

INTISARI

PERTUMBUHAN GURAMI (*Osphronemus goramy* Lac. 1801) DENGAN PENGGUNAAN DAUN TALAS SEBAGAI PENSUBSTITUSI PAKAN KOMERSIAL PADA TAHAP PEMBESARAN SEGMENT II

Penelitian ini dilakukan untuk mengetahui pertumbuhan gurami (*Osphronemus goramy* Lac. 1801) dengan penggunaan daun talas (*Colocasia esculenta*) sebagai pensubstitusi pakan komersial. Penelitian ini menggunakan rancangan acak lengkap (RAL) dengan 5 taraf perlakuan dengan 3 ulangan yang terdiri atas perlakuan substitusi pakan komersial dengan daun talas sebesar 0%, 25%, 50%, 75%, dan 100%. Ikan uji berupa ikan gurami pada tahap pembesaran segmen II dengan ukuran tebar 200-250 g. Penelitian ini dilaksanakan selama 112 hari dengan pemberian pakan sebanyak 3% dari total biomassa. Pemeliharaan dilakukan dalam kolam beton yang disekat dengan jaring dengan ukuran 1x1x1 m dengan ketinggian air 70 cm dan padat tebar 10 ekor pada tiap unit percobaan. Parameter yang diamati meliputi pertumbuhan mutlak, laju pertumbuhan spesifik, rasio konversi pakan (FCR), kinerja enzim pencernaan, hematologi darah, total protein plasma (TPP) dan kualitas air. Hasil penelitian menunjukkan bahwa substitusi pakan komersial dengan daun talas (*Colocasia esculenta*) berpengaruh nyata terhadap penambahan berat gurami. Pertambahan berat gurami dengan substitusi daun talas sebesar 0%, 25%, 50%, dan 75% lebih tinggi secara nyata dibanding perlakuan substitusi 100%. Berdasarkan uji *orthogonal polynomial*, substitusi pakan komersial dengan daun talas sebesar 30% menghasilkan pertambahan berat tertinggi. Kinerja enzim amilase meningkat sedangkan enzim protease fluktuatif seiring peningkatan persentase substitusi. Substitusi pakan komersial dengan daun talas tidak mempengaruhi kondisi hematokrit dan kadar protein plasma gurami.

Kata kunci: daun talas, enzim, FCR, gurami, pertumbuhan, substitusi.

ABSTRAK

GROWTH OF GOURAMI (*Osphronemus goramy* Lac. 1801) USING TARO LEAVES AS A COMMERCIAL FEED SUBSTITUTE AT THE REARING SEGMENT STAGE II

This study examined the giant gourami (*Osphronemus goramy* Lac.1801) growth with the substitution of taro leaf (*Colocasia esculenta*) on commercial feed in the diets. This study used a completely randomized design (CRD) with 5 different substitution percentages of taro leaf on commercial feed as treatment levels i.e. 0% (control), 25%, 50%, 75%, and 100% with triplications of each treatment. The sample used in this experiment was giant gourami at the second stage of fish rearing segment each weighed about 200-250 g. Feeding experiment was performed out for 112 days with feeding amount to 3% of the total biomass. Fish were reared in ponds, each plot measuring 1x1x1 m separated by nets with a water level of 70cm and a stocking density of 2-2.5 kg/m³. Parameters observed included absolute growth, specific growth rate, feed conversion ratio (FCR), digestive enzyme performance, blood hematology, total plasma protein (TPP) and water quality. The results showed that the substitution of taro leaves (*Colocasia esculenta*) had a significant effect on the weight growth of giant gourami. The weight growth of giant gourami with taro leaf substitution was 0%, 25%, 50%, and 75% significantly higher than the 100% substitution treatment. Based on the orthogonal polynomial test, 30% taro leaf substitution on commercial feed will yield the highest weight growth. The performance of the amylase enzyme increased while the protease enzyme fluctuated as the percentage of substitution increased. The substitution of commercial feed with taro leaves did not affect the hematocrit and plasma protein levels condition of giant gourami.

Key words: enzymes, FCR, giant gourami, growth, substitution, taro leaves