

## **ABSTRAK**

### **OPTIMASI PENAMBAHAN *DISTILLERS DRIED GRAINS WITH SOLUBLES* (DDGS) DAN TAURIN DALAM PAKAN TERHADAP PERFORMA PERTUMBUHAN DAN GLUKOSA DARAH BENIH IKAN GABUS *Channa striata* (BLOCH, 1973)**

**Oleh**

**ARI YULIANSAH**

Ikan gabus (*Channa striata*) merupakan salah satu ikan yang memiliki nilai ekonomi dan permintaan yang tinggi. Salah satu permasalahan dalam budi daya ikan gabus yaitu masih menggunakan pakan segar. Permasalahan ini dapat diatasi dengan mengganti bahan baku pakan menggunakan bahan baku alternatif, seperti *distillers dried grains with solubles* (DDGS) yang ditambah dengan taurin sebagai asam amino bebas. Penelitian ini bertujuan untuk mengkaji performa pertumbuhan dan glukosa darah benih ikan gabus yang diberi pakan dengan penambahan *distillers dried grains with solubles* (DDGS) dan taurin dosis berbeda. Penelitian ini menggunakan metode rancangan acak lengkap (RAL) dengan 4 perlakuan, yaitu penambahan DDGS dan taurin dosis berbeda, yang kemudian dianalisis menggunakan Anova dan dilanjutkan dengan uji Duncan serta analisis deskriptif. Hasil dari penelitian yang telah dilakukan menunjukkan kandungan nutrisi pakan tertinggi terdapat pada P2 (tepung ikan 12% + DDGS 5% + taurin 0,5%) yaitu protein sebesar 33%, lemak 6,81%, karbohidrat 37,82%, air 5,71%, abu 16,48%, dan serat kasar 7,12%. Hasil analisis sidik ragam menunjukkan bahwa penambahan DDGS dan taurin dalam pakan tidak memberikan pengaruh yang berbeda nyata ( $P>0,05$ ) terhadap pertumbuhan bobot mutlak, pertumbuhan panjang mutlak, tingkat kelangsungan hidup, laju pertumbuhan spesifik, rasio konversi pakan, efisiensi pakan, dan glukosa darah benih ikan gabus, tetapi memberikan pengaruh yang berbeda nyata ( $P<0,005$ ) terhadap rasio konversi pakan benih ikan gabus. Berdasarkan penelitian ini dapat disimpulkan bahwa penambahan *distillers dried grains with solubles* (DDGS) dan taurin pada setiap perlakuan memberikan pengaruh yang sama terhadap performa pertumbuhan dan glukosa darah benih ikan gabus.

Kata kunci: Ikan gabus, pakan, *distillers dried grains with solubles*, taurin

## ***ABSTRACT***

### ***THE OPTIMIZATION OF DISTILLERS DRIED GRAINS WITH SOLUBLES (DDGS) AND TAURINE ADDITION IN FEED ON THE GROWTH AND BLOOD GLUCOSE PERFORMANCE OF SNAKEHEAD FISH *Channa striata* (BLOCH, 1973)***

***By***

***ARI YULIANSAH***

*Snakehead fish (*Channa striata*) is a fish that has high economic value and demand. One of the problems in snakehead fish cultivation is that it still uses fresh feed. This problem can be overcome by replacing feed raw materials using alternative raw materials such as distillers dried grains with solubles (DDGS) which is added with taurine as a free amino acid. This study aimed to examine the growth performance and blood glucose of snakehead fish fry fed with distillers dried grains with solubles (DDGS) additives and different doses of taurine. This research used a completely randomized design (CRD) method with 4 treatments, namely the addition of DDGS and different doses of taurine which were then analyzed using Anova and continued with the Duncan test and descriptive analysis. The results of the research showed that the highest nutritional content of feed was found in P2 (12% fish meal + 5% DDGS + 0.5% taurine), namely 33% protein, 6.81% fat, 37.82% carbohydrates, 5.71% water, 16.48% ash, and crude fiber 7.12%. The results of analysis of variance showed that the addition of DDGS and taurine in the feed did not have a significantly different effect ( $P>0.05$ ) on absolute weight growth, absolute length growth, survival rate, specific growth rate, feed conversion ratio, feed efficiency, and blood glucose of snakehead fish fry but had a significantly different effect ( $P<0.005$ ) on the feed conversion ratio of snakehead fish seeds. Based on this research, it can be concluded that the addition of distillers dried grains with solubles (DDGS) and taurine to each treatment had the same effect on the growth performance and blood glucose of snakehead fish fry.*

*Keywords:* Snakehead fish, feed, distillers dried grains with solubles, taurine