ABSTRAK

PENGARUH PENAMBAHAN METIONIN PADA PAKAN FORMULASI TERHADAP LAJU PERTUMBUHAN IKAN KERAPU MACAN (*Epinephelus fuscoguttatus*) DI FASE PENGGELONDONGAN

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Metionin merupakan salah satu asam amino esensial yang tersedia dalam ransum dengan jumlah yang cukup memiliki fungsi untuk memulai sintesis protein dalam pertumbuhan ikan. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan kadar metionin berbeda pada pakan terhadap pertumbuhan dan kelangsungan hidup kerapu macan (*Epinephelus fuscoguttatus*) di fase penggelondongan, sebanyak tiga perlakuan dilakukan dalam penelitian ini yaitu kontrol (tanpa penambahan metionin), untuk pakan mandiri dengan penambahan metionin 0,35% (perlakuan 1), dan 0,5% (perlakuan 2) masing-masing dengan 3 ulangan. Ikan kerapu macan dengan bobot rata-rata 60 g/ekor dipelihara dalam bak fiber ukuran (2,5×1×1) meter selama 60 hari. Rancangan yang digunakan dalam penelitian ini adalah Rancangan Acak Lengkap (RAL). Data yang diperoleh dianalisis menggunakan ANOVA pada taraf kepercayaan 95% melalui program SPSS 21 dan uji lanjut Tukey untuk mengetahui perlakuan terbaik. Hasil analisis menunjukan bahwa penambahan metionin dalam pakan formulasi mampu menyamai pakan komersial dalam hal pertumbuhan mutlak, dan laju pertumbuhan spesifik. Meskipun hasil FCR pakan mandiri lebih tinggi dari kontrol, tetapi secara ekonomis masih jauh lebih rendah 2 kali lipat.Penambahan metionin 0,5% dianjurkan dalam produksi pakan formulasi untuk budidaya ikan kerapu.

Kata Kunci: Kerapu Macan, Metionin, Pakan Mandiri, Penggelondongan.

ABSTRACT

THE EFFECT OF ADDITION OF DIFFERENT METHIONINE CONTENTS ON FEED ON THE GROWTH OF TIGER GROUPER (*Epinephelus fuscoguttatus*) IN THE NURSERY PHASE

By

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Methionine is one of the essential amino acids that are available in the diet in sufficient quantities to have a function to initiate protein synthesis in fish growth. This study aimed to determine the effect of adding different levels of methionine to feed on the growth and survival of tiger grouper (*Epinephelus fuscoguttatus*) in the germination phase. Three treatments were carried out in this study, namely control (without the addition of methionine), for independent feed with the addition of 0, methionine. 35% (treatment 1), and 0.5% (treatment 2) each with 3 replications. Tiger grouper with an average weight of 60 g/head was kept in a fiber tank measuring (2.5×1×1) meter for 60 days. The design used in this study was a completely randomized design (CRD). The data obtained were analyzed using ANOVA at a 95% confidence level through the SPSS 21 Program and Tukey's further test to determine the best treatment. The results of the analysis showed that the addition of methionine in the formulated feed was able to match the commercial feed in terms of absolute growth and specific growth rate. Although the independent feed FCR yield was higher than the control, but economically it was still much lower by 2 times. The addition of methionine 0.5% is recommended in the production of formulation feed for the cultivation of grouper fish.

Keywords: Tiger Grouper, Methionine, Feed Formulation, Nursery.