identification of the 26 *Salmonella sp* isolates showed that 14 isolates amplified the *invA* gene, and 13 isolates amplified the *ssrB* gene. *Sequencing* analysis of 8 *ssrB* gene amplicons showed 100% similarity to *Salmonella enterica* serovar *Barreily, Reading* dan *Hadar,* which have zoonotic potential. Antibiotic sensitivity testing revealed that over 80% of the *Salmonella sp* isolates in this study were sensitive to enrofloxacin, trimethoprim-sulfamethoxazole, tetracycline, chloramphenicol, and amoxicillin, while other isolates were resistant to ciprofloxacin and amoxicillin. In conclusion, Reptils transported through Yogyakarta International Airport were clinically healthy, but *Salmonella sp* was isolated in 54.83% of the cases, with 29.16% identified as *S. enterica subsp. enterica*, posing zoonotic risks. The isolated *Salmonella sp* remains sensitive to antibiotics

Keywords: antibiotics, *Salmonella* spp., reptils, zoonosis