

RINGKASAN

RAJA RAHMADONI RIZA SEDRAN. Pengaruh Substitusi Tepung Ikan dengan Tepung Kulit Udang Difermentasi terhadap Pertumbuhan Ikan Kakap Putih (*Lates calcarifer*). Dibimbing oleh DWI SEPTIANI PUTRI dan TRI YULIANTO

Pakan yang umum diberikan pada budidaya ikan kakap putih yaitu pakan komersil/pelet. Tetapi penggunaan pakan komersil memerlukan biaya yang cukup tinggi. Bahan baku pembuatan pakan ikan yang relatif mahal ialah bahan baku sumber protein. Karena itu, penggunaan bahan baku pakan alternatif yang mengandung sumber protein seperti tepung kulit udang perlu dilakukan. Akan tetapi kulit udang memiliki kandungan kitin yang tinggi, Untuk menurunkan kandungan kitin, tepung kulit udang harus difermentasi menggunakan kapang jenis *Trichoderma*. penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung ikan dengan tepung kulit udang difermentasi terhadap pertumbuhan ikan kakap putih (*Lates calcarifer*) dan mengetahui persentasi substitusi tepung ikan dengan tepung kulit udang terhadap pertumbuhan ikan kakap putih (*Lates calcarifer*). Faktor perlakuan yang diberikan yaitu perbedaan jumlah tepung kulit udang yang disubstitusi dengan tepung ikan untuk pakan ikan kakap putih. Perlakuan A (100% TI (kontrol)), B (85% TI + 15% TKU fermentasi), C (80% TI + 20% TKU fermentasi), D (75% TI + 25% TKU fermentasi). Hasil analisis menunjukkan bahwa parameter pertumbuhan bobot dan laju pertumbuhan harian memberikan pengaruh nyata terhadap pertumbuhan ikan kakap putih. Hasil terbaik pada perlakuan A (100% tepung ikan). Nilai efisiensi pakan 28,47%, Rasio Konversi Pakan 3,53%, pertumbuhan bobot mutlak 16,21 gr dan laju pertumbuhan harian 0,27 gr.

Kata kunci: Tepung Kulit Udang, *Trichoderma*, Ikan Kakap Putih

SUMMARY

RAJA RAHMADONI RIZA SEDRAN. The Effect of Fish Meal Substitution With Fermented Shrimp Shell Flour on White Snapper Growth (*Lates calcarifer*). Supervised by DWI SEPTIANI PUTRI and TRI YULIANTO

Common feed given to barramundi culture is commercial feed/pellets. But the use of commercial feed requires a fairly high cost. The raw material for making fish feed which is relatively expensive is a protein source raw material. Therefore, it is necessary to use alternative feed raw materials containing protein sources such as shrimp shell flour. However, shrimp shells have a high chitin content. To reduce the chitin content, shrimp shell flour must be fermented using a *Trichoderma* type of mold. This study aims to determine the effect of substitution of fish meal with fermented shrimp shell meal on the growth of white snapper (*Lates calcarifer*), and to determine the percentage of substitution of fish meal with shrimp shell meal on the growth of white snapper (*Lates calcarifer*). The treatment factor given was the difference in the amount of shrimp shell meal substituted with fish meal for white snapper feed. Treatment A (100% TI (control)), B (85% TI + 15% TKU fermented), C (80% TI + 20% TKU fermented), D (75% TI + 25% TKU fermented). The results of the analysis showed that the weight growth parameters, and daily weight gave a significant effect on the growth of white snapper. The best results were in treatment A (100% fish meal). The feed efficiency value was 28.47%, the feed conversion ratio was 3.53%, the absolute weight growth was 16.21 g, and the daily weight was 0.27 g.

Keywords: Shrimp Shell Flour, *Trichoderma*, White Snapper

