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Sustainable Aquaculture for a Secure Future

Title: Ammonia Toxicity Degrades Animal Health, Growth

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Abstract: Ammonia nitrogen occurs in aquaculture systems as a waste product of protein metabolism by aquatic animals and degradation of organic matter, or in nitrogen fertilizers. Exposure can reduce growth and increase susceptibility to diseases in aquatic species. Ammonia nitrogen concentrations vary with time of day, water depth and temperature, and increase as biomass and feed input increase. The best management is conservative stocking and feeding rates that minimize ammonia nitrogen and avoid excessive phytoplankton blooms that cause high pH.

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