

combinations and processing methods in crab aquaculture more broadly also suggest that performance and product quality can improve together when diets are designed around both biology and sustainability. Overall, the most promising commercial pathway is an integrated model in which balanced formulated feeds, precision delivery systems, and real-time environmental monitoring are deployed together to improve mud crab growth performance reliably and at scale.

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## Conflict of Interest Disclosure

The author affirms that this research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest.

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