

水产—研究报告

壳聚糖对水环境镉致罗非鱼急性毒性影响的研究

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摘要:

为研究壳聚糖对水环境镉致罗非鱼急性毒性的影响, 将540尾罗非鱼随机分为2个处理组, 每个处理3个重复, 每个重复90尾。对照组按照水生生物急性毒性试验方法进行镉对罗非鱼的急性毒性试验; 试验组加入等量壳聚糖, 同法进行镉对罗非鱼的急性毒性试验。结果为: 对照组24h LC50为20.51mg/L, 试验组24h LC50为33.96mg/L, 两组间差异极显著 ($P < 0.01$); 对照组48h LC50为9.00mg/L, 试验组48h LC50为18.59mg/L, 两组间差异显著 ($P < 0.05$)。说明壳聚糖可以在一定程度上缓解镉对罗非鱼的毒性。

关键词: 壳聚糖; 镉; 罗非鱼; 急性毒性

Effect of Chitosan on Acute Toxicity Induced by Cadmium to Tilapia

Abstract:

this experiment was conducted to investigate the effect of chitosan on acute toxicity Induced by cadmium to Tilapia. 540 Tilapia were divided into two treatment groups, each with three replicates, and each replicate 90 fishes. The control group was designed according to the static test method of acute toxicity; the test group was added equal amount of chitosan with the same method of the control group. The results showed that 24h LC50 for the control group was 20.51mg/L, 24h LC50 for the test group was 33.96mg/L, the significant difference was found between two groups ($P < 0.01$); 48h LC50 for the control group was 9.00mg/L, 48h LC50 for the test group was 18.56mg/L, the significant difference was also found between two groups ($P < 0.05$). Chitosan might decrease the toxicity of cadmium on tilapia to some extent.

Keywords: chitosan cadmium; Tilapia acute toxicity

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- 壳聚糖; 镉; 罗非鱼; 急性毒性

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