



**PENGARUH JUMLAH AERASI
PADA DAYA TETAS TELUR DAN SINTASAN LARVA
KOI (*Cyprinus carpio* Linnaeus)**

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh jumlah aerasi pada daya tetas telur dan sintasan larva koi (*Cyprinus carpio* Linnaeus) dan mengetahui perlakuan jumlah aerasi yang menghasilkan daya tetas telur, sintasan larva koi, dan kualitas air tertinggi. Penetasan telur dan pemeliharaan larva koi dilakukan dalam air pada akuarium (volume air 57,5 L). Perlakuan jumlah aerasi yang diberikan ke dalam air sebanyak 0, 1, 2, 3, dan 4 unit per akuarium (debit udara total secara berurutan sebesar 0, 606, 1216, 1825, dan 2430 mL/menit/akuarium), masing-masing perlakuan memiliki tiga ulangan. Penelitian perlakuan jumlah aerasi tersebut dimulai dari penebaran telur, penetasan telur, sampai pemeliharaan larva selama 2 bulan. Setiap akuarium ditebar telur sebanyak 1000 butir. Penetasan telur berlangsung dalam waktu 2 hari. Hasil penelitian perlakuan jumlah aerasi dalam air selama 2 bulan sebanyak 0, 1, 2, 3, dan 4 unit berpengaruh nyata terhadap daya tetas telur koi, dengan hasil secara berurutan sebanyak 4, 76, 80, 79, dan 77 %. Daya tetas telur koi tertinggi adalah pada perlakuan 2 aerasi yaitu 80 %. Perlakuan aerasi 1, 2, 3, dan 4 unit menghasilkan jumlah larva koi hidup secara berurutan sebanyak 548, 556, 535, dan 541 ekor dan menghasilkan sintasan larva koi secara berurutan sebanyak 54, 55, 53, dan 54 %; sedangkan perlakuan tanpa aerasi menghasilkan larva koi sebanyak 46 ekor dengan sintasan larva 97 %. Jumlah larva koi hidup terbanyak adalah pada perlakuan 2 aerasi yaitu sebanyak 556 ekor.

Kata kunci : aerasi, daya tetas, kualitas air, larva koi, sintasan

**THE EFFECT OF AERATION QUANTITY TO EGGS HATCHING
RATE AND LARVAE SURVIVAL RATE OF
(*Cyprinus carpio* Linnaeus)**

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ABSTRACT

This study aimed to determine the effect of the aeration quantity on the eggs hatching rate and the larvae survival rate of (*Cyprinus carpio* Linnaeus) and to find out the aeration quantity to obtain the highest of eggs hatching rate, larvae survival rate, and water quality. Hatching eggs and larvae cultivation were performed in aquarium (water volume 57,5 L) for 2 months. The water aeration quantity were 0, 1, 2, 3, and 4 unit/aquarium (total air discharge sequentially were 0, 606, 1216, 1825, and 2430 mL/minute/aquarium), each treatment had three replications. Each aquarium were stocked with 1000 eggs. Eggs hatched within 2 days. The result of the research showed that the water aeration as much as 0, 1, 2, 3, and 4 units were significantly affected of eggs hatching rate, as much as 4, 76, 80, 79, and 77 % respectively. The highest eggs hatching rate was in the 2 aerations which was 80 %. Aeration quantity of 1, 2, 3, and 4 units produced 548, 556, 535, and 541 live larvae and resulted in 54, 55, 53, and 54 % larvae survival rate respectively; while the aquarium without aeration resulted in 46 live larvae with survival rate of 97 %. The highest live larvae was as many as 556 that happened in the aquarium treated by 2 units aeration.

Keywords: aeration, *Cyprinus carpio* Linnaeus, hatching eggs, larvae cultivation, survival rate, water quality