C

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : JURNAL ILMIAH

Judul Jurnal Ilmiah (Artik : Exploration of the potential of Holothuria atra bioactive compounds based on their habitat characteristics.

Jumlah Penulisa : 3 orang

Status Pengusul : Bambang Sulardiono, Sutrisno Anggoro, **Renni Yuniati**

Identitas Jurnal Ilmiah :

a. Nama Jurnal : AACL Bioflux 2020
b. Nomor ISSN : 1844-8143
c. Volume/ nomor /Hal : Vol.13 No.3 pp.1715-1722 ref.32
d. Edisi : Th 2020
e. Penerbit : Bioflux
f. Jumlah halaman : 8 halaman
g.DOI artikel (Jika ada) : -
h. Alamat web Jurnal : http://www.bioflux.com.ro/docs/2020.1715-1722.pdf
i.Terindeks di : Scopus Q3, SJR 0,28

Kategori Publikasi Jurnal : [v] Jurnal Ilmiah Internasional / internasional bereputasi *
(beri Ppada kategori yang tepat) [ ] Jurnal Ilmiah Nasional Terakreditasi
[ ] Jurnal Ilmiah Nasional/ Nasional terindeks di DOAJ CABI COPERNICUS**

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NO	KOMPONEN YG DINILAI	Nilai Maksimal Jurnal Ilmiah			
		Internasional/internasional '40	Nasional Terakreditasi [ ]	Nasional *** [ ]	Nilai Akhir Yang Diperoleh
a	Kelengkapan unsur isi artikel (10%)	4			3,5
b	Ruang lingkup dan kedalaman pembahasan (30%)	12			9
c	Kecukupan dan kemutahiran data/informasi dan	12			10
d	Kelengkapan unsur dan berkualitas terbitan/ jurnal (30%)	12			10
	Nilai Total = (100%)	40			32,5
		.4 X 32,5 X 1/2 =			**6,5**

Catatan Penilaian artikel oleh Reviewer

a. Kelengkapan unsur isi artikel : Artikel ditulis cukup baik abstrak-pendahuluan-metode-hasil-diskusi. Referensi cukup mutakhir.
b. Ruang lingkup dan kedalaman pembahasan : Merupakan penelitian telaah kandungan kimiawi dari suatu tanaman dan membandingkannya berdasarkan lokasi yang berbeda. Hasil dibahas dengan cukup baik dengan membandingkan penelitian2 sebelumnya, tak terlalu dalam karena hanya diskusi tentang kandungan zat aktif saja
c. Kecukupan dan kemutahiran data/informasi dan metodologi : Alat dan metode cukup mutakhir dan dijelaskan secara rinci
d. Kelengkapan unsur dan berkualitas terbitan/ jurnal :Jurnal Internasional terindex Scopus Q3, SJR > 0,1

Semarang, ...
Reviewer 1

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Bidang ilmu : Ilmu Kedokteran
Jabatan/pangkat: Guru Besar

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
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i. Terindeks di : Q3, SJR 0,28
j. On line turnitin : https://doc-pak.undip.ac.id/7656/1/Turnitin-Exploration-of-the-potential.pdf

Kategori Publikasi Jurnal Ilmiah (beri ✓pada kategori yang tepat) :
☑ **Jurnal Ilmiah** Internasional/ **Internasional Bereputasi****
☐ Jurnal Ilmiah Nasional Terakreditasi
☐ Jurnal Ilmiah Nasional/Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	Internasional / Internasional Bereputasi ** 40	**Nasional Terakreditasi** ☐	**Nasional *** ☐**	
a. Kelengkapan unsur isi artikel (10%)	4			3,5
b. Ruang lingkup dan kedalaman pembahasan (30%)	12			11,5
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	12			11,5
d. Kelengkapan unsur dan kualitas terbitan/ jurnal (30%)	12			12,0
Total = (100%)	40			38,5
Nilai Pengusul =			40% x 38,5 /2 =	7,7

Catatan penilaian Artikel oleh Reviewer :

a. Kelengkapan unsur isi artikel : Abstrak kurang lengkap pada material dan metodenya. Isi artikel tertulis lengkap menurut kaidah penulisan ilmiah, Pendahuluan tertulis latar belakang sampai tujuan penelitian, Metode lengkap tentang bahan, cara dan analisis statistiknya, Hasil dengan tampilan tabel, Diskusi dengan mensitasi Pustaka yang baru (< 10tahun) dan relevan
b. Ruang lingkup dan kedalaman pembahasan : lingkup penelitian sesuai bidang ilmu pengusul dengan mencoba ekstraksi zat bioaktif Holothuria atra. Pembahasan dalam dan luas dibandingkan dengan hasil penelitian terdahulu dari pustaka baru dan relevan
c. Kecukupan dan kemutahiran data/informasi dan metodologi: studi observasi biota laut di laut sekitar Karimunjawa suatu yang baru, dengan cara pengambilan sampel, ekstraksi dan analisis bahan menggunakan cara yang terstandar
d. Kelengkapan unsur dan kualitas terbitan/ jurnal: jurnal AACL Bioflux 2020, adalah jurnal Internasional terakreditas Scopus Q3, SJR 0,28

Semarang, 25 Agustus 2021
Reviewer 1

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Bidang ilmu : Ilmu Kedokteran
Jabatan pangkat : Guru Besar

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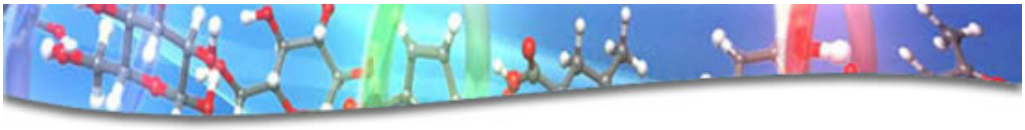

BIOFLUX SRL

Identity: Research organization, CAEN 7219, CUI: 23753059 from 18.04.2008

Address: 54 Ceahlau street, Cluj-Napoca 400488, Romania,

European Union, Europe.

Aquaculture, Aquarium, Conservation & Legislation - International Journal of the Bioflux Society

ISSN 1844-9166 (online)

ISSN 1844-8143 (print)

Published by Bioflux - bimonthly -

in cooperation with The Natural Sciences Museum Complex (Constanta, Romania)

Peer-reviewed (each article was independently evaluated before publication by two specialists)

The journal includes original papers, short communications, and reviews on Aquaculture (Biology, Technology, Economics, Marketing), Fish Genetics and Improvement, Aquarium Sciences, Fisheries, Ichthyology, Aquatic Ecology, Conservation of Aquatic Resources and Legislation (in connection with aquatic issues) from wide world.

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Volume 13(3)/2020

Yolk-sac absorption, mouth size development, and first exogenous feeding of Sultan fish, *Leptobarbus hoevenii*

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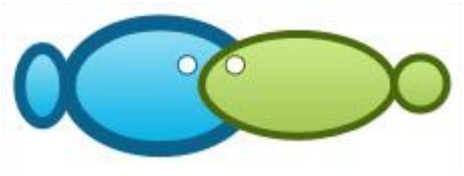
Abstract. Sultan fish, *Leptobarbus hoevenii* is an important species for aquaculture in several Southeast Asian countries, including Thailand and Malaysia. However, knowledge on its yolk absorption, mouth size development, and first food ingestion timing is still lacking up-to-date. This information on the correct feeding of the *L. hoevenii* larvae are crucial to farmers. The present study hence examined these parameters in the *L. hoevenii*. The newly hatched *L. hoevenii* larvae were obtained through natural spawning with the aid of chemicals injection, and sampled consecutively every 2 hours to measure their yolk volumes, mouth height, and to confirm the ingestion time of the first *Moina* into the larval gut. Also, a starvation experiment was conducted to detect the larval point-of-no-return (PNR). It was found that the yolk sac volume of the newly hatched *L. hoevenii* larvae was 77.51 µm, and it was completely absorbed at 108 hours after hatching (hAH). The larval mouth has first opened at 36 hAH (mouth height 215±22.59 µm) but the larvae only commenced first exogenous feeding on *Moina* (approximately 207 µm in width) at 62 hAH, when its mouth height reached 372.91±79.11 µm. The *L. hoevenii* larvae required about 18 hrs from 62–80 hAH, to adapt themselves to feed on the given *Moina*, and the PNR was estimated to happen at 70–72 hAH. It was recommended that *Moina* should be given to the *L. hoevenii* larvae best within 62–72 hAH, at the rearing water temperature of 27 to 29°C.
Key Words: nutritional transition period, optimum first feeding timing, larval rearing, *Moina*, PNR.

Introduction. Sultan fish, *Leptobarbus hoevenii*, is a cyprinid native to lakes and rivers in Malaysia, Indonesia, Laos, Cambodia, Vietnam, and Thailand (Mohsin & Ambak 1983; Roberts 1989; Rainboth 1996; Vidthayanon et al 1997; Kottelat 2001). According to Tee et al (1989), *L. hoevenii* contains high concentrations of protein, vitamin B, and some minerals, including calcium, phosphorus, and iron, and it is recommended for human consumption. Therefore, it is an important freshwater fish species for the inland fisheries in these countries, and now it has become one of the targeted species for aquaculture, due to the high market demand. Indeed, in Malaysia, the aquaculture production of *L. hoevenii* has steadily increased in 2015–2018 from 923 to 1,771.28 tonnes (Fisheries Department of Malaysia 2015–2018).

The artificial seed production of *L. hoevenii* has been succeeded since the 1980s (Meenakarn 1986; Saidin et al 1988). However, published information on its larval biology, which is essential for the seed production techniques improvement, is still very limited up-to-date. In fish larval rearing, knowledge on the larval early developments in relation to their first exogenous feeding, especially yolk absorption, mouth size



Selective mobilization of fatty acids in common carp (*Cyprinus carpio*) during long-term starvation

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Abstract. Common carp *(Cyprinus carpio)* fingerlings (25 g; n=200) were introduced into a recirculation system in the Fish Laboratory of the Kaposvár University (Hungary). Fish were stocked into 60 L fish tanks (20x10 fish) in a recirculation system and feed was totally withdrawn for 12 weeks to test the selective depletion/conservation of hepatic and muscle originated fatty acids. Alterations in hepatic total fatty acid (FA) composition were: decrease of C16:1n7, C18:1n9 and increase C20:4n6, C20:5n3, C22:5n3 and C22:6n3 proportion, leading to an enormously increased unsaturation index, from 124.04 to 217.3). Changes of the fillet flesh phospholipid (PL) fraction were more expressed. The proportion of C16:1n7, C18:1n9 and C20:1n9 decreased, while C20:4n6, C22:6n3, polyunsaturated fatty acids (PUFA), total n3 and the unsaturation index increased. A moderate, but not statistically significant decrease of fillet malondyaldehide (MDA) concentration was detected. It was concluded that mostly the monoenoic fatty acids of the liver were utilized as a fuel source. Likewise, as an opposite reaction, fillet PUFAs were selectively conserved referring to the maintenance of membrane fluidity during prolonged starvation.
Key Words: Cyprinidae, feed restriction, malondyaldehide, membrane lipids, metabolism.

Introduction. Most of the fish species are exposed to short-term or long-term starvation periods during their lifespan in both natural and artificial conditions. Fish have a stronger capability to tolerate starvation than birds and mammals (Feng et al 2011). The ability to endure starvation depends on thermal conditions, nutritional status and species. European eel (*Anguilla anguilla*) has the highest tolerance to non-hibernating starvation (Boetius & Boetius 1985). In general, most of the fish are able to survive several months without any food (Moon 1983; Wilkins 1967; Woo & Cheung 1980).

During the starvation period, fish replace the lacking energy in a complex way, but mainly via the oxidation of stored fat (Einen et al 1998; Friedrich & Stepanowska 2001; Hung et al 1997). Lipid oxidation proceeds in a selective manner in fish, influenced by environmental factors. Significant changes of the fatty acid (FA) composition may befall within some weeks because of food deprivation.

Selective retention of essential fatty acids (EFA) is specific for most living organisms. It can be explained by the fact that the organism has to maintain the unsaturation level to preserve the fluidity of the biological membranes (Szabó et al 2005).

Common carp (*Cyprinus carpio*) is able to metabolize selected FA for its energy needs when they are in good condition, but if body fat content is low, it may metabolize all FA types equally to sustain metabolic functions during starvation in cold temperatures (Zajic et al 2013). Fillet FA composition of Atlantic salmon (*Salmo salar*) changes similarly in case of food deprivation; the proportion of saturated fatty acids (SFA) decreases, while proportion of mono (MUFA) and polyunsaturated fatty acids (PUFA) significantly increases (Einen et al 1998). Similarly, significant increase of PUFA in the