

عنوان مقاله:

Research Article: Effect of dietary Bdellovibrio powder on non-specific immunity, antioxidant ability and disease resistance of Chinese mitten crab *Eriocheir sinensis*

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تعداد صفحات اصل مقاله: 18

نویسندگان:

J. Liu - National Pathogen Collection Center for Aquatic Animals, Shanghai Engineering Research Center of Aquaculture, Shanghai Ocean University, Shanghai ۲۰۱۳۰۶, China

J. Li - National Pathogen Collection Center for Aquatic Animals, Shanghai Engineering Research Center of Aquaculture, Shanghai Ocean University, Shanghai ۲۰۱۳۰۶, China

X. Huang - National Pathogen Collection Center for Aquatic Animals, Shanghai Engineering Research Center of Aquaculture, Shanghai Ocean University, Shanghai ۲۰۱۳۰۶, China

B. Chen - Lianyungang Marine and Fisheries Development Promotion Center, Lianyungang Jiangsu ۲۲۲۰۰۰, China

J. An - Lianyungang Marine and Fisheries Development Promotion Center, Lianyungang Jiangsu ۲۲۲۰۰۰, China

H. Cao - National Pathogen Collection Center for Aquatic Animals, Shanghai Engineering Research Center of Aquaculture, Shanghai Ocean University, Shanghai ۲۰۱۳۰۶, China

خلاصه مقاله:

The predatory *Bdellovibrio* is considered one of the most promising probiotics in aquaculture. Yet the effect of dietary *Bdellovibrio* probiotics on Chinese mitten crab *Eriocheir sinensis* has never been evaluated. In the present study, a fifty-day feeding trial was conducted to assess the effects of dietary *Bdellovibrio* powder at a recommended final dose of ۷.۵ g kg⁻¹ diets on non-specific immunity, antioxidant ability and disease resistance of *E. sinensis*. The results indicated that compared with the control, the activities of lysozyme, superoxide dismutase, catalase, acid phosphatase, and alkaline phosphatase were significantly increased in the serum and hepatopancreas of *E. sinensis* fed with *Bdellovibrio* powder-supplemented diets ($p < 0.05$). Besides, a significant reduction of malondialdehyde level was also observed in the serum and hepatopancreas of *Bdellovibrio* powder-fed crabs ($p < 0.05$). In addition, the test crabs fed diets with *Bdellovibrio* powder for fifty days exhibited significantly ($p < 0.05$) higher protection against aeromoniasis, showing a relative percentage survival of ۸۱.۲۵% against *Aeromonas veronii* challenge for seven days. To conclude, dietary supplementation of *Bdellovibrio* powder for fifty days can increase immunity, antioxidant capability and resistance of *E. sinensis* to *A. veronii* infection.

کلمات کلیدی:

Antioxidant ability, *Bdellovibrio* powder, Disease resistance, *Eriocheir sinensis*, Non-specific immunity

لینک ثابت مقاله در پایگاه سیویلیکا:

