

SYSTEMIC ACCOUNTS AND SOME ASPECTS OF
REPRODUCTIVE BIOLOGY IN *Tenualosa toli*

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SCHOOL OF MARINE SCIENCE AND ENVIRONMENT
UNIVERSITI MALAYSIA TERENGGANU

2014

**SYSTEMATIC ACCOUNTS AND SOME ASPECTS OF REPRODUCTIVE
BIOLOGY OF *Tenualosa toli***

**By
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**Research Report submitted in partial fulfillment of
the requirements for the degree of
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**FINAL DRAFT CONFIRMATION AND APPROVAL FORM
FINAL YEAR RESEARCH PROJECT**

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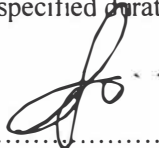
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ABSTRACT

Tenualosa toli also known as terubok, is a commercial and important fish species in Sarawak specifically and Asia generally due to its consumption and market demand. However, the fishmongers face trouble in differentiating this species with an almost similar species, *Tenualosa macrura*. Both species are sold at various price levels according to size. This research gathers specific details to aid in the visual differences in enhancing the identification. There are three main components that were focused throughout this study which were systematic accounts, length-weight relationship and reproductive biology. The length-weight relationship showed isometric with b value 3.0 ($b=3$). This means the length of fish is growing same with weight. Specifically, males showed negative allometric with b value 2.9 ($b<3$) and females showed positive allometric with b value 3.2 ($b>3$). The mean value of body weight and standard length for males were 132.67g and 180.33mm respectively. Females were 214.39g and 214.39mm. The key identification features between both species identified in this paper were body depth and caudal fin. The mean of GSI for male was 0.46 ± 0.4 and for females was 26.09 ± 16.5 . In this study, the females exhibited average counts in fecundity as most female's maturity were fully developed which was mean fecundity of 61, 864 eggs.

PERIHALAN SISTEMATIK DAN BEBERAPA ASPEK BIOLOGI PEMBIAKAN *Tenualosa toli*

ABSTRAK

Tenualosa toli juga dikenali sebagai terubok, merupakan spesies ikan komersial dan penting di Sarawak khususnya dan secara amnya di Asia disebabkan oleh penggunaan dan permintaan pasaran. Walau bagaimanapun, penjual ikan menghadapi masalah dalam membezakan spesies ini dengan spesies yang hampir sama, *Tenualosa macrura*. Kedua-dua spesies dijual pada paras harga yang berbeza mengikut saiz. Kajian ini mengumpulkan maklumat tertentu untuk membantu dalam perbezaan visual dalam meningkatkan pengenalan. Terdapat tiga komponen utama yang fokus di sepanjang kajian ini iaitu perihalan sistematik, hubungan panjang-berat, dan biologi pembiakan. Hubungan panjang-berat menunjukkan isometrik dengan b nilai 3.0 ($b=3$). Ini bermakna panjang ikan berkembang sama dengan berat badan. Khususnya, jantan menunjukkan 'allometric' negatif dengan b nilai 2.9 ($b<3$) dan betina menunjukkan 'allometric' positif dengan b nilai 3.2 ($b>3$). Nilai min berat badan dan panjang standard bagi jantan adalah 132.67g dan 180.33mm masing-masing. Betina pula adalah 214.39g dan 214.39mm. Ciri pengenalan utama antara kedua-dua spesies yang dikenal pasti dalam kajian ini adalah ketinggian badan dan sirip kaudal. Min bagi GSI untuk jantan adalah 0.46 ± 0.4 dan betina adalah 26.09 ± 16.5 . Dalam kajian ini, purata fekunditi betina yang dipamerkan kebanyakan dalam kematangan yang paling subur mencapai min 61, 864 telur.

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LIST OF ABBREVIATIONS

%	-	percentage
SL	-	Standard Length
FL	-	Fork Length
TL	-	Total Length
TW	-	Total Weight
BW	-	Body Weight
GL	-	Gonad Length
GW	-	Gonad Weight
GSI	-	Gonadosomatic Index
L-W	-	Length-Weight

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