Impacts of Nile Tilapia (Oreochromis niloticus) exposed to microplastics in bioflocs system

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Introduction

Microplastics (MPs) are abundant in aquaculture water. The abundance of microbes found in biofloc technology (BFT) aquaculture systems is the highest among the current aquaculture systems. However, the effects of MPs on aquatic animals in BFT systems, which contain a considerable number of microorganisms, have not been thoroughly investigated.

Methods





Integrated response



- > MPs had no obvious effect on nitrification in the BFT systems or on the digestive activity of tilapia.
- \geq Tilapia growth was not obviously affected but nutritional composition (CP and CL) was significantly inhibited.
- ➢ No variation in MDA levels was observed, indicating that oxidative stress did not occur.
- MPs did not significantly influence the microbial communities and tilapia guts.
- MPs barely affect tilapia in BFT aquaculture \triangleright systems.

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Digestiv activity



