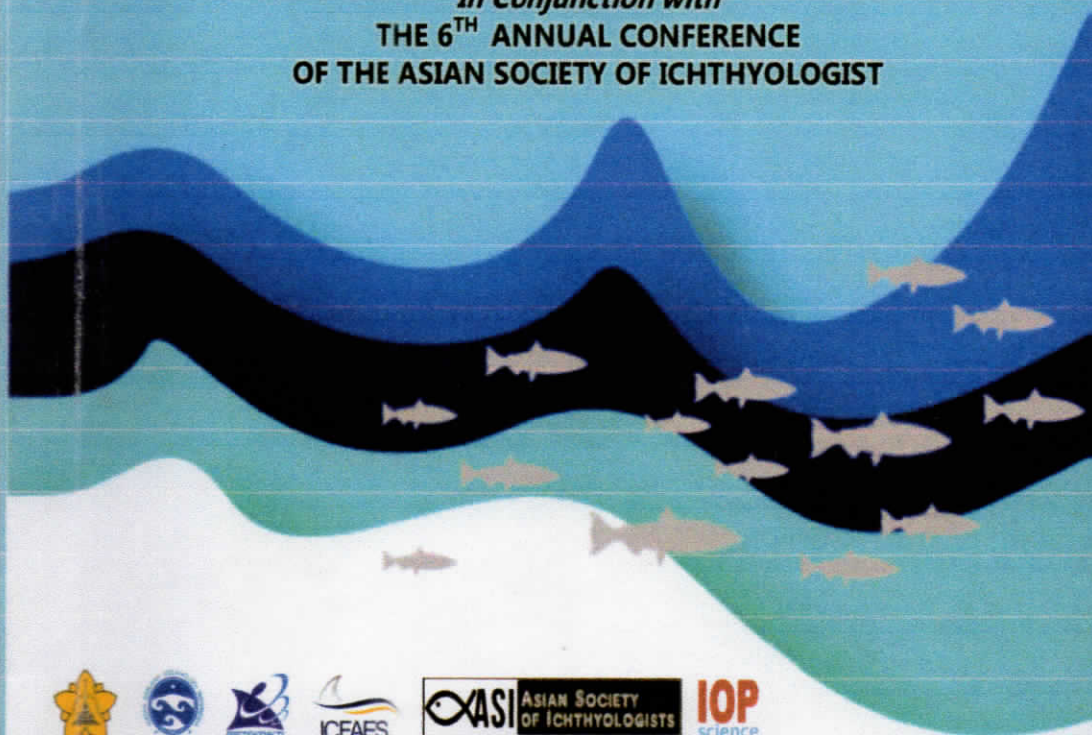


# PROGRAM BOOK

THE 2<sup>ND</sup> INTERNATIONAL CONFERENCE ON FISHERIES,  
AQUATIC AND ENVIRONMENTAL SCIENCES

*In Conjunction with*  
THE 6<sup>TH</sup> ANNUAL CONFERENCE  
OF THE ASIAN SOCIETY OF ICHTHYOLOGIST



"Advancing marine, fisheries, and  
environmental research towards  
improving human and community  
welfare"

June 19<sup>th</sup> - 20<sup>th</sup>, 2019  
Banda Aceh, Indonesia





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# First Report of Molecular Identification Based on Melanophores Pattern to Determine Species Composition of Nike Fish Schooling in Gorontalo Bay, Indonesia

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## Abstract

Nike is the local name of small fish found in the sea and the estuary of Bone River, Gorontalo, Indonesia and is one of the local mainstay fisheries resources that are relatively small in size compared to other types of fish. This type of fish is known as an unique sort of fish in the Gorontalo Bay. Presently, the fish is one of the economically valuable commodities that prompts high fishing intensity. This study aims to identify species that make up the schooling of nike fish in the waters of Gorontalo Bay using an approach to differences in melanophore patterns and molecular analysis with the CO1 gene. Initial identification was morphologically carried out based on differences in melanophore patterns found in individuals composing schooling of nike fish. Sampling was done randomly by picking up nike fish of approximately 100-150 grams from the catch of fishermen during the period of its appearance in Gorontalo Bay on October 5-11 2018. Samples were grouped into 5 groups, each of which was coded as N1, N2, N3, N4, and N5. From each group of samples, each individual fish was taken and preserved in 70% alcohol for molecular analysis. The results showed that the nike school in Gorontalo Bay consisted of several species successfully identified, *Sicyopterus pugnans*, *S. cynocephalus*, *Belohranchus segura*, and *Bunaka gyrynoides*.

**Keywords:** goby, melanophore, molecular, morphology, nike fish

# Lenght-Weight Relationship Shrimp *Penaeus merguensis* in The Waters of Nagan Raya, Aceh, Indonesia

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## Abstract

*Penaeus merguensis* shrimp is one of the most important commodities in the waters of Nagan Raya. The purpose of this study was to determine the relationship of length of weight, sex ratio, and the level of gonad shrimp maturity caught in Nagan Raya waters. This research method used a simple random withdrawal method that is. Shrimp samples were 10% of the total catch of the fishermen. Sampling was conducted in October 2018. Sampling place at TPI Kuala Tuhan, Nagan Raya. The results shoud that male and female carapace lengths ranged from 4.7 mm to 25.42 mm and 25.4 mm to 45.5 mm. The growth characteristics of shrimp in males and females in Nagan Raya waters are positive allometric ( $b = 5.3611$ ) and positive allometric ( $b = 6.2997$ ). Comparison of male and female sex ratios 1: 0.47. Gonad maturity level was dominated by level V TKG, but at the time of the study there was no level I TKG.

**Keyword:** Lenght-weight, *Penaeus merguensis*, sex ratio, and the level of gonad shrimp





# *Certificate of Appreciation*

This is to certify that:

**Femy M. Sahami, S.Pi., M.Si**

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Dean of Faculty of Marine and Fisheries  
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Certificate is proudly presented to:

Femy M. Sahami, Rene Charles Kepel, Abdul Hafidz Olii,  
Silvester Benny Pratasik

**As Author**

**For the paper entitled:**

First Report of Molecular Identification Based on Melanophores Pattern to Determine Species  
Composition of Nike Fish Schooling in Gorontalo Bay, Indonesia

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