

## Intisari

### Pengaruh Suhu terhadap Daya Tetas Telur Dan Laju Sintasan Larva Lele (*Clarias sp.*) Sangkuriang

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Penelitian telah dilakukan untuk mengetahui pengaruh perbedaan suhu terhadap daya tetas telur dan laju sintasan larva lele sangkuriang, serta mengetahui suhu optimum pada daya tetas telur dan laju sintasan yang paling tinggi. Penelitian ini menggunakan sistem pemijahan alami dengan perbandingan induk 1:1. Rancangan yang digunakan adalah rancangan blok acak lengkap (RBAL) dengan empat perlakuan suhu air sebagai media penelitian, yaitu pada suhu 22 °C, 26 °C, 30 °C, dan 34 °C dan masing-masing perlakuan memiliki tiga kali ulangan. Penelitian dilakukan dalam bak berukuran 20x40x25 cm<sup>3</sup>, dan larva ikan dipelihara selama 15 hari. Parameter yang dianalisis meliputi suhu air, O<sub>2</sub> terlarut, CO<sub>2</sub> bebas, pH air, daya tetas telur dan laju sintasan larva lele sangkuriang. Pakan yang diberikan untuk larva yaitu cacing sutra (*Tubifex*), dimulai pada hari ke 3 sampai akhir penelitian. Data yang diperoleh dianalisis dengan menggunakan analisis sidik ragam (ANOVA) dan uji lanjut HSD (*Honestly Significant Difference*). Hasil penelitian menunjukkan bahwa suhu berpengaruh tidak nyata terhadap daya tetas telur, tetapi berpengaruh nyata ( $p < 0,05$ ) terhadap laju sintasan larva lele sangkuriang. Daya tetas telur dan laju sintasan larva lele sangkuriang pada suhu 22-34 °C, masing-masing berkisar antara 84,00-89,33 % dan 74,08-90,03 %. Laju sintasan larva lele sangkuriang tertinggi pada suhu 30,04 °C, yaitu sebanyak 87,5 %. Hubungan perlakuan suhu ( $x$ ) dengan daya tetas telur ( $y$ ) diperoleh hubungan regresi linier  $y = 0,4167x + 75,833$  dan hubungan perlakuan suhu ( $x$ ) dengan laju sintasan larva ( $y$ ) diperoleh hubungan kuadratik  $y = -0,2207x^2 + 13,259x + 111,64$ .

Kata kunci: daya tetas telur, laju sintasan larva, lele sangkuriang, suhu.

## Abstract

The Effect of Temperature on The Eggs Hatching Rate and  
Larvae Survival Rate of Sangkuriang Catfish (*Clarias sp.*)

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The research has been conducted to determine the effect of temperature on the eggs hatching rate and larvae survival rate of sangkuriang catfish, and determine the optimum temperature, which the hatching rate of eggs and the survival rate of larvae, were highest. This research used the natural breeding system with parent ratio 1: 1. The design used was a randomized complete block design (RCBD) with four water temperature treatments as a media research, which were temperature of 22 °C, 26 °C, 30 °C and 34 °C and of each treatment had three replicates. The research were conducted in the aquarium size of 20x40x25 cm<sup>3</sup>, and fish larvae were reared for 15 days. The parameters were be analyzed namely water temperature, dissolved oxygen, free carbondioxide, pH water, hatching rate of eggs, survival rate of larvae. The given feed to the larvae was silk worm (*Tubifex*), starting at 3<sup>th</sup> day until the end of the research (15 days). Data obtained were analyzed using analysis of variance (ANOVA) and HSD (*Honestly Significant Difference*) test. The results showed that the temperature didn't influent on the hatching rate of eggs, but influenced ( $P < 0,05$ ) on the survival rate of sangkuriang catfish larvae. The eggs hatching rate and the larvae survival rate at 22-34 °C temperature, were respectively range 84,00-89,33 % and 74,08-90,03 %. The highest larvae survival rate was 87,5 % at 30,04 °C. The relationship of temperature treatment (x) with the hatching rate of eggs (y) was linear regression,  $y = 0,4167x + 75,833$ . The relationship of temperature treatment (x) with the larvae survival rate (y) was quadratic relationship  $y = -0,2207x^2 + 13,259x + 111,64$ .

Keywords: the eggs hatching rate, larvae survival rate, sangkuriang catfish, temperature.