THE ADDITION OF INDIGOFERA FISHING FLOUR IN FEED TOWARDS REPRODUCTIVE PERFORMANCE OF FISH TILES Oreochromis niloticus (Linn, 1758)

By

Tatang Purnama

ABSTRACT

Tilapia had a fast reproduction cycle. One of the supporting factors needed to got quality broodstocks and seed was feed. Feed was a very influence on development of gonad both egg and sperm. *Indigofera zollingeriana* has high protein, carotenoid, and vitamin E content compared to commercial feed. This study aims to determine the reproductive performance of male tilapia with feed added by *Indigofera zollingeriana.* The research design used was a Completely Randomized Design (CRD) with four treatments and three replications. The treatments were different proportions of indigofera leaf flour, namely treatments A (0%), B (10%), C (20%), D (30%), and E (40%). The parameters observed included weighting of tilapia, gonad sampling, sperm fluid volume, duration of sperm motility, sperm count, pH, DO, and temperature. Data of weight, SR, and water quality parameters were analyzed using variance with 95% confidence intervals, if duncan was significantly different. The results showed that the addition of the best indigofera shoot flour for male reproductive performance of tilapia was 40%.

Keywords: *gonads, indigofera, reproduction, Tilapia*

PENAMBAHAN TEPUNG PUCUK INDIGOFERA PADA PAKAN TERHADAP PERFORMA REPRODUKSI IKAN NILA JANTAN *Oreochromis niloticus* (Linn, 1758)

Oleh

Tatang Purnama

ABSTRAK

Ikan nila memiliki siklus reproduksi yang cepat. Salah satu faktor pendukung yang dibutuhkan untuk mendapatkan induk dan benih berkualitas adalah pakan. Pakan sangat berpengaruh terhadap perkembangan gonad baik telur dan sperma. *Indigofera zollingeriana* memiliki kandungan protein, karotenoid, dan vitamin E yang tinggi dibanding pakan komersil. Penelitian ini bertujuan untuk mengetahui performa reproduksi ikan nila jantan dengan pakan yang ditambahkan *Indigofera zollingeriana*. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan empat perlakuan dan tiga ulangan. Perlakuan berupa proporsi tepung daun indigofera yang berbeda yaitu perlakuan A (0%), B (10%), C (20%), D (30%), dan E (40%). Parameter yang diamati meliputi pertambahan bobot ikan nila, pengambilan sampel gonad, volume cairan sperma, durasi motilitas sperma, jumlah sperma, pH, DO, dan suhu. Data parameter bobot, SR, dan kualitas air dianalisis menggunakan sidik ragam dengan selang kepercayaan 95%, jika berbeda nyata dilakukan uji duncan. Hasil penelitian menunjukkan penambahan tepung pucuk indigofera yang terbaik untuk performa reproduksi ikan nila jantan yaitu sebanyak 40%.

Kata Kunci : *Nila, indigofera, reproduksi, gonad*