

Gambaran darah ikan mas *Cyprinus carpio* yang telah diberi perlakuan prebiotik dan diikuti uji tantang dengan *Aeromonas hydrophila*

Hematology of common carp *Cyprinus carpio* after prebiotic treatment followed by *Aeromonas hydrophila* challenge test

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ABSTRACT

Motile aeromonad septicemia often becomes problem for common carp culture. One of the solution is using prebiotics. This study aimed to determine the effects of dietary prebiotic on hematology of common carp that infected by *A. hydrophila*. Fifteen fish with mean weight 8.94 ± 0.28 g cultured in 72 L. The treatment in this study were negative and positive control (A and B; without prebiotic), and 2% prebiotic supplementation (C). Rearing was carried out for 45 days, and then all treatment (except negative control) were injected intraperitoneally (ip) with 100 μ L *A. hydrophila* at a concentration 10^7 CFU/ml and then the mortality was observed for 7 days. The result showed that the supplementation of prebiotics (C) increased survival of common carp (87.5%) higher than control (50%), and gave positive influence on hematology common carp after infected by *A. hydrophila*.

Keywords: *Aeromonas hydrophila*, common carp, hematology, prebiotic

ABSTRAK

Penyakit *motile aeromonad septicemia* (MAS) merupakan kendala yang sering dialami dalam budidaya ikan mas. Salah satu alternatif yang dapat dilakukan untuk mengatasi kendala tersebut yaitu dengan aplikasi prebiotik. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian prebiotik melalui pakan terhadap gambaran darah ikan mas yang diinfeksi *Aeromonas hydrophila*. Sebanyak 15 ekor ikan mas dengan bobot rata-rata $8,94 \pm 0,28$ g dipelihara di akuarium dengan volume 72 liter. Perlakuan yang diberikan yaitu kontrol negatif, kontrol positif (A dan B; tanpa prebiotik), dan perlakuan penambahan 2% prebiotik (C). Setelah 45 hari, semua perlakuan (kecuali kontrol negatif) diuji tantang dengan menyuntikkan *A. hydrophila* sebanyak 100 μ L/ekor pada konsentrasi 10^7 CFU/ml secara intraperitoneal, kemudian diamati mortalitasnya selama 7 hari. Hasil penelitian menunjukkan bahwa penambahan prebiotik memberikan kelangsungan hidup yang lebih

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