ABSTRAK

Indonesia merupakan salah satu negara yang memiliki potensi penghasil ikan hias paling banyak di dunia. Salah satu ikan hias tersebut yaitu ikan cupang (*Betta splendens*). Ikan cupang jantan mempunyai warna lebih menarik dilihat dari siripnya dan bernilai komersial lebih tinggi daripada betina. Fotoperiode merupakan salah satu teknik usaha budidaya untuk kelangsungan hidup dan kelestarian ikan cupang. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh fotoperiode terhadap perkembangan indeks morfo-anatomi dan morfometrik ikan cupang jantan strain halfmoon dan fancy. Metode eksperimen dalam penelitian ini menerapkan Rancangan Acak Lengkap (RAL) Faktorial (2 × 3) dengan dua strain halfmoon dan fancy dan tiga perlakuan pencahayaan (12 jam terang (T):12 jam gelap (G), 14T:10G dan 10T:14G) dengan lima ulangan. Data penelitian berupa morfo-anatomi yaitu IGS, IVS, IHS dan data 14 karater morfometrik. ANOVA menunjukan bahwa perlakuan fotoperiode yang berbeda tidak memberikan pengaruh signifikan. Sehingga, perlakuan fotoperiode berbeda belum mampu memaksimalkan perkembangan IGS, IVS, IHS dan pertumbuhan morfometrik ikan cupang jantan strain halfmoon dan fancy.

Kata kunci: *Betta splendens strain Halfmoon dan Fancy; fotoperiode; indeks morfo-anatomi; morfometrik.*

ABSTRACT

One of ornamental fish is popular fighting fish *Betta Splendens, e*specially the male presenting attractive color and fin form. The male are more valuable than female. Photoperiod regimes offer some advantages in fish cultures, including for fighting fish. A study, aiming to observe the effects of photoperiod on development of morpho-anatomical indexes MAI and morphometric characters MC, was carried out on male fighting fish of halfmoon and fancy strains. An experimental method, aplying Completely Randomized Design (CRD) with Factorial paterns of 2×3, was run to examine different photoperiod treatments (i.e. 14L:10D 14-h of light and 10-h of dark; 10L:14D, and ambient). The treatments were investigated on the two strains, in quintuplicates of each. MAI and MC data were collected from 5 individuals by 15 and 30-d of treaments. The data showed that the treatments did not affected MAI and MC of fish. MAI data in terms of gonado-somatic, hepato-somatic, and viscero-somatic indexes developed similarly in all strains from all treatments. The treatments did not also influence development of morphometric characters.

Keywords : *Betta splendens, Halfmoon and Fancy strains; photoperiod; morpho-anatomical index; morphometric characters.*