

## Intisari

### DAMPAK PAPARAN SUHU 36°C TERHADAP PERUBAHAN ORIENTASI SEKS BERBAGAI UMUR LARVA GUPPY (*Poecilia reticulata* Peters, 1859)

Penelitian ini bertujuan untuk mengetahui dampak suhu tinggi (36°C) yang diberikan pada beberapa umur larva hingga umur 14 hari terhadap proporsi jenis kelamin ikan guppy. Penelitian ini dilakukan dengan menggunakan metode Rancangan Acak Lengkap (RAL). Larva guppy yang telah dipijahkan dibagi ke dalam 5 perlakuan, yaitu 1 kontrol dengan suhu 28°C-29°C (P0) dan empat perlakuan larva umur 2 hari sampai 5 hari yang dipelihara hingga umur 14 hari dengan suhu tinggi 36°C. Perlakuan diberikan mulai umur 2 hari (P1), umur 3 hari (P2), umur 4 hari (P3), umur 5 (P4) dan setiap perlakuan dibagi dengan 3 ulangan. Parameter yang diamati adalah jumlah anakan ikan yang dihasilkan dan jenis kelamin anakan ikan guppy yang telah dipelihara selama 2 bulan. Hasil rerata jenis kelamin anakan ikan guppy dianalisis menggunakan ANOVA. Hasil penelitian ini menunjukkan rerata anakan jantan dan betina secara berturut-turut adalah P0 anakan jantan 37,04% dan betina 62,96%, P1 anakan jantan 43,39% dan betina 56,61%, P2 anakan jantan 31,22% dan betina 68,78%, P3 anakan jantan 50,00% dan betina 50,00%, P4 anakan jantan 58,93% dan betina 41,07%. Hasil analisis anova menunjukkan adanya pengaruh yang nyata. Jumlah anakan jantan terbanyak terdapat pada P4. Hasil anakan jantan yang lebih dominan yaitu pada guppy umur 5 hari.

Kata kunci : anakan ikan, betina, jantan, suhu, umur

## **Abstract**

### **THE IMPACT OF 36°C TEMPERATURE EXPOSURE ON SEX ORIENTATION OF VARIOUS AGES OF GUPPY (*Poecilia reticulata* Peters, 1859) LARVAE**

This study aims to determine the effect of high temperature (36°C) on sex proportion of guppy fish. This study used a completely randomized design method (CRD). Guppy fry produced from spawning were divided into five treatments, with one control temperature of 28-29°C (P0) and four treatments of guppy fry aged 2 days to 5 days which were reared up to 14 days old with a high temperature of 36°C. Treatment was given from 2 days after birth (P1), given at 3 day after birth (P2), given at 4 days after birth (P3) and given at 5 days after birth (P4) and each treatment consisted of 3 replications. The parameters observed were the number of guppy fry produced and the sex of guppy fry that had been reared for 2 months. The results of the mean sex of guppy fry were analyzed using ANOVA. The results of this study showed that the mean of male and female guppy fry P0 37.04% and female 62.96%, P1 male 43.39% and female 56.61%, P2 male 31.22% and female 68.78%, P3 male 50.00% and female 50.00% and P4 were 58.93% and female 41.07%. The result of the ANOVA analysis showed a significant effect. The highest number of male guppy fry was found in P4. The result of male guppy fry were more dominant in guppy fry aged 5 days.

Key words: age, female, fry, male, temperature