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AQUACULTURE & FISHERIES INNOVATION LAB

## RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

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**Title:** Nitrite Toxicity Affected by Species Susceptibility, Environmental Conditions

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**Abstract:** Nitrite, an intermediate compound in the oxidation of ammonia nitrogen to nitrate by nitrifying bacteria in soil and water, is considerably more toxic than nitrate. Exposure to nitrite causes gill lesions and edema in the skeletal muscles of fish, and also affects respiration. Nitrite concentration is affected by the dissolved-oxygen and chloride levels in water, as well as species' differences in nitrite susceptibility. Fish suffering brown-blood disease quickly recover when moved to water with low nitrite concentration.

This abstract was excerpted from the original paper, which was in the *Global Aquaculture Advocate* 17(1): 34-37.

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