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A REVIEW

Advances in nanotechnology for fish nutrition

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SUMMARY

Nanotechnology has emerged as a groundbreaking method in aquaculture, greatly improving fish nutrition and health. This review examines the use of various nanoparticles, such as selenium, zinc, iron, silver, and chitosan, in fish feed to enhance nutrient delivery, absorption, and overall well-being. Incorporating nanoparticles boosts growth performance, immune function, and disease resistance, contributing to more efficient and sustainable aquaculture practices. Nonetheless, the application of nanoparticles also poses challenges, including potential toxicity, environmental concerns, and regulatory issues. It is essential to tackle these challenges to ensure nanotechnology's safe and effective implementation in fish nutrition.

Key Words: Nanotechnology, Fish nutrition, Nanoparticles, Aquaculture, Nutrient absorption

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