STRUKTUR ANATOMIS *APPARATUS VOCALIS* KATAK *Rhacophorus margaritifer* (Schlegel, 1837), *Huia masonii* (Boulenger, 1884) DAN *Kaloula baleata* (Müller, 1836)

Asmaa' Anugerah Tarekat
11/313546/BI/8641

INTISARI

Komunikasi akustik merupakan bentuk komunikasi yang paling umum digunakan dalam ordo Anura. Kemampuan tersebut didukung adanya struktur anatomis khusus pada *apparatus vocalis* yang memungkinkan mereka melakukan vokalisasi. *Rhacophorus margaritifer*, *Huia masonii*, dan *Kaloula baleata* merupakan tiga spesies yang dapat ditemukan di Pulau Jawa yang memiliki karakter suara yang khas dan berbeda di antara ketiganya. Ketiganya diduga memiliki struktur anatomis *apparatus vocalis* meliputi kartilago penyusun laring, otot penyusun laring, *vocal cord*, dan *saccus vocalis* yang berbeda. Penelitian ini bertujuan untuk mempelajari struktur anatomis *apparatus vocalis* berdasarkan kartilago dan otot penyusun laring, *vocal cord*, dan *saccus vocalis R. margaritifer*, *H. masonii*, dan *K. baleata*. Pencarian spesimen dilakukan di Taman Nasional Gunung Merapi dan area kampus Universitas Gadjah Mada. Sampling dilakukan dengan metode *Visual Encounter Survey* dan diambil enam individu per spesies untuk dilakukan pengamatan struktur anatomis *apparatus vocalis*. Tiga individu difiksasi menggunakan alkohol 70% untuk melihat struktur tulang dan kartilago penyusun laring dengan metode Alizarin Red's-Alcian Blue. Tiga individu lainnya difiksasi menggunakan formalin 10% untuk melihat otot penyusun laring. Hasil menunjukkan bahwa *R. margaritifer*, *H. masonii*, dan *K. baleata* memiliki variasi struktur anatomis *apparatus vocalis* berdasarkan pada kartilago dan otot penyusun laring, *vocal cord*, serta *saccus vocalis*.

Kata Kunci: Laring, Kartilago penyusun laring, Otot penyusun laring, *Vocal cord*, *Saccus vocalis*

ANATOMICAL STRUCTURE OF APPARATUS VOCALIS IN *Rhacophorus margaritifer* (Schlegel, 1837), *Huia masonii* (Boulenger, 1884) AND *Kaloula baleata* (Müller, 1836)

Asmaa' Anugerah Tarekat
11/313546/BI/8641

ABSTRACT

Acoustic communication is the most common communication among anurans. It is supported by certain anatomical structure in *apparatus vocalis* allowing them to do vocalization. *Rhacophorus margaritifer*, *Huia masonii*, and *Kaloula baleata* are three species' found in Java which have a typical sound characters. They are supposed to have anatomical structure differents in their *apparatus vocalis* such as cartilage and muscles that consisting larynx, and their vocal sac. The objective of this research is to study anatomical structure of *apparatus vocalis* such as cartilage and muscle that consisting larynx, vocal cord, and vocal sac in *R. margaritifer*, *H. masonii*, and *K. baleata*. Sampling was conducted in Mount Merapi National Park and campus area of Universitas Gadjah Mada. Sampling was conducted with Visual Encounter Survey. We took six individuals each species to see their anatomical structure of *apparatus vocalis*. Three individuals are fixed by alcohol 70% to see their bone and cartilage structure that consisting larynx by Alizarin Red's-Alcian Blue method. Another three individuals are fixed by formaldehyde 10% to see their muscles that consisting larynx. The result shows that *R. margaritifer*, *H. masonii*, and *K. baleata* vary in their anatomical structure of *apparatus vocalis* based on cartilage and muscle that consisting larynx, vocal cord, and vocal sac.

Keyword: Larynx, cartilage that consisting larynx, muscle that consisting larynx, vocal cord, vocal sac