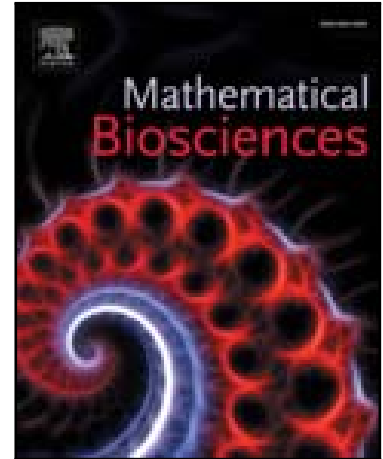


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Bifurcations and Global Dynamics in a Toxin-dependent Aquatic Population Model

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Highlights

- A toxin-dependent aquatic population model is proposed and investigated.
- Global stability and bifurcation analysis are carried out.
- Thresholds of toxin level for population extirpation and persistence are obtained.
- Model exhibits bistability, hysteresis, transient oscillations, heteroclinic orbits.

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