

## KARAKTERISTIK ANATOMIS-HISTOLOGIS LENGAN, TENTAKEL DAN *HECTOCOTYLUS CUMI-CUMI (Loligo sp.)*

Nuha Syaj'in Fadhilatin

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### INTISARI

Indonesia sebagai negara kepulauan memiliki kekayaan alam yang melimpah utamanya pada organisme laut seperti ikan dan invertebrata. Salah satu invertebrata laut yang mudah dijumpai di perairan Indonesia adalah cumi-cumi. Cumi-cumi memiliki ciri khas dengan mantel yang lonjong dan juluran ekstremitas pada kepalanya. Juluran-juluran tersebut merupakan tiga organ yang berbeda yakni tentakel, lengan dan *hectocotylus*. Meskipun nampak mirip, ketiganya memiliki fungsi masing-masing. Penelitian ini bertujuan untuk mengetahui karakteristik anatomi-histologi pada tentakel, lengan dan *hectocotylus* cumi-cumi. Sampel yang digunakan adalah cumi-cumi jantan yang diperoleh dari Pantai Muncar Banyuwangi. Pada penelitian ini, sampel yang digunakan dalam keadaan mati, namun masih dalam kondisi segar. Parameter yang diamati adalah pengamatan anatomi, pengamatan histologi dan analisis kadar hormon testosteron. Data kuantitatif dianalisa menggunakan uji *oneway* ANOVA. Hasil pengamatan anatomi menunjukkan terdapat perbedaan pada ukuran, bentuk, kerapatan *sucker* dan panjang *pedicel* ketiga organ. Hasil pengamatan histologi menunjukkan terdapat perbedaan letak *swimming keel* pada masing-masing organ. Namun, tidak terdapat perbedaan pada struktur penyusun jaringan. Hasil analisis hormon menunjukkan tidak terdapat perbedaan signifikan konsentrasi hormon testosteron pada organ lengan, tentakel dan *hectocotylus*. Kadar hormon testosteron berkisar antara 1,58 – 1,62 ng/ml. Konsentrasi tertinggi ditemukan pada organ lengan keempat dengan konsentrasi 1,62ng/ml dan konsentrasi terendah pada organ lengan ketiga dengan konsentrasi 1,58 ng/ml.

Kata kunci : Cumi-cumi, tentakel, lengan, *hectocotylus*, karakter histologi, karakter anatomi

**ANATOMICAL-HISTOLOGICAL CHARACTERISTICS OF ARMS,  
TENTACLES AND *HECTOCOTYLUS* OF SQUID (*Loligo sp.*)**

**Nuha Syaj'in Fadhilatin**

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**ABSTRACT**

Indonesia, as an archipelagic country has abundant natural wealth mainly in marine organisms such as fish and invertebrates. One of the marine invertebrates that are easily found in Indonesian waters is squid. Squid has a characteristic feature with an oval coat and appendages on its head. There are three different organs, namely tentacles, arms and *hectocotylus*. Even though it looks similar, they have their respective functions. This study aims to determine the anatomical-histological characteristics of squid tentacles, arms and *hectocotylus*. The sample used was male squid obtained from Muncar Banyuwangi Beach. In this study, the samples used were dead, but still in fress. The parameters observed were anatomical observation, histology observation and analysis of testosterone levels. Quantitative data were analyzed using oneway ANOVA test. Anatomical observations showed differences in size, shape, density of *suckers* and length of *pedicels* of all the organs. Histology observations showed that they were differences in the location of the *swimming keel*. However, there is no difference in the tissue structure. The results of hormone analysis showed that there was no significant difference in the concentration of testosterone in the arm, tentacles and *hectocotylus*. Testosterone levels range from 1.58 to 1.62 ng/ml. The highest testosterone level was found in the fourth arm with a concentration of 1.62ng / ml and the lowest level in the third arm with a concentration of 1.58 ng/ml.

**Keywords :** squid, tentacle, arm, *hectocotylus*, histological characters, anatomical characters.